

INIT

Shifting Power Through Resistance: Social justice in practice

his issue of XRDS was originally conceived with the theme of "technology and social justice." Yet as we began to develop it, we couldn't help but ask whether technology and social justice are fundamentally working in disparate, often opposing, directions. While technology has led to positive changes in society, it has also been used to create, claim, consolidate, and reify power. Social justice, on the other hand, is all about redistributing power to counter past and ongoing oppression. Sometimes the injustices that we seek to right were forged or hardened through technological means.

Despite our belief that the majority of technologists hope their efforts will improve the world in some way, it is clear that people with greater power not only wield the ability to steer the course of technological developments but also to leverage technologies in ways that benefit themselves while enacting harm onto others. Efforts to address social justice issues by technology companies and academic institutions often ring hollow. As our fellow peers and past XRDS guest editors Jordan Taylor and Adinawa Adjagbodjou stated in their "DEI in Computing" issue, efforts

of social justice as currently practiced by these institutions often "pay lip service to marginalized communities while avoiding meaningful, systemic change" [1]. We especially draw attention to ways that our departments and institutions have failed to work toward social justice in this present moment as we witness how the technologies we develop have contributed to the deaths of more than 34,000 Palestinians since October 7 [2]. The world is currently witnessing how AI is being used overtly to select and target Palestinians in real-time [3], how semi-autonomous robot dogs are being used for military conquest in Gaza [4], and how drones are being used to shoot unarmed civilians at close range [5].

At the same time, we have observed more and more

We cannot be immune to the immense potential for destruction that tech often wields, especially right now.

research in our field and beyond that focuses on ways to mitigate harm and work toward better realities—in some cases by sharpening our understanding of power dynamics, and in other cases by changing them directly (e.g., Turkopticon,1 the Algorithmic Justice League,2 and Tech Otherwise³) [6, 7, 8]. These cases show that you do not need to hold positions of significant power to effect change and that this work is both possible and necessary.

Yet, the ways we understand power and resistance must extend beyond the technologies we build and the domains we study. We must interrogate our own positionality and praxis, as our everyday actions as technologists bear political significance. We are inspired by the long lineage of technologists fighting against injustices: tech workers organizing their workplaces, computer science and engineering students calling for their universities to divest from military and defense funding, and data scientists working alongside community activists to combat technologies used for policing and surveillance. And this lineage continues in the present, with students across the world protesting the ongoing genocide of Palestinians, despite institutional condemnation, police violence, and the suppression of their speech [9, 10, 11].

The articles in this issue of XRDS investigate power and resistance across multiple technological contexts within research, workplaces, universities, communities, and everyday practices. We begin with a conversation between Gabriel Schubiner and Nikhil Dharmaraj, organizers from No Tech for Apartheid and No Tech for Tyrants, respectively, who discuss the intersection of technology and settler colonialism and how it connects to the historical and ongoing genocides and violence happening in Kashmir and Palestine. By speaking about personal journeys of becoming organizers, Schubiner and Dharmaraj emphasize the important roles tech workers and students play in pushing their workplaces and schools to break ties with the militaryindustrial complex.

David Widder unpacks the reasons why addressing ethical issues at both universities and technology companies is difficult. Drawing parallels between the testimonials of tech workers concerning AI ethics and vignettes of his

¹ https://turkopticon.net

² https://www.ajl.org

³ https://techotherwise.pubpub.org



In 2020 researchers from Stanford and Georgetown published a study of commercial automated speech recognition (ASR) systems developed by Amazon, Apple, Google, IBM, and Microsoft; they found significant racial disparities when these tools were used to transcribe Black people's voices.

INIT

experience as a computer science Ph.D. student, Widder notes how these institutions are inherently set up to value quantitative knowledge over lived experiences under a false pretense of "neutrality." This, in turn, disempowers individuals from speaking up about ethical concerns. Despite the power dynamics at play, Widder shows how students can still resist.

In the next article, William Agnew argues AI ethicists should engage with anarchist principles that directly confront and resist existing power dynamics, rather than more passively working within them. These principles include direct action, decentralization, building solidarity, commitments to dismantling harmful institutions, and radical imagination. According to Agnew, any attempts to address AI harms will have little impact if they are not informed by a radical praxis.

Alejandro Ruizesparza and Freddy Martinez from the Lucy Parsons Lab demonstrate how they have put some of these principles into practice. An activist research collective based in Chicago, Lucy Parsons Lab calls attention to the ways that techno-optimism enforces state and corporate domination, contributing to the proliferation of policing and technologies surveillance that harm Black and brown communities. Through rigorous research and coalition building, as well as by centering an abolitionist and prefigurative politic, they discuss how they actively fight to dismantle these carceral technologies.

Tajanae Harris examines the data practices of communities, governments, and corporations in West Dallas, Texas, to find differences in power, values, and visions as they contend with one another in the fight toward (or against) environmental justice. By interrogating the politics of data, Harris seeks to find opportunities for more participatory environmental decision-making processes where community voices are centered.

Similarly, Samantha Dalal examines data practices, but within the context of worker advocacy. She describes the complexities and tensions when workers seek enhanced visibility in their interactions with algorithmic management systems by adopting their own data practices to contest management accounts. Through the lens of her work with a labor union, she calls for a bottom-up and worker-centered approach to auditing algorithmic management systems. She also outlines ways researchers can best support workers in their advocacy efforts.

Divyanshu Kumar Singh and Palashi Vaghela draw on lessons from their fieldwork to highlight how, despite common narratives of "castelessness," caste still persists within media and technological infra-



Cella M. Sum

structures. Within this context, they show how Dalits build power and resistance through technology. As caste has largely been absent in discussions of social justice, they charge readers to actively bring an anticaste commitment into their work and praxis.

Alex Ahmed shares her experience as a worker-owner and unionized member of a tech cooperative and what it's like to work in a place with consensual decision-making and no hierarchies. Through her experiences, Ahmed shows that a more democratic workplace is not merely a far-off possibility, but an obtainable and current reality. From this foundation, she calls on tech workers and researchers to buck the trend of working for big and powerful tech companies where workers have little agency.

Reflecting on learnings from the CHI 2022 "Dreaming Disability Justice in HCI" workshop, members of the Disability Justice in HCI Collective discuss how ableism not only drives the development of inaccessible technologies but also prioritizes a focus on technocentric interventions within the field more broadly. Drawing on tenets such as interdependence and intersectionality, they call on the HCI community to center disability justice despite the many challenges of working within the ableist structures of academia and industry.

This issue concludes with a personal essay by Tyler Musgrave, who explores ways to find joy through creative inquiry, focusing on an art project where she translated



Dr. Joy Buolamwini, founder of the Algorithmic Justice League (AJL) was named the 2024 NAACP - Archewell Foundation Digital Civil Rights Award recipient for her work in spearheading a movement toward equitable and accountable AI.



Alicia DeVrio

research findings into an animated short documentary called "For Black Femmes." Noting the inaccessibility of academia, this animation also supports the communication of research findings to a broader audience. With this work, Musgrave challenges us to each find our place of joy as a method of resistance.

Sometimes the injustices that we seek to right were forged or hardened through technological means.

Although some of the topics in this issue may be considered controversial, history has shown that resistance movements that work to shift power are inherently controversial because they work outside the status quo to instigate change. As technologists, we cannot be immune to the immense potential for destruction that tech often wields, especially right now as we witness the technological furthering of racist policing, environmental destruction, genocide, and other forms of oppression. Referencing Ruth Wilson Gilmore who challenges us to imagine the possibilities of "non-reformist reform" [12], we echo Linda Huber's call for technologists to ask, "How can we remain vigilant about the ways that the tech industry and academia may

tend to co-opt or reformulate activist visions to avoid radical change? How can we become skilled in identifying non-reformist reforms available to us in the domains of academic hiring and policies, in mentoring and teaching, in designing and building technologies, and in managing funding streams and resources?" [13]. In the face of this, many scholars and activists are looking for ways to fight back and create a more just world. We are honored to bring together the writings of some of these actors in these pages, and we urge readers to join them in conversation and action.

References

- [1] Taylor, J. and Adjagbodjou, A. DEI in computing: Centering the margins. XRDS 28, 2 (2022), 6-7.
- [2] Reuters. Gaza ministry says 34,535 Palestinians killed in Israeli strikes since Oct. 7. April 30, 2024; https:// www.reuters.com/world/middleeast/gaza-ministry-says-34535palestinians-killed-israeli-strikessince-oct-7-2024-04-30
- [3] Brumfiel, G. Israel is using an Al system to find targets in Gaza. Experts say it's just the start. NPR. Dec. 14, 2023; https://www.npr. org/2023/12/14/1218643254/ israel-is-using-an-ai-system-tofind-targets-in-gaza-experts-sayits-just-the-st
- [4] Ryan S. The first robot genocide: Israel experimenting with dystopian militarized robot dogs in ongoing extermination campaign. The Kansas City Defender. March 5, 2024; https://kansascitydefender.com/ world/ai-genocide-gaza-urgentcall-action-against-tech-tyranny
- [5] Euro-Med Human Rights Monitor. Gaza: Israel systematically uses quadcopters to kill Palestinians from a close distance. Feb. 19, 2024; https://euromedmonitor. org/en/article/6166/Gaza:-Israelsystematically-uses-quadcoptersto-kill-Palestinians-from-a-closedistance
- [6] Li, H. et al. Out of Site: Empowering a new approach to online boycotts.

- Proceedings of the ACM on Human-Computer Interaction 2, CSCW (2018).
- Kalluri, P. Don't ask if artificial intelligence is good or fair, ask how it shifts power. Nature 583, 7815 (2020).
- [8] DeVrio, A. et al. Building, shifting, 6 employing power: A taxonomy of responses from below to algorithmic harm. In the Proceedings of the 2024 ACM Conference on Fairness, Accountability, and Transparency. ACM, 2024; https:// doi.org/10.1145/3630106.3658958
- [9] Regan, H. Where pro-Palestinian university protests are happening around the world. CNN. May 3, 2024; https://www.cnn.com/2024/05/03/ world/pro-palestinian-universityprotests-worldwide-intl-hnk/index. html
- [10] Stepansky, J. US campus protests updates: Police clear pro-Palestine UCLA camp. Al Jazeera. May 2, 2024; https://www.aljazeera.com/news/ liveblog/2024/5/2/us-universityprotests-live-police-ucla-propalestine-encampment
- [11] Iqbal, R. I teach democracy at Princeton. Student protesters are getting an education like no other. The Guardian. May 4, 2024; https:// www.theguardian.com/us-news/ commentisfree/article/2024/ may/04/university-protests democracy-faculty-princeton
- [12] Gilmore, R. W. Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California. University of California Press, 2007.
- [13] Huber, L. Abolitionist frameworks for thinking about how to "do" justice as a scholar? Tech Otherwise. Oct. 15, 2020; https:// doi.org/10.21428/93b2c832. ee6a9655

Biographies

Cella M. Sum is a Ph.D. student at Carnegie Mellon University's Human-Computer Interaction Institute and organizer with Against Carceral Tech. Her research focuses on surveillance technologies, power, and resistance in labor. Using community-based participatory design methods, she works with affected communities to co-create more just

Alicia DeVrio is a Ph.D. student in Carnegie Mellon University's Human-Computer Interaction Institute. Her research explores the power of everyday people to resist and work toward remediation of harmful algorithmic behaviors they encounter.

DOI: 10.1145/3665272 Copyright held by authors.