2021

**DATA&
SOCIETY**

CONTENTS

ABOUT DATA & SOCIETY

At Data & Society, we advance public understanding of the social and cultural implications of data-centric technologies and automation. Through empirically grounded research and inclusive engagement, we work to ensure that knowledge guides the development and governance of technology.

This report presents an overview of institutional highlights from 2021.

LETTER FROM THE EXECUTIVE DIRECTOR

Dear Friends,

At the end of 2021 — and our second year of working remotely – Data & Society has made incredible strides in pushing for decisions about technology to be undertaken deliberately, and with respect for human dignity. We launched our first policy engagement program, working to advance more justice-oriented policy instruments and prevent further tech-driven harms. We've broadened the discourse on algorithmic governance, worker surveillance and monitoring in data-centric workplaces, social media's disenfranchisement of youth, and international platform governance. Our work increasingly centered on voices from outside the United States, and we were proud to work with partners around the world as we launched a shared exploration of AI in the majority world.

I'm deeply grateful to everyone at Data & Society for their care for each other, and for the work we've engaged in together — through rigorous research and engagement — to build towards a society that is more just, equitable, and evidence-based in our use of technology. Our staff showed up every day not only to advance our external mission, but to contribute to our internal work of building a stronger, more equitable, and more responsive organization. And we've accomplished a lot on both fronts in 2021 because so many of our staff came together to do the hard work of listening to each other, sharing how we can improve, and building projects and programs to make change happen at Data & Society and in the world.

As we look to the coming year, our work feels more pressing and urgent than ever. We are seeing rapid shifts in the use of AI and data-centric technologies, accompanied by increasing recognition of the need to balance the full-throated embrace of technology with protections against the violations of fundamental rights and freedoms these technologies have been shown to engender. It's critical that these society-shaping debates are informed by groundbreaking, rigorous research.

We look forward to continuing to expand and grow our work over the coming years, and invite you to join us in creating the future we want to see.

With thanks,

Janet Haven
Executive Director, Data & Society

PEOPLE

PEOPLE

None of this work would be possible without our incredible network of staff, researchers, fellows, affiliates, advisors, and directors.

BOARD OF DIRECTORS

danah boyd
Founder and President of the Board, Data & Society; Partner Researcher, Microsoft Research

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Co-Founder and Executive Director, TechEquity Collaborative

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Moira Weigel

Eve Zelickson

FELLOWS

Tamara Nopper
2021-22

Chaz Arnet
2021-22

Murali Shanmugavelan
2021-22

Shaka McGlotten
2020-21

Meredith D. Clark
2020-21

VALUES

VALUES

INDEPENDENCE

Independence is the foundation of rigorous empirical research. We select projects, choose methodologies, and make publishing decisions based on our analysis of the issues at hand. We have specific requirements for accepting funding, and do not accept support that would compromise the independence or rigor of our work.

INTEGRITY

Organizational integrity requires trust, accountability, and transparency. We build trust and accountability through our independent research, our transparent funding relationships and organizational practices, and our inclusive outreach to a wide range of communities and individuals.

EQUITY

Individuals and their communities require respect and dignity. We recognize and embrace differences among us, and center these differences because of a fundamental respect for diversity and a desire to challenge existing power relations in data-centric fields. True commitment to this value requires equitable practices of hiring and retention, a centering of community experiences in our research, and an adherence to the principles of diversity, equity, and inclusion in all organizational activities and policies.
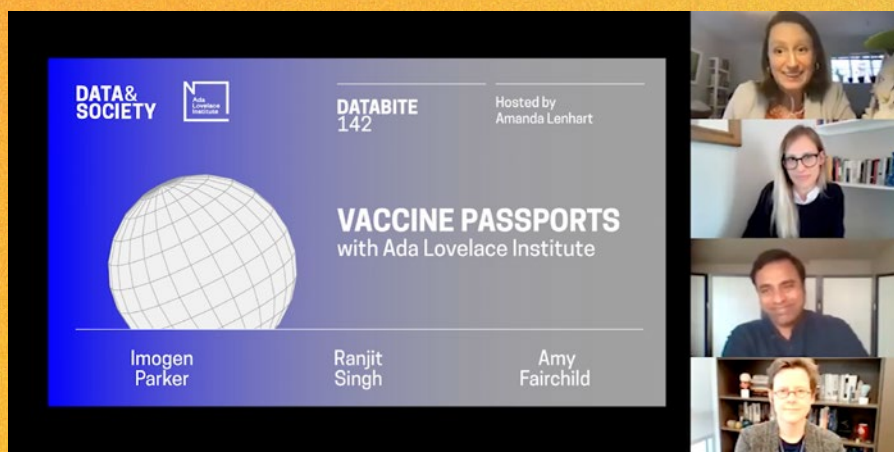
CREATIVITY

Non-traditional approaches are necessary to challenge existing structures of power and dominant narratives about data-centric technologies. Thus, we support interdisciplinary work. We enable research and engagement that values new forms of knowledge production, open experimentation, and a broad range of expertise to frame our culture and outputs.

THEORY OF CHANGE

THEORY OF CHANGE

Our work is informed by these core concerns:

1. Data-centric technologies have social, cultural, and political implications that are far-reaching, unevenly distributed, and poorly understood.

2. Negative impacts of these technologies disproportionately cause harm to systematically marginalized populations.

3. Concentration of power in the technology industry, driven by the amassing of personal data by private companies, has significant implications for practicing democracy, and for governing data-centric technologies in relation to citizenship and human rights.

PICTURED: DATA & SOCIETY'S *Amanda Lenhart and Ranjit Singh in conversation with public health ethicist Amy Fairchild, and the head of policy at Ada Lovelace Institute Imogen Parker talking about Vaccine Passports in March 2021.*

RESEARCH

At Data & Society, we believe evidence and knowledge should guide the design and governance of data-centric and automated technologies. Our research both fills knowledge gaps in known territories and explores emerging domains, with the goal of increasing general understanding of the social and cultural implications of the technologies that have such a pervasive and subtle influence on the way we work and live. We build our research culture on work that is empirical and interdisciplinary, using a decolonialist framework, academic rigor, and orthogonal approaches to create maximum impact. Our research culture foregrounds these approaches:

Empirical

The heart of our work is rooted in direct observation of the real world, and is often ethnographic, while we use other research methodologies that foreground computer science, socio-legal scholarship, and critical inquiry, all to gain a better understanding of emerging practices around data-centric technologies.

Interdisciplinary

The biggest challenges technologies pose to equity and justice require interdisciplinary thinking. We intentionally create areas of overlap and foster collaborations across disciplines. Our alumni span many fields and include social scientists, computer scientists, legal scholars, social advocates, practitioners, creators, and artists.

Anticolonial

Our research seeks to ask questions and confront issues in a way that centers race, class, gender, indigeneity, and their intersectionalities—both inside the United States and abroad. We develop and use novel participatory research approaches to assess data infrastructures and systems.

Rigorous

We do research that is methodologically sound, theoretically and analytically conscientious, and empirically grounded. All of our research is reviewed by peers who span many disciplines and fields. Additionally, we are experimenting with new ways to build further review and engagement into our processes.

Orthogonal

Our research seeks to tackle new and emerging domains and raise questions that have not yet been asked. We aim to explore questions in which the outcomes aren't yet known or obvious, in areas where our conclusions may challenge existing assumptions.

Impactful

We believe that the knowledge and evidence we gather is necessary to effectively handle the implications of sociotechnical systems. We design our research to offer nuanced framings of the on-the-ground effects technical systems have in social, economic, and political contexts, centering concerns of equity and justice.

OUR IMPACT

OUR IMPACT

We view our impact as more than just a numbers game. Starting with the premise that data is a social construct—that it communicates currently predominant values and norms, rather than any objective truth—we choose to report on our own impact in narrative form. We trace our research projects from concept to engagement to result via "impact stories" that take place over the course of months—if not years.

We understand our work to have impact in three major ways:

CHANGING THE TERMS OF DEBATE
We challenge the narrative of technology as social savior in policy and media environments, and we push for a shift to more nuanced and context-specific framings of technology's role in society.

SHIFTING POWER
We inform emerging data governance in policy and practice with a rigorous, interdisciplinary evidence base, drawn from empirical research.

SHAPING POLICY AND PRACTICE IN DATA GOVERNANCE
We inform emerging data governance in policy and practice with a rigorous, interdisciplinary evidence base, drawn from empirical research.

The four impact stories that follow are selected from the much larger body of work that we undertook in 2021. They were chosen to illustrate the breadth of topics we address, and the variety of approaches we're taking to increase our impact.

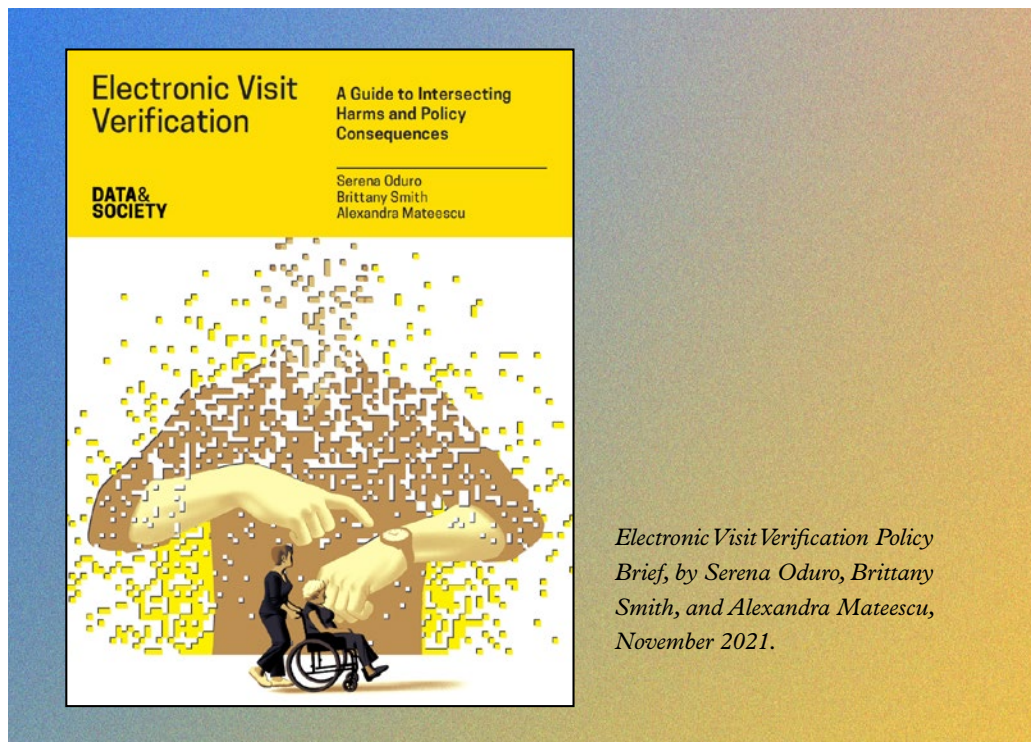# CONNECTING EMPIRICAL RESEARCH TO POLICY ENGAGEMENT

We marked the formal launch of our policy engagement work with the arrival of our first policy director in February 2021. Our network and staff include numerous policy and legal experts whose work demonstrates the value of connecting our research to policy action, including two former board members serving in the White House Office for Science and Technology Policy (OSTP), and a former researcher working as a senior advisor at National Institute of Standards and Technology (NIST). The launch of this work has tremendous potential for expanding the impact of our research, and has contributed to the development of a more sustained, organized policy engagement effort. To help support this, we produced our first policy engagement strategy—outlining our goals, the tactics we use to achieve those goals, a rubric for prioritizing policy engagement opportunities, and details regarding team boundaries, failure modes, and the ways we measure success.

Policy Brief for Assembling Accountability report, Emanuel Moss, Elizabeth Anne Watkins, Ranjit Singh, Madeleine Clare Elish, and Jacob Metcalf, DATA & SOCIETY, June 2021.

Major outputs and impacts:

- We wrote and released our first policy briefs, accompanying two of this year's major research reports: *Electronic Visit Verification: the Weight of Surveillance and the Fracturing of Care* and *Assembling Accountability: Algorithmic Impact Assessment for the Public Interest*.

- We launched and continue to co-chair a working group on the algorithmic state at the Leadership Conference's Civil Rights, Privacy, and Technology Table. Alongside multiple civil rights partners and tech policy organizations, we're identifying opportunities for collective action, to ensure that government use of algorithmic systems prioritizes equity and economic justice.

- We've organized and participated in a number of meetings with the White House OSTP, as well as with other federal agencies and members of Congress. Through these meetings, we've been working to establish Data & Society as a source of expertise by providing critical sociotechnical research on data-centric technology.

- We contributed to numerous letters addressed to government agencies that called for regulation and guidance in AI policy, including a letter addressed to the White House OSTP and the Domestic Policy Council.
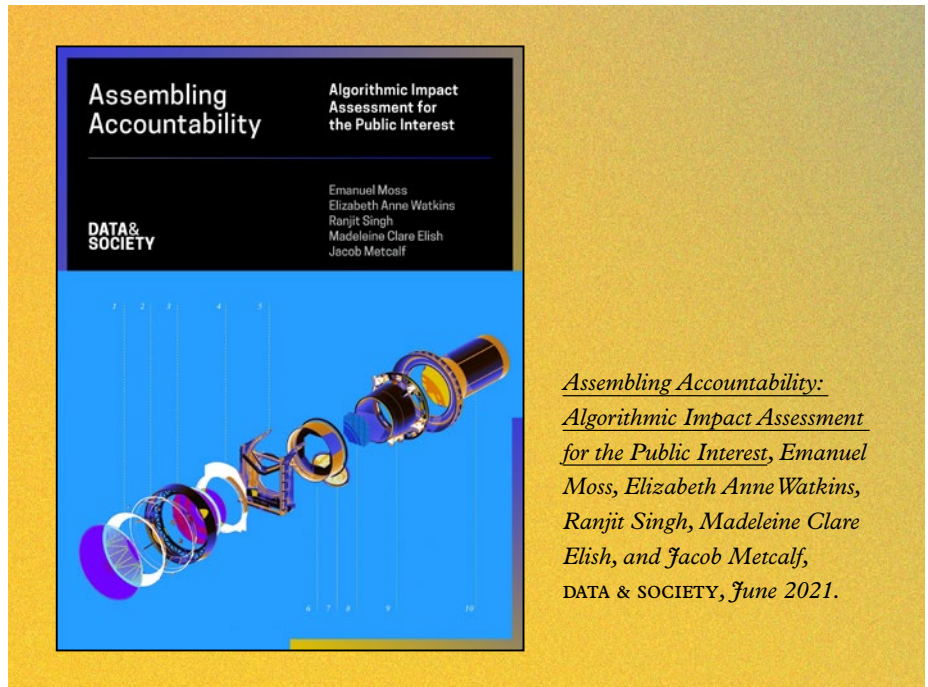

Electronic Visit Verification Policy Brief, by Serena Oduro, Brittany Smith, and Alexandra Mateescu, November 2021.

DEFINING EVIDENCE-BASED SOLUTIONS: ACCOUNTABLE ALGORITHMS

There is near-universal consensus that algorithmic systems disproportionately harm systematically excluded groups; this harm tends to make itself known only after the systems have already been integrated into society. Assessments of this harm, however, are often limited—by the scope of harms considered, the set of stakeholders who participate, and the difficulties involved in crafting mechanisms of accountability. Algorithmic systems are shaped by design decisions and the practicalities of their integration into social structures, but they should also be directly accountable to those affected by them. Over the next three to five years, we expect to see governments across the globe codifying more laws concerning the regulation of algorithmic systems—AI systems in particular. Throughout 2021, we have been exploring how these assessments are made and engaging partner organizations about how to influence related policy and legislation.
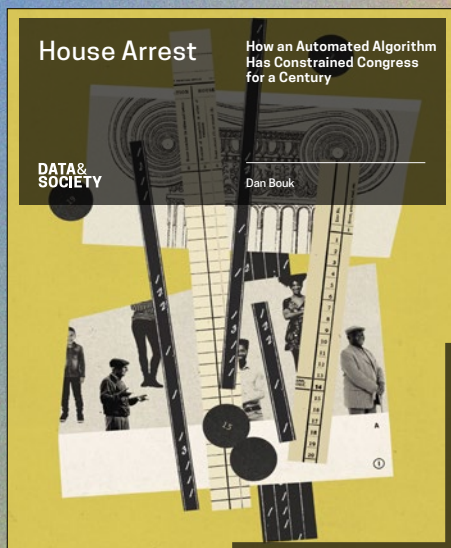
Major outputs and impacts:

- After two years of research, we released our report <u>Assembling Accountability: Algorithmic Impact Assessment for the Public Interest</u>. It was released alongside <u>our first policy briefing</u>, which laid out a series of policy recommendations based on the report. The report was presented at the <u>2021 ACM Conference on Fairness, Accountability, and Transparency</u>, which was co-chaired in 2021 by Data & Society affiliate Madeleine Clare Elish.

- Ahead of the release of the revised version of the <u>Algorithmic Accountability Act of 2019</u>, we served as expert advisors to Senator Ron Wyden's staffers as the bill took shape.

<u>Assembling Accountability: Algorithmic Impact Assessment for the Public Interest</u>, Emanuel Moss, Elizabeth Anne Watkins, Ranjit Singh, Madeleine Clare Elish, and Jacob Metcalf, DATA & SOCIETY, *June 2021.*

- We published an op-ed in *Slate,* "A New Law Could Actually Hold Big Tech Accountable for Its Algorithms," outlining the strengths of this legislative approach to tech accountability—including its requirement that companies consult with impacted communities, and stressing the validity of impact assessments as a way to hold tech companies responsible.

- We worked with experts on emerging regulations in the EU, US, and Canada to engage our key audiences, including policy actors, media, community advocates, and the designers of algorithmic systems. This culminated in our event Algorithmic Governance and the State of Impact Assessment in the EU, US, and Canada.

- We released a report by Dan Bouk, *House Arrest: How An Automated Algorithm Constrained Congress for a Century*, about the current use of algorithms in democratic process. The report focuses on how an automated algorithm implemented in the 1930s has led to an imbalance of power in Congress that lasts to this day.

- We designed a three-year project to develop a public-interest Algorithmic Impact Assessment methodology: the Algorithmic Impact Methods Lab (AIMLab).

House Arrest: How An Automated Algorithm Constrained Congress For A Century by Dan Bouk, DATA & SOCIETY, *April 2021.*

ENGAGEMENT AND COALITIONS
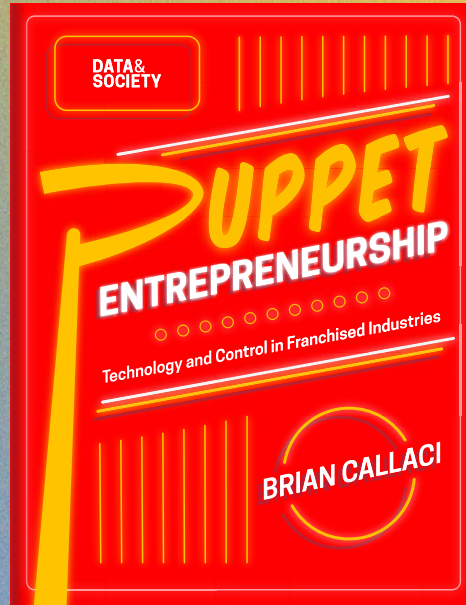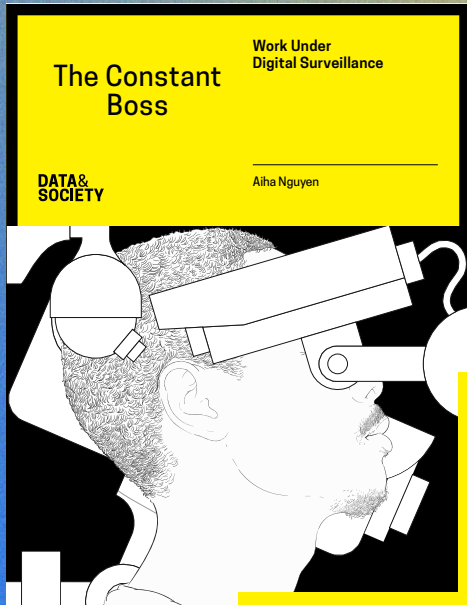# FOCUSING ON THE FUTURE OF WORK

This work is led by our Labor Futures initiative, which centers workers' concerns in order to envision fair and just labor conditions in data-centric work environments. That team, which includes seasoned labor advocates and ethnographers, works closely with other teams at Data & Society, pulling in expertise on data and health, online organizing, algorithmic governance, policy, and creative communications practices, all of which broaden and deepen the impact of our work.

Major outputs and impacts:

▪ We released three major reports in 2021, including _The Constant Boss,_ by program director Aiha Nguyen; _Puppet Entrepreneurship,_ by researcher Brian Callaci; and _Electronic Visit Verification: the Weight of Surveillance and the Fracturing of Care,_ by researcher Alexandra Mateescu.

▪ We prepared comments for the OSTP's Public and Private Sector Uses of Biometric Technologies RFI, based on our Electronic Visit Verification report, in coalition with other organizations to oppose the government's use of biometric technologies.

Electronic Visit Verification: the Weight of Surveillance and the Fracturing of Care, _Alexandra Mateescu,_ DATA & SOCIETY, _November 2021._

- We partnered with the Tech Worker Coalition to publish a series of posts on our *Points* blog about the impact that changing labor conditions in the pandemic have had on workers.

- We built new bridges for collaboration through our academic workshops, including The Hustle Economy: Race, Gender, and Digital Entrepreneurship. This event brought Data & Society's Sareeta Amrute together with Tressie McMillan Cottom, an associate professor at the University of North Carolina, and Lana Swartz, an assistant professor of media studies at the University of Virginia. This online, collaborative program provided space for deep dives into academic works-in-progress.
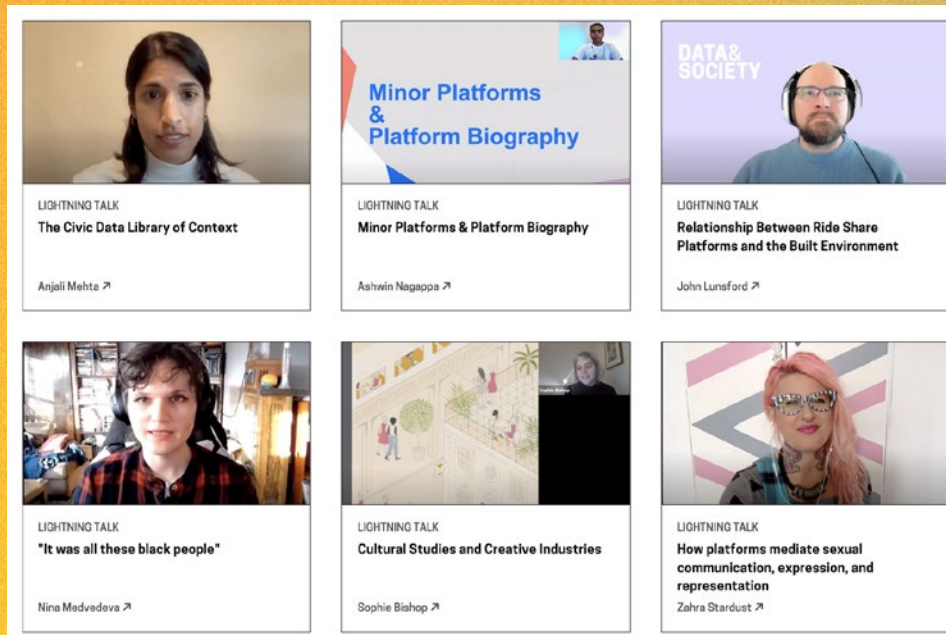

The Constant Boss,
Aiha Nguyen,
DATA & SOCIETY, *May 2021.*

Puppet Entrepreneurship,
Brian Callaci,
DATA & SOCIETY, *January 2021*

QUESTIONING THE GOVERNANCE AND SAFETY OF PLATFORMS

Over the past year we have been increasingly concerned with the governance of tech platforms, and how trustworthy and safe they are for users. To help address this concern, we have built a research agenda that focuses on platform governance: a broad area of research dedicated to the norms, rules, and regulations through which platforms are governed, and by which they govern their users. Specific research projects have zeroed in on how different users interact with and are treated by different platforms. We partnered with international research centers, worked directly with communities that are often overlooked by platform safety rules, and engaged regulators, policymakers, and industry leaders with our findings.
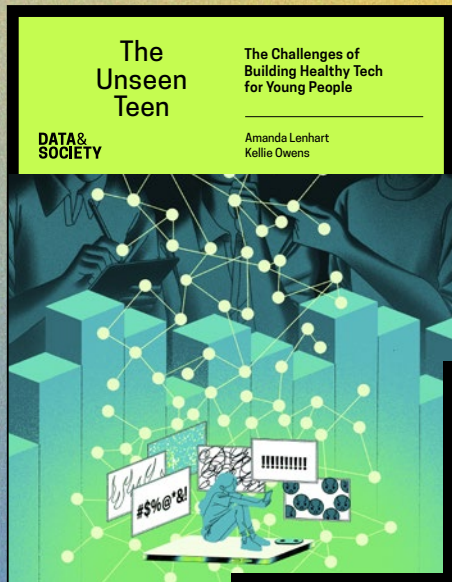

The Against Platform Determinism workshop featured civic leaders and emerging scholars during lightning talks and small group discussions.

Major outputs and impacts:

▪ In January 2021 we hosted our first completely online academic workshop, Against Platform Determinism, led by William Partin, Meredith D. Clark, and Robyn Caplan. Out of close to 450 applications, 60 participants were selected from various career stages, specialties, sectors, and global locations; and from a range of disciplines, including legal, organizational, activist, policy, media, and platform domains. Paper topics spanned subjects including alternative internet histories;

platform deaths; culture industries, subcultures, and modes of resistance; mediation of platforms through infrastructure; and multistakeholderism and influence.

- Following this successful academic workshop, we have been building transnational networks to bring together global collaborative conversations. Data & Society is proud to be a founding member of the Platform Governance Research Network, working with organizations who are based in 18 countries across 6 continents.

- To help foster this conversation, the Platform Governance Research Network held its first annual conference in March of this year. The conference as a whole had 1,000 registered participants, and our keynote panel (which featured Chinmayi Arun, Tarleton Gillespie, and Anne Cheung) had 250 participants.

- We released a major report, *The Unseen Teen: The Challenges of Building Healthy Tech for Young People*, about how adolescent well-being is prioritized (or not) in the design and development of popular social media and gaming platforms. Informed by interviews with tech industry professionals, the report found that young users are often treated as an afterthought and not included in the typical definition of an "average user." To help combat how young people have been overlooked by platforms, we produced tip sheets for regulators and civil society, as well as for tech companies and people who work in the industry, stressing that the digital well-being of adolescent users should be handled with care and respect.

The Unseen Teen, Amanda Lenhart and Kellie Owens, DATA & SOCIETY, *May 2021.*

ENGAGEMENT

ENGAGEMENT

Over the course of 2021, we continued to hold all our events virtually. The chief advantage of an all-virtual format is that we have vastly expanded the geographic range of our audiences, and it has become much easier to work with organizations based outside the US. We have adapted to this virtual, global model by timing events so that audiences around the world can access them at a reasonable hour.

These programs have included our Databites series, academic workshops, network talks, and events held in collaboration with our partners. Our events bring together diverse communities to reframe the way our audiences—be they policymakers, academics, media, or civil society—think about their social relationship with technology.

PICTURED:
Databite 'For Leaders and Researchers: Bringing Equity into the Remote Workplace' featuring (L-R top to bottom) Yang Hong, Rigoberto Lara Guzmán, Ellen Pao, and McKensie Mack.

Some examples of our responsive virtual programming:

- **Academic Workshop: Trust and Doubt in Public-Sector Data Infrastructures**

- **Network Talk: Can't Pay, Won't Pay**

- [Databite No. 142: Vaccine Passports with Ada Lovelace Institute](#)

- [Storytelling Workshop: Parables of AI in/from the Global South](#)

- **Podcast Series with Public Books:** Co-produced by Data & Society and Public Books, "Becoming Data" is the third season of Public Books 101, a podcast that turns a scholarly eye towards a world worth studying. The first episode premiered Monday, May 17, 2021.

    [Episode 1: Becoming Data - Data & Humanity](#) with Mimi Onuoha, Lam Thuy Vo and Natalie Kerby, *Data & Society & Public Books*, May 2021.

    [Episode 2: Becoming Data - Data & Labor](#) with Shaka McGlotten, Chris Ramsaroop and Natalie Kerby, *Data & Society & Public Books*, June 2021.

    [Episode 3: Becoming Data - Data, AI & Automation](#), with Arthur Gwagwa, Deb Raji, and Natalie Kerby, *Data & Society & Public Books*, June 2021.

    [Episode 4: Becoming Data - Data & Infrastructure](#), with Laura Forlano, Ranjit Singh, and Natalie Kerby, *Data & Society & Public Books*, June 2021.

    [Episode 5: Becoming Data - Data & Racial Capitalism](#) with Sareeta Amrute & Emiliano Treré, *Data & Society & Public Books,* June 2021.

Our researchers also published numerous academic articles and op eds in partnership with major media outlets including [How to Keep Kids Safe Online? Ask Videogame Designers](#), by Amanda Lenhart, THE INDEPENDENT*, October 2021, and [State efforts to curb porch theft has another potential victim: delivery workers](#), by Aiha Nyguen and Eve Zelickson,* FAST COMPANY*, December 2021.*

FELLOWSHIPS

FELLOWSHIPS

Since our launch in 2014, Data & Society has hosted a variety of practitioners and academics: data scientists and engineers, lawyers and librarians, ethnographers and creators, historians and activists. In 2021, two Data & Society fellows completed their time with us:

PICTURED:
Meredith D. Clark & Shaka McGlotten speaking at Databite 'Moving Through Molasses: On Intellectual Labor, Productivity, and Belonging'.

Meredith D. Clark, Ph.D. is an assistant professor in the media studies department at the University of Virginia. Clark began the fellowship intent on digging into the issue of misinformation vis-a-vis the exploitation of Black women's online identities. In the course of her research, the project evolved from theory to practice: now she is working to develop a community-based social networking app that is built on values espoused by Black feminists and womanists, as well as nonbinary and gender-nonconforming Black folks who identify as femme. She spent most of the fellowship year working on a project collecting data about newsroom diversity. We're pleased to share that this effort (News Leaders Association's Transformative Transparency Project) is in its pilot stage, and has gone out to the field.

Shaka McGlotten is a professor of media studies and anthropology at SUNY Purchase, where they also serve as chair of the gender studies and global Black studies programs. They have published three episodes of an approximately 15 minute video essay called "Racial Chain of Being: The More Things Change." The video essay brings together reflections on scientific racism both past and present, the seminal essay "The Cyborg Manifesto" by anthropologist and pioneering feminist science and technology studies scholar Donna Haraway, and various autobiographical and pedagogical materials. The essay uses the figure

of the chain to link its themes together: the "chain" refers to the "Great Chain of Being"—a medieval, hierarchical structure of all matter and life that contained an early formulation of racial hierarchies—and also refers to the ways learning and its radical potential connect Shaka to their father, a US Army veteran and former Black Panther; as well as to their students, who seek to bring new forms of Black thought and life into being.

SUPPORTERS

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Luminate

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National Conference on Citizenship

National Science Foundation

New Venture Fund

Open Society Foundations

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William and Flora Hewlett Foundation

FINANCIALS

FINANCIALS

Adhering to our values of integrity and independence, we publish our 990s and audited financial statements annually on our website. Data & Society welcomes questions about our sources of funding and allocation of resources.

ACKNOWLEDGEMENTS

ACKNOWLEDGEMENTS

We are gratified and inspired by the ways our staff, our network, and our supporters have stepped up to meet the challenges of the past year. Thank you to everyone who worked with Data & Society over 2021—we look forward to continuing our important work of research, engagement, and connection.

Special thanks to everyone who contributed to this report, and thanks to our report designer Christine Sullivan at cstudiodesign.