

Culture, Values, and Identities

Technology and Democracy

NOTICE: This Material May Be Protected
By Copyright Law (Title 17 U.S. Code)

Steven E. Zipperstein¹  ^a

¹ Luskin School of Public Affairs, University of California, Los Angeles, CA, US

Keywords: Democracy, Technology

<https://doi.org/10.1525/gp.2023.68114>

Global Perspectives

Vol. 4, Issue 1, 2023

The three books featured in this Global Perspectives review symposium – Stein Ringen’s *How Democracies Live*; Francis Fukuyama’s *Liberalism and its Discontents*; and Craig Calhoun, Dilip Gaonkar and Charles Taylor’s *Degenerations of Democracy* – each raise important and urgent concerns about the fate of liberal democracy, especially in the United States. This essay argues that policymakers must focus on the interplay between democracy and technology to stimulate democratic renewal in the 21st century. Technology must be democratized through new regulatory and policy approaches to deliver the benefits of broadband internet access as widely as possible. And democracy must be technologized by leveraging new frontiers in artificial intelligence, blockchain and other advanced technologies to improve democratic accountability, public goods provision and state capacity.

INTRODUCTION

The three books featured in this *Global Perspectives* review symposium—Stein Ringen’s *How Democracies Live*, Francis Fukuyama’s *Liberalism and Its Discontents*, and Craig Calhoun, Dilip Gaonkar, and Charles Taylor’s *Degenerations of Democracy*—each raise dire concerns about the fate of liberal democracy in the twenty-first century, especially in the United States.

Ringen (2022, 24, 159) calls this “The American Predicament,” and with good reason. The 2022 *Berggruen Governance Index* reveals a bleak assessment of the United States, “the only world power where both accountability and state capacity declined significantly between 2010 and 2019. This dual decline makes the U.S. stand out and gives cause for concern” (Anheier, Lang, and Knudsen 2022, 58).

The three books offer a variety of mostly high-level recommendations for reinvigorating liberal democracy in the United States and elsewhere.¹ I will focus on one area—technology—where the three books might have offered more specific recommendations.

The interplay between democracy and technology—including cable television, social media, and more advanced technologies such as artificial intelligence—has thus far proven elusive. Indeed, most commentators, including the

authors of the three books featured in this review symposium, raise serious concerns about technology’s deleterious impacts on democracy since the turn of the twenty-first century.

But technology can and should play a far more positive role in regenerating democracy. Technology offers enormous, unprecedented opportunities to expand citizen engagement and efficacy, to bring government at all levels closer to the people, and to empower individuals to seek economic opportunity in ways unimaginable during *les trente glorieuses*.²

I therefore offer three sets of recommendations:

First, I build on Ringen’s and Calhoun’s proposals to rein in and regulate the social media and data platforms (to which I add cable television). Those companies place profit above all else, even when it means driving polarization and harming democratic solidarity. Regulating those companies for the public good will *democratize* the technology they control, unlocking the vast potential of that technology to enhance rather than degrade civic discourse.

Second, I address the pressing need to close the digital divide and *democratize* broadband internet access by mandating connectivity as a fundamental right for everyone.

Third, I offer recommendations for harnessing the power of cutting-edge technologies, such as artificial intelligence,

^a <https://luskin.ucla.edu/person/steve-zipperstein>
zipperstein@international.ucla.edu

¹ Ringen includes two specific recommendations among his list of twenty-three proposals: adding a tenth member to the US Supreme Court, resulting in a majority of six votes required for any ruling; and allowing children to vote by proxy. Ringen 2022, 190.

² Francis Fukuyama calls for a return to the “broad and happy coexistence” of liberalism and democracy during *les trente glorieuses*, the period between the 1950s and the 1970s that Calhoun somewhat differently characterizes as a time of “compromise” between capitalism and experimentation in social improvement. Fukuyama 2022, 15; Calhoun, Gaonkar, and Taylor 2022, 86, 90–97.

smart cities, and blockchain, to *technologize* and reimagine democracy for the twenty-first century and beyond.

DEMOCRATIZE TECHNOLOGY, TECHNOLOGIZE DEMOCRACY

The three books all agree that technology thus far has hurt democracy more than it has enhanced it. The corrosive impacts of cable television news, the polarizing impact of social media, and the concentration of enormous market power in the hands of a small number of techno-oligarchs have all contributed to the decline of democracy in the United States.

No matter what one may think of the controversial US Supreme Court justice Clarence Thomas, he accurately described the Silicon Valley market power concentration problem in an April 2021 concurring opinion:

To be sure, much activity on the Internet derives value from network effects. But dominant digital platforms are different. Unlike decentralized digital spheres, such as the e-mail protocol, control of these networks is highly concentrated. Although both companies are public, one person controls Facebook (Mark Zuckerberg), and just two control Google (Larry Page and Sergey Brin).³

But it doesn't have to be this way. Regulatory policies must be instituted to wrest monopolistic control of the Silicon Valley technology platforms from the tiny number of megabillionaires who run them for their own profit. Regulators must also be empowered to circumscribe the toxic and polarizing content spewed on cable television and social media platforms. Public policy must also urgently address the digital divide.

Calhoun challenges us to find capable institutional structures to put new technologies to good use, "regulate them where necessary, and provide new replacements for the support old media gave to democracy" (Calhoun, Gaonkar, and Taylor 2022, 69). Those replacements should include advanced technologies such as artificial intelligence, smart cities/smart government, and blockchain, all of which should be repurposed for the public good and for revitalizing democracy in the twenty-first century and beyond.

By *democratizing* high-speed broadband internet access, cable television, and social media, we can achieve a vastly more inclusive society than we have today. And by *technologizing democracy*, we can improve citizen efficacy and engagement, increase governmental accountability, and help mitigate the root causes of socioeconomic inequality that have led to our current predicament.

One must always be wary of succumbing to the allure of technological determinism (Imperial 2021, 2). But with clearheaded and focused policy-making, the promise of technology can be put to work for the public good.

DEMOCRATIZING ACCESS: CLOSING THE DIGITAL DIVIDE

Millions of Americans, mostly in rural and inner city areas, lack high-speed broadband internet access. Millions more with access cannot afford the monthly fee or cannot afford a computer or smartphone to connect.

Technology played a key role in keeping people connected during the COVID-19 pandemic, enabling commerce, schooling, and a host of other activities to continue. Never before had the world's dependency on technology become so stark, and never before had technology served the public so well, at least those with internet access and internet-accessible devices. But for hundreds of millions of others around the world, the digital divide left them without any technological lifeline during the pandemic.

Calhoun, Gaonkar, and Taylor (2022, 280) note the importance of the digital divide in the concluding chapter of their book, but they regard underlying inequality as a more serious issue. Other scholars view the digital divide as linked inextricably to both income inequality and the democratic divide, where those excluded from internet access likewise face exclusion from democratic engagement and economic opportunity (Min 2010). Lai and Widmar (2021) describe how the digital divide severely impacted those without internet access during the COVID-19 pandemic, with worse health, education, economic, and social outcomes (Eruchalu et al. 2021).

High-speed broadband internet access in the twenty-first century is critical to restoring democracy by enabling *everyone* to engage and interact with e-government, to participate in e-voting, and to galvanize direct action. Broadband internet access also provides the essential on-ramp for access to the increasing range of services—such as medicine, banking, and commerce—migrating online in the twenty-first century. Closing the digital divide and rendering such access ubiquitous will do much to mitigate socioeconomic inequality in the United States and elsewhere, with positive outcomes for democracy.

Public policy, therefore, must declare high-speed broadband internet access a fundamental human necessity subject to universal service mandates. Policymakers in the twentieth century imposed universal service mandates on water, electricity, telephone, and natural gas monopolies to provide connectivity for their services to *everyone* in the United States. In the twenty-first century, we must do the same for high-speed broadband internet access, requiring the telecommunications and internet industry to offer affordable high-speed broadband internet access to every person in the country.

DEMOCRATIZING CABLE TELEVISION

Cable television news and social media have displaced old media while playing a toxic role in driving and exacerbating polarization in democratic societies, especially the United

³ *Biden v. Knight First Amendment Institute at Columbia University et al.*, 141 S. Ct. 1220, 1222 (2021) (Thomas, J. concurring).

States. Ringen (2022, 183) proposes breaking up the “media and data trusts” and imposing “normal editorial responsibility” on social media website managers. His proposals are important, and should serve as a starting point for democratizing technology through a new regulatory paradigm for both cable television and social media.

FCC oversight of cable television. The US Federal Communications Commission (FCC) currently lacks statutory power to regulate cable news and political programming. Prior to 1987, the FCC’s so-called “fairness doctrine” required broadcasters and eventually cable networks to present a variety of viewpoints, especially regarding controversial issues.⁴

Following the demise of the fairness doctrine, the FCC has maintained a rarely enforced “broadcast news distortion policy” (Federal Communications Commission 2022; see, generally, Ring 2013; Raphael 2001). The policy authorizes the FCC to levy fines if a broadcaster *deliberately* distorts a factual news report involving a *significant event*. But the FCC has no power to enforce the distortion policy against cable news networks or social media platforms.

Congress should pass legislation creating a twenty-first-century version of the fairness doctrine to curb the spread of false and incendiary information. The legislation should empower the FCC to levy fines against any media, including broadcast, cable, and social media, that intentionally purvey false or misleading information regarding matters of public importance. Fox News, OAN, Newsmax, CNN, MSNBC, Twitter, Meta, Google, TikTok, and others should all be subject to the requirement that they not deliberately purvey false information.

DEMOCRATIZING SOCIAL MEDIA

Section 230 reform: Eliminating statutory immunity for social media companies. Social media implicates an additional set of concerns. Social media usage has increased exponentially in the last two decades both in the United States and globally, displacing traditional media as the main source of news for tens of millions of people. Newspapers lost more than \$20 billion in print advertising in the United States from 2008 to 2017, close to half of total industry revenues, and cut newsroom employment by 45 percent (Nielsen and Fletcher 2020, 145).

Social media platforms have created vast echo chambers in which algorithms deliberately feed content reinforcing their users’ preexisting beliefs. Scholars have raised concerns that “selective exposure to information in like-minded communities increases political polarization and

decreases acceptance of shared facts” (McKay and Tenove 2021, 705, citing Pariser 2011). This, in turn, has created a breeding ground for extremism (Barberá 2020, 37) with the attendant diminution of consensus in democratic societies and rise in violence elsewhere, such as in Myanmar against the Rohingya (see Sablosky 2021).

Adversary governments such as Russia also have leveraged social media to sow discord and dissent in democratic societies. The well-documented Russian interference in the 2016 American presidential election campaign included a highly sophisticated social media campaign designed to poison political discourse in American society.⁵

Since 1996, however, social media companies in the United States have enjoyed nearly complete immunity from liability for content they host on their platforms. Section 230(c)(2) of the Communications Decency Act of 1996 is the source of this immunity:

No provider or user of an interactive computer service shall be held liable on account of . . . any action voluntarily taken in good faith to restrict access to or availability of material that the provider or user considers to be obscene, lewd, lascivious, filthy, excessively violent, harassing, or otherwise objectionable, whether or not such material is constitutionally protected.⁶

Congress enacted the statute in the mid-1990s to create a safe harbor for the nascent internet and social media companies to attract investment and innovate without fear of constant litigation. But by the third decade of the twenty-first century, the statute had long outlived its purpose. The now-massive social media companies no longer need the statutory immunity they enjoyed in their early start-up days.

Therefore, Section 230 should be rescinded. Social media companies should be subject to legal liability for content they host, just as traditional media have always faced the same consequence for content they host. Doing so would be one effective way to force the social media platforms to engage in the sort of “normal editorial responsibility” Ringen recommends.

Social media as public utility? A final potential reform for social media would be to impose public utility regulation on the platform companies.

US Supreme Court justice Clarence Thomas has not only warned about the market power of the internet platforms but also argued that the platforms be treated as the twenty-first-century version of “common carriers” and be subjected to public utility regulation.⁷ This model would empower the FCC and state public utility commissions to impose a wide

⁴ *Editorializing by Broadcast Licensees*, 13 F.C.C. 1246 (1949).

⁵ Report on the Investigation into Russian Interference in the 2016 Presidential Election, Special Counsel Robert S. Mueller, III Submitted Pursuant to 28 C.F.R. § 600.8(c) Washington, DC (March 2019) (the “Mueller Report”). Vol. 1 of the Mueller report, 14–35, provides a detailed account of the Russian Internet Research Agency’s weaponization of social media platforms to interfere in the 2016 US election campaign.

⁶ 47 U.S.C. § 230(c)(2).

⁷ *Biden v. Knight First Amendment Institute at Columbia University et al.*, 141 S. Ct. 1220, 1223 (2021) (Thomas, J. concurring).

variety of rules and regulations on the social media companies, including nondiscrimination, algorithmic transparency, and other similar requirements.

The Texas legislature took a step toward social media regulation in August 2021, passing a bill that would have allowed users to sue social media companies over their content-moderation decisions. The law would have barred social media companies from removing or restricting content based on “the viewpoint represented in the user’s expression.”⁸ In September 2022 the US Court of Appeals for the Fifth Circuit upheld the law, rejecting the social media companies’ argument that the law violated *their* free speech rights to engage in censorship.⁹ The US Supreme Court will very likely have the final word on the fate of the Texas law.

Treating social media companies as public utilities offers a different outcome than Ringen’s proposal to use antitrust law to break up those companies. Public utility regulation would allow the companies to maintain their large scope and scale while subjecting them to highly intensive state and federal regulation.

As for breaking up the companies or regulating them, my preference would be the latter. After all, the Bell Telephone monopoly was broken up in 1984 into smaller pieces, many of which ended up merging back together over the next two decades.

Social media reimagined. Calhoun and Ringen catalogue the many problems social media has caused during the last decade through near-monopoly control of data flows, capitalist and statist surveillance, and algorithmic targeting that has driven societal and political polarization to new extremes (Calhoun, Gaonkar, and Taylor 2022, 67–68; Ringen 2022, 183–85).

But social media technology also offers enormous potential for improving citizen engagement and creating virtual and hybrid forms of constructive direct action and associational solidarity. Fukuyama (2022, 102) argues that social media can serve as a positive force for democracy by giving voice to masses of disenfranchised people, connecting them together in pursuit of common goals.

Social media can also play a positive role in galvanizing direct action and protest, which Gaonkar characterizes as “an integral part of democratic tradition and struggle” (Calhoun, Gaonkar, and Taylor 2022, 196). Social media affordances offer a promising hybrid model for citizen engagement and protest, synergizing the online and offline worlds. In their analysis of the interaction between the physical and the virtual realms during the Arab Spring, Al Sayyad et al. observed:

At many rallies, protesters could be seen holding smart phones in one hand and anti-state banners in the other. And from the tents in occupied squares, Internet users disseminated images and messages of protest to the rest of the world. Coverage by international and national media of protest in real urban space magnified

this effect. As the protests expanded, claims made by social media and enacted in the physical space of one city could generate a model of protest, be re-enacted in another city, move through other cities and be replicated, with different claims, elsewhere (AlSayyad and Guvenc 2015, 2028).

The 2014 Hong Kong “umbrella protests” also demonstrated the power of social media in orchestrating direct action. Lee, Chen, and Chan (2017, 466) found that “sharing political information and direct connections with political actors on social media stand out as the two dimensions with consistent effects on support for and participation in the Umbrella Movement” (see also Etter and Albu 2021).

Although Facebook played a constructive role during the Arab Spring and the Umbrella Movement, the platform played a highly destructive role during the Cambridge Analytica scandal and the Rohingya genocide in Myanmar (Mozur 2018). The challenge for policymakers will be to harness the positive use cases for social media while preventing its weaponization against democracy.

Can Facebook (and Twitter, TikTok, Google/YouTube) be trusted on their own to deploy their platform for the public good, even if that means sacrificing profit? Their track record to date suggests not. They must instead be regulated, whether as public utilities or otherwise, to provide appropriate and independent oversight.

TECHNOLOGIZING DEMOCRACY: SMART CITIES AND E-GOVERNMENT

Technology has already enhanced limited pockets of governmental service to the public, primarily at the transactional level, such as renewing vehicle registrations online and paying taxes online. Smart city technology has the potential to do far more to connect citizens to their local government, one of the key recommendations of both Ringen and Calhoun.

Smart city technology can improve local governmental provision of services to the public, while connecting and involving the public more closely in local policy-making, such as urban planning (Walters 2011) and monitoring air quality (Zandburgen and Uitermark 2020). Advanced technology can empower both smart *cities* and smart *citizens* (Zandburgen and Uitermark 2020). As Vestergaar, Fernandes, and Presser noted:

Smart city technologies can be seen as support for the citizen engagement. By adapting to individual needs, and by providing direct control to the citizens, ownership and responsibility will emerge. A consequence is a shift in the municipality-citizen relationship, which results in leveraging the, yet unexploited, resource of reflective and acting citizens. (Vestergaar, Fernandes, and Presser 2016)

⁸ Texas House Bill 20 (adopted August 30, 2021).

⁹ *Netchoice v. Paxton*, Attorney General of Texas, No. 21-51178 (5th Cir. Sept. 16, 2022).

Scholars envision a future where smart cities exist not merely to showcase private sector technologies such as smart parking and smart street lighting, but as *technopolitical platforms* designed to serve the public good. In their recent study of Madrid and Barcelona, Smith and Martín (2021) noted how “technopolitics” can spur “the continual development of platform processes and institutional embedding in an open dialogue with citizens, citizen groups, and wider reforms for democracy” (Smith and Martín 2021, 312; Oliveira, Oliver, and Ramalhinho 2020).

More research is needed to determine methods for informing and spurring citizens to embrace e-participation tools as the entry point for citizen efficacy in the smart city environment, but early results are promising (Kopackova, Komarkova, and Horak 2022).

TECHNOLOGIZING DEMOCRACY: BLOCKCHAIN AND E-VOTING

Technology can and should play a key role in making voting as easy as possible for everyone eligible to vote. All three books decry current efforts to deny the franchise to poor and minority voters in nearly one-third of the American states.

Various proposals have been advanced to ensure that the maximum number of eligible voters are able to register and vote, including proxy voting and liquid (delegated) voting (Kahng, Mackenzie, and Procaccia 2021). Technology alone cannot solve this particular problem, but it can do much to mitigate the unfairness and inequality prevalent today.

Blockchain technology offers one promising methodology for making voter registration and voting more efficient, while increasing trust and confidence in the outcome of elections.

Blockchain technology describes a distributed and public peer-to-peer computerized immutable ledger where trust and verification are established without the need for third-party involvement. Each “block” begins with the identifier (or “hash”) for the previous block, and then adds information regarding a transaction. Because each block contains the hash of the immediately preceding block, the blocks form a “chain.” Each block also contains a time stamp, proving the transaction information existed when the block was created. This renders it nearly impossible to tamper with the information in the previous blocks without alerting everyone with access to the ledger of the alterations.

Blockchain technology can be viewed as an operating system, enabling specific applications such as Bitcoin digital currency. Bitcoin, however, represents only one of potentially hundreds of thousands of applications that can run on the blockchain operating system. Businesses and governments alike have been experimenting with a wide variety of other applications for blockchain, including self-executing smart contracts, copyright registration, supply

chain and logistics use cases, and voting (Imperial 2021; Baraiya and Joshi 2019; Gambill 2020; see also Kshetri and Voas 2018).

Voting represents a largely untested use case for blockchain technology, and more study is required. Some scholars see great promise in blockchain voting (Yu et al. 2018). Others worry blockchain may fall short of ensuring election integrity.¹⁰ Nevertheless, policymakers should make the necessary commitment to testing blockchain for voter registration and voting to determine whether to deploy it nationwide, at all levels of voting and elections. Doing so would make an enormously positive impact on public confidence in the integrity of the election process, while opening voting to millions more.

TECHNOLOGIZING DEMOCRACY: ARTIFICIAL INTELLIGENCE

The rapid advance of artificial intelligence (AI) technology has stirred robust debate regarding AI’s potential threat to human freedom and democracy (Helbing et al. 2017; Brkan 2019). China’s use of an AI-driven “social credit score” system to track, reward, and punish citizen behavior is frequently cited as just one example of the potential anti-democratic and repressive risks of artificial intelligence systems, especially in societies with inadequate data protection regimes (Wong and Dobson 2019).

AI also poses risks to democracy in the West, with algorithmic targeting and bot-driven content already responsible for driving polarization and impeding social solidarity (Woolley 2020).

But other scholars view AI as a highly promising means for augmenting democracy through technology. The democratic use cases for AI are still in the nascent stage, but many promising ideas have already surfaced.

For example, Burgess (2021) envisions democracy-enhancing roles for AI in voting and legislation, including the long-term possibility of AI replacing human legislators:

- (1) The simple transfer of voting for representatives online;
- (2) The use of online voting to pass or reject bills proposed in the legislature;
- (3) The use of (anonymised) individuals’ preferences to directly inform legislative decision-making; and,
- (4) The wholesale replacement of the (physical) legislature and the individuals within it with a legislature composed of algorithms representing the voting public. (See also Helbing, Frey, et al. 2018)

Other studies have demonstrated how AI and machine-learning technologies can empower citizen efficacy and hold governments more accountable. In Brazil, for example, a civil society group launched an AI-based initiative to detect inappropriate public expenditures, demonstrating how AI can improve governmental transparency “by allowing

¹⁰ Park et al. 2021 (questioning whether blockchain voting can be secured from tampering, and whether the decentralized “bulletin board” nature of blockchain would render voting results less reliable).

citizens to tackle stable and predictable problems for which large volumes of data are relatively easy to collect” (Savaget, Chiarini, and Evans 2019).

Lin and Lewis (2022) propose “Journalistic AI” as a model for improving democracy through better accuracy, accessibility, diversity, relevance, and timeliness of news delivery while combating fake news and polarizing content.

AI can even be used to police itself and counter some of the potentially negative aspects of AI technology. Elkin-Koren (2020) has proposed “contesting algorithms” as a way for AI to check and balance itself through algorithmic competition to improve transparency and guard against antidemocratic outcomes.

AI offers enormous potential to technologize democracy through advanced technology. The challenge will be to resist the temptation to use AI to concentrate political and economic power in the hands of fewer and fewer people while using the technology to control everyone else. We need appropriate legislative and regulatory frameworks to guard against those risks.

CONCLUSION

The three books make valuable contributions to the burgeoning literature addressing the threats to liberal democracy. Although the three books offer different perspectives, they each agree with Tocqueville’s early nineteenth-century observations regarding the benefits of civic associations and civic engagement in the United States. Those observations are as relevant as ever two hundred years later.

American society is infinitely more complex today than during Tocqueville’s sojourn. But by regulating what Ringen calls the “media and data trusts” and harnessing the incredible potential of advanced technology, we can achieve dramatic improvements in associational engagement and empowerment for the twenty-first century.

In a speech to the United States Congress on May 25, 1961, President John F. Kennedy famously urged the country to meet the greatest technological challenge of the twentieth century and “commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to Earth.”¹¹ The Apollo 11 mission achieved that goal five months before the end of the decade.

The leadership of the United States must now ask the country to meet another great technological challenge in the twenty-first century by committing itself to democratizing technology and technologizing democracy. Perhaps the Silicon Valley companies will commit to a strong public-private technology partnership for democracy. Or perhaps not. Either way, the government and the people must plow

ahead with the same focus and commitment that led us to the moon and back.

COMPETING INTERESTS

The author has no competing interest(s) to declare.

AUTHOR BIOGRAPHY

Steven E. Zipperstein is a distinguished senior fellow at the UCLA Center for Middle East Development. He also serves as an adjunct assistant professor in the UCLA Luskin School of Public Affairs. Zipperstein is also a lecturer in the School of Engineering at UCLA, the UCLA School of Business, and the Department of History at UC Santa Barbara. Zipperstein is also a visiting professor at Tel Aviv University Law School.

Zipperstein is the author of *Zionism, Palestinian Nationalism and the Law: 1939-1948* (Routledge, 2022) and *Law and the Arab-Israeli Conflict: The Trials of Palestine* (Routledge, 2020). He has also published several law review articles.

Zipperstein, an elected member of the American Law Institute, has also practiced law for nearly forty years. During his career Zipperstein worked as a law firm litigator, as a federal prosecutor and Justice Department official, and as the chief legal officer of two large companies, Verizon Wireless and BlackBerry.

Before his corporate legal career, Zipperstein served for more than nine years as a federal prosecutor in the United States Attorney’s office in Los Angeles. Zipperstein tried more than a dozen federal felony jury trials (including the first-ever prosecution against the owners of a failed savings and loan during the late 1980s), and he argued twenty-three cases before the Ninth Circuit Court of Appeals.

During 1992–93 Zipperstein served at the Justice Department in Washington, DC, as special counsel to former Criminal Division chief (later FBI director and Russia special counsel) Robert S. Mueller III. Attorney general Janet Reno later selected Zipperstein to serve as her counselor during the 1995 congressional hearings regarding the 1993 events at the Branch Davidian compound in Waco, Texas.

Zipperstein has testified before the US Congress on telecommunications policy issues numerous times.

Submitted: November 24, 2022 PST, Accepted: December 02, 2022 PST

¹¹ President John F. Kennedy, Address to Joint Session of Congress, May 25, 1961, <https://www.jfklibrary.org/learn/about-jfk/historic-speeches/address-to-joint-session-of-congress-may-25-1961>, last accessed December 21, 2022.

REFERENCES

- AlSayyad, Nezar, and Muna Guvenc. 2015. "Virtual Uprisings: On the Interaction of New Social Media, Traditional Media Coverage and Urban Space during the 'Arab Spring.'" *Urban Studies* 52 (11): 2018–34. <https://doi.org/10.1177/0042098013505881>.
- Anheier, H.K., M. Lang, and E. Knudsen. 2022. *Toward a New Understanding of Governance: The 2022 Berggruen Governance Index*. UCLA Luskin School of Public Affairs.
- Baraiya, Vishal, and Seema B. Joshi. 2019. "E-Voting: Blockchain Based Voting for Secure Vote Casting." *International Journal of Engineering and Advanced Technology* 9 (2): 4797–4801. <https://doi.org/10.35940/ijeat.b3024.129219>.
- Barberá, Pablo. 2020. "Social Media, Echo Chambers, and Political Polarization." In *Social Media and Democracy: The State of the Field, Prospects for Reform*, edited by N. Persily and J.A. Tucker, 34–55. Cambridge University Press. <https://doi.org/10.1017/9781108890960.004>.
- Brkan, M. 2019. "Artificial Intelligence and Democracy." *Delphi - Interdisciplinary Review of Emerging Technologies* 2 (2): 66–71. <https://doi.org/10.21552/delphi/2019/2/4>.
- Burgess, Paul. 2021. "Algorithmic Augmentation of Democracy: Considering Whether Technology Can Enhance the Concepts of Democracy and the Rule of Law through Four Hypotheticals." *AI & Society* 37 (1): 97–112. <https://doi.org/10.1007/s00146-021-01170-8>.
- Calhoun, Craig, Dilip Parameshwar Gaonkar, and Charles Taylor. 2022. *Degenerations of Democracy*. Harvard University Press. <https://doi.org/10.4159/9780674276024>.
- Elkin-Koren, Niva. 2020. "Contesting Algorithms: Restoring the Public Interest in Content Filtering by Artificial Intelligence." *Big Data & Society* 7 (2): 1–13. <https://doi.org/10.1177/2053951720932296>.
- Eruchalu, Chukwuma N., Margaret S. Pichardo, Maheetha Bharadwaj, Carmen B. Rodriguez, Jorge A. Rodriguez, Regan W. Bergmark, David W. Bates, and Gezzer Ortega. 2021. "The Expanding Digital Divide: Digital Health Access Inequities during the COVID-19 Pandemic in New York City." *Journal of Urban Health* 98 (2): 183–86. <https://doi.org/10.1007/s11524-020-00508-9>.
- Etter, Michael, and Oana Brindusa Albu. 2021. "Activists in the Dark: Social Media Algorithms and Collective Action in Two Social Movement Organizations." *Organization* 28 (1): 68–91. <https://doi.org/10.1177/1350508420961532>.
- Federal Communications Commission. 2022. "Broadcast News Distortion Policy." August 31, 2022. <https://www.fcc.gov/broadcast-news-distortion>.
- Fukuyama, F. 2022. *Liberalism and Its Discontents*. Farrar, Straus and Giroux.
- Gambill, A.B. 2020. "The Future of Voting Reform with Blockchain Technology." *Idaho Law Review* 56 (2): 167–82.
- Helbing, D. et al. 2017. "Will Democracy Survive Big Data and Artificial Intelligence?" *Scientific American*, February 25, 2017.
- Helbing, D., B. Frey, et al. 2018. "Will Democracy Survive Big Data and Artificial Intelligence?" In *Towards Digital Enlightenment: Essays on the Dark and Light Sides of the Digital Revolution*, edited by D. Helbing, 73–98.
- Imperial, Miranda. 2021. "The Democracy to Come? An Enquiry Into the Vision of Blockchain-Powered E-Voting Start-Ups." *Frontiers in Blockchain* 4: 1–13. <https://doi.org/10.3389/fbloc.2021.587148>.
- Kahng, Anson, Simon Mackenzie, and Ariel Procaccia. 2021. "Liquid Democracy: An Algorithmic Perspective." *Journal of Artificial Intelligence Research* 70: 1223–52. <https://doi.org/10.1613/jair.1.12261>.
- Kopackova, Hana, Jitka Komarkova, and Oldrich Horak. 2022. "Enhancing the Diffusion of E-Participation Tools in Smart Cities." *Cities* 125: 1–11. <https://doi.org/10.1016/j.cities.2022.103640>.
- Kshetri, Nir, and Jeffrey Voas. 2018. "Blockchain-Enabled E-Voting." *IEEE Software* 35 (4): 95–99. <https://doi.org/10.1109/ms.2018.2801546>.
- Lai, John, and Nicole O. Widmar. 2021. "Revisiting the Digital Divide in the COVID-19 Era." *Applied Economic Perspectives and Policy* 43 (1): 458–64. <https://doi.org/10.1002/aep.13104>.
- Lee, Francis L.F., Hsuan-Ting Chen, and Michael Chan. 2017. "Social Media Use and University Students' Participation in a Large-Scale Protest Campaign: The Case of Hong Kong's Umbrella Movement." *Telematics and Informatics* 34 (2): 457–69. <https://doi.org/10.1016/j.tele.2016.08.005>.
- Lin, Bibo, and Seth C. Lewis. 2022. "The One Thing Journalistic AI Just Might Do for Democracy." *Digital Journalism* 10 (10): 1627–49. <https://doi.org/10.1080/21670811.2022.2084131>.
- McKay, Spencer, and Chris Tenove. 2021. "Disinformation as a Threat to Deliberative Democracy." *Political Research Quarterly* 74 (3): 703–17. <https://doi.org/10.1177/1065912920938143>.
- Min, Seong-Jae. 2010. "From the Digital Divide to the Democratic Divide: Internet Skills, Political Interest, and the Second-Level Digital Divide in Political Internet Use." *Journal of Information Technology & Politics* 7 (1): 22–35. <https://doi.org/10.1080/19331680903109402>.
- Mozur, P. 2018. "A Genocide Incited on Facebook, With Posts from Myanmar's Military." *New York Times*, October 15, 2018.
- Nielsen, Rasmus Kleis, and Richard Fletcher. 2020. "Democratic Creative Destruction? The Effect of a Changing Media Landscape on Democracy." In *Social Media and Democracy: The State of the Field, Prospects for Reform*, edited by N. Persily and J.A. Tucker, 139–62. Cambridge University Press. <https://doi.org/10.1017/9781108890960.008>.

- Oliveira, Thays A., Miquel Oliver, and Helena Ramalhinho. 2020. "Challenges for Connecting Citizens and Smart Cities: ICT, E-Governance and Blockchain." *Sustainability* 12 (7): 2926–47. <https://doi.org/10.3390/su12072926>.
- Pariser, E. 2011. *The Filter Bubble: What the Internet Is Hiding from You*. Penguin Books.
- Park, Sunoo, Michael Specter, Neha Narula, and Ronald L Rivest. 2021. "Going from Bad to Worse: From Internet Voting to Blockchain Voting." *Journal of Cybersecurity* 7 (1): 1–15. <https://doi.org/10.1093/cybs/ec/tyaa025>.
- Raphael, Chad. 2001. "The FCC's Broadcast News Distortion Rules: Regulation by Drooping Eyelid." *Communication Law & Policy* 6 (3): 485–539. https://doi.org/10.1207/s15326926clp0603_03.
- Ring, C. 2013. "Curbing Deception: Why the FCC Should Establish Formal News Distortion Regulations for Broadcast Programming." *Communication Law Review* 13 (1): 48–71.
- Ringen, Stein. 2022. *How Democracies Live: Power, Statecraft and Freedom in Modern Societies*. University of Chicago Press. <https://doi.org/10.7208/chicago/9780226819112.001.0001>.
- Sablosky, Jeffrey. 2021. "Dangerous Organizations: Facebook's Content Moderation Decisions and Ethnic Visibility in Myanmar." *Media, Culture & Society* 43 (6): 1017–42. <https://doi.org/10.1177/0163443720987751>.
- Savaget, Paulo, Tulio Chiarini, and Steve Evans. 2019. "Empowering Political Participation through Artificial Intelligence." *Science and Public Policy* 46 (3): 369–80. <https://doi.org/10.1093/scipol/scy064>.
- Smith, Adrian, and Pedro Prieto Martín. 2021. "Going beyond the Smart City? Implementing Technopolitical Platforms for Urban Democracy in Madrid and Barcelona." *Journal of Urban Technology* 28 (1–2): 311–30. <https://doi.org/10.1080/10630732.2020.1786337>.
- Vestergaar, L.S., J. Fernandes, and M. Presser. 2016. "Towards Smart City Democracy." *Geoforum Perspektiv* 14 (25): 38–43.
- Walters, David. 2011. "Smart Cities, Smart Places, Smart Democracy: Form-Based Codes, Electronic Governance and the Role of Place in Making Smart Cities." *Intelligent Buildings International* 3 (3): 198–218. <https://doi.org/10.1080/17508975.2011.586670>.
- Wong, Karen Li Xan, and Amy Shields Dobson. 2019. "We're Just Data: Exploring China's Social Credit System in Relation to Digital Platform Ratings Cultures in Westernised Democracies." *Global Media and China* 4 (2): 220–32. <https://doi.org/10.1177/2059436419856090>.
- Woolley, Samuel C. 2020. "Bots and Computational Propaganda: Automation for Communication and Control." In *Social Media and Democracy: The State of the Field, Prospects for Reform*, edited by N. Persily and J.A. Tucker, 89–110. Cambridge University Press. <https://doi.org/10.1017/9781108890960.006>.
- Yu, B. et al. 2018. "Platform-Independent Secure Blockchain-Based Voting System." In *Information Security*, edited by L. Chen et al., 369–86. Springer.
- Zandburgen, Dorien, and Justus Uitermark. 2020. "In Search of the Smart Citizen: Republican and Cybernetic Citizenship in the Smart City." *Urban Studies* 57 (8): 1733–48. <https://doi.org/10.1177/0042098019847410>.

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.