Dreaming Disability Justice in HCI

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ABSTRACT

While disability studies and social justice-oriented research is growing in prominence in HCI, these approaches tend to only bring attention to oppression under a single identity axis (e.g. race-only, gender-only, disability-only, etc). Using a single-axis framework neglects to recognize people's complex identities and how ableism overlaps with other forms of oppression including classism, racism, sexism, colonialism, among others. As a result, HCI and assistive technology research may not always attend to the complex lived experiences of disabled people. In this one-day workshop, we position disability justice as a framework that centers the needs and expertise of disabled people towards more equitable HCI and assistive technology research. We will discuss harmful biases in existing research and seek to distill strategies for researchers to better support disabled people in the design (and dismantling) of future technologies.

CCS CONCEPTS

• **Human-centered computing** → **Accessibility theory, concepts and paradigms**; **Accessibility design and evaluation methods**; • **Social and professional topics** → **People with disabilities**; **Race and ethnicity**; **Gender**.

KEYWORDS

disability justice, assistive technologies, accessibility

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1 BACKGROUND

> But I am dreaming the biggest disabled dream of my life—dreaming not just of a revolutionary movement in which we are not abandoned but of a movement in which we lead the way. With all of our crazy, adaptive-deviced, loving kinship and commitment to each other, we will leave no one behind as we roll, limp, stim, sign, and move in a million ways towards cocreating the decolonial living future. I am dreaming like my life depends on it. Because it does.
>
> – Leah Lakshmi Piepzna-Samarasinha, Care Work: Dreaming Disability Justice [25]

Disability studies and social justice-oriented research is growing in prominence in HCI [22, 24, 31, 37]. However, it tends to only focus on oppression under a single identity axis (e.g. race-only, gender-only, disability-only, etc.) [5, 11, 16]. Using a single-axis framework [10] neglects to recognize people's complex identities and how ableism overlaps with other forms of oppression, such as classism, racism, sexism, colonialism, among others [21, 27]. As a result, there is a lack of HCI and assistive technology research that attends to the needs of marginalized disabled people [6, 28, 30, 36]. This can lead to harms including perpetuating discriminatory biases and surveillance on such users in the design of technologies [6, 14, 28]. We position disability justice [14, 19, 25] as a framework that centers the lived experiences and expertise of disabled people towards more equitable HCI and assistive technology research.

Disability justice acknowledges that ableism is intertwined with other forms of oppression and is deeply rooted in anti-Blackness, eugenics, misogyny, colonialism, imperialism, and capitalism [21]. Disability justice was born in 2005 by disabled queers and activists of color in response to failures of the Disability Rights and Independent Living movements for historically centering white experiences

of disability [19]. While many involved shared the identity of disability, these movements largely ignored many issues that marginalized disabled people face, including increased poverty, policing, and health disparities [9, 19]. Disability justice recognizes that issues across various movements for liberation (e.g., Black Lives Matter, environmental justice, and immigration rights movements, etc.) are also disability issues [8]. For example, the heightened surveillance of precarious workers to perform and meet capitalist standards is a disability justice issue as it promotes ableist framings of productivity and profit generation [32].

In 2010, Jennifer Mankoff, Gillian Hayes, and Devva Kasnitz [22] presented a key piece to integrate disability studies in HCI research as it complicates and expands assistive technology design. Ten years later, Hofmann, Kasnitz, Mankoff, and Bennett offered a personal narrative on technology and disability, calling researchers to resist the pervasive ways ableism is integrated and sustained in our research [18]. Disabled people within and outside of HCI have surfaced powerful critiques and demonstrations against the extractive and ableist nature of HCI work [13, 20, 38]. Still, disabled people remain overlooked or treated as a niche population in much of HCI research [14, 17]. Although disabled people are present in every area of focus within HCI as expert users and technology creators (e.g. wearable technologies, AR/VR, and social computing) [12, 26], they are often regarded as passive participants that require the "help" of non-disabled "experts" [28]. Disability justice instead recognizes that disabled people should be leading efforts in research and design so that "no body or mind can be left behind" [8]. Understanding disability justice as liberatory praxis to dismantle all forms of oppression [19], we build upon the legacy of past work and imagine potential futures to further explore and unsettle disability within HCI spaces.

Disability justice can provide a critical lens to uncover evident and potential harms of emerging areas of HCI that affect disabled people's lives. For example, the use of AI/ML in healthcare, hiring practices, policing, transportation, and education [1, 2, 33, 34] have various harmful implications for disabled people that are rarely explored. There is also potential for disability justice to surface how we as researchers can better support care webs, interdependence, and access intimacy that center disabled people's experiences [4, 8, 23, 25]. For example, HCI and CSCW researchers have begun to explore anti-oppressive approaches such as prefigurative design and speculative design [3, 7, 15, 29, 35] that explicitly invokes liberatory futures and justice.

In this one-day workshop, we will bring together people doing research to address ableism that takes a justice-oriented and intersectional perspective. We will use this workshop to enrich critical HCI scholarship and challenge western, white, and ableist hegemonies within the field and beyond. This workshop will also be used as a means to go beyond accessibility, acknowledging how disability is present in all facets of HCI, and calling in a diverse range of scholarships to critically reflect on disability justice within their work.

Together, we will explore several critical questions, including:

(1) How does disability intersect with other overlapping systems of oppression (racism, anti-Blackness, sexism, classism, colonialism, etc) and how does it inform the technologies we design?
(2) How does disability justice expand and complicate human-centered approaches in HCI research?
(3) What might disability justice look like in HCI?
(4) How can we as HCI researchers create and maintain a practice of care in creating access?

We are interested in a variety of submissions that concern research, design, reflections, and even personal experiences related to disability justice and HCI. We are paying special attention to the following topics:

- Intersections of disability with race, gender, sexuality, and class
- Accessible ways of doing research which also reciprocate community needs
- Disability justice and AI/ML systems
- Disability justice in the Global South
- Tensions in academia and disability justice

2 ORGANIZERS

Cella M. Sum is a PhD student at Carnegie Mellon University's Human-Computer Interaction Institute. Her research focuses on technology, labor, disability, and care infrastructures. Drawing from postcolonial, feminist, and critical disability perspectives, she examines the politics of care in relation to technology and design. Using community-based participatory design methods, she works with affected communities to co-create more just alternatives.

Rahaf Alharbi is a PhD student at University of Michigan. Rahaf explores questions around AI/ML, privacy, power, disability studies, accessibility, and more broadly, human-computer interaction. Drawing from a disability justice lens, Rahaf centers the imaginaries and perspectives of disabled people in the development, design, and refusal of emerging technologies.

Franchesca Spektor is a PhD student at the Human-Computer Interaction Institute at Carnegie Mellon University. Her research focuses on the ways that technological systems and market forces construct socially valuable bodies. She seeks to challenge dominant discourses around disability, sexuality, and expertise through community-driven design methods.

Cynthia Bennett is a postdoctoral researcher at Carnegie Mellon University's Human-Computer Interaction Institute. Her research concerns the intersection of power, disability, design, and accessibility. She positions the lived experiences and creativity of people with disabilities as starting points for developing accessible and justice-oriented applications of AI and sociotechnical systems. She is also a disabled scholar. Disability justice guides her to center access in her research groups and when she develops design activities and research methods.

Christina Harrington is an Assistant Professor in the HCI Institute at Carnegie Mellon University. Her research focuses on design research to support health and racial equity among groups that have been historically marginalized groups based on race and class. Her research leverages community-based participatory design methods to address social deficits and technology access.

Katta Spiel is an FWF-Hertha-Firnberg scholar at TU Wien (Austria). They research queer and crip perspectives on technologies

with a specific focus on the perspectives of neurodivergent and non-binary/inter* folks. Their most recent work investigates the potential of wearable computing technologies to counteract body norms in technological design.

Rua M. Williams is an Assistant Professor of User Experience Design at Purdue University. They apply inquiry from Critical Disability Studies and Science & Technology Studies scholarship in the critique of oppressive research and design practices in the field of HCI. Their current research projects focus on the ethical reform of researchers through counterventional methods – leveraging the testimony and design expertise of marginalized people to intervene on the technosolutionist drives that target disabled and "underserved" populations as problems in need of intervention.

3 WEBSITE

We will present our call for submissions, organizer backgrounds, instructions on making materials accessible, and eventually our accepted submissions at https://disabilityjusticeinhci.org/.

4 PRE-WORKSHOP PLANS

We will recruit participants via social media spaces (e.g., Twitter and Facebook), international HCI and disability studies mailing lists, disability justice activist organizations (e.g., Sins Invalid), the Design Justice Network, as well as our personal and professional networks. Per acceptance, we will also provide materials on the workshop website. Potential participants will be asked to submit either an accessible 300-word abstract, 1-2 page statement of interest or position paper, blog post, pictorial, or short video that describes their past, current, and future work around HCI and disability justice. Instructions on making materials accessible will be readily available on the workshop website. Additionally, we will inquire about any concerns, aspirations, access needs and desires for the workshop. We plan to tailor the workshop accordingly as we work together with the accessibility chairs to ensure sign language interpretations, captioning or any other additional services are acquired. To accommodate all access considerations, we will select 20-25 participants based on how their work and interests intersect with disability justice. Prior to the workshop, we will invite accepted participants to a Discord server to post announcements, coordinate workshop activities, and enable asynchronous discussion before, during, and after the workshop.

5 IN-PERSON, HYBRID OR VIRTUAL-ONLY

The workshop will be entirely virtual. We will host the workshop over Zoom and utilize breakout rooms for small group discussions. We will tailor the workshop based on access requirements, which may include sign language interpretations, captioning or other required services.

6 ASYNCHRONOUS ENGAGEMENT

All materials, including video recordings with associated captions and transcriptions, will be made available for participants who wish to participate asynchronously. We will also have a Discord server to enable asynchronous discussion before, during, and after the workshop.

7 WORKSHOP STRUCTURE

The four-hour workshop will take place on Zoom as follows:

7.1 Opening and Introductions (1 hour):

We will open with the workshop's motivation, agenda, and introduction to the organizers. We will then facilitate an Introduction round for workshop participants to get to know each other, their research interests, and expectations for the workshop.

7.2 Breakout Groups (1 hour 20 minutes)

We will then organize participants into breakout groups based on submissions and pre-workshop discussion on Discord. At least one organizer will attend each of the breakout rooms to serve as a facilitator and note taker. Each organizer will create discussion points to provoke conversation.

7.3 Breaks (10 minutes each)

Although we will encourage participants to take a break whenever they need, we will schedule two 10-minute breaks between sessions to allow participants time away from the workshop.

7.4 Reflection and closing remarks (1 hour 20 minutes)

The breakout groups will reconvene as a larger group to share their reflections and learnings with each other. We will close out by identifying opportunities for further discussion and collaboration beyond the workshop.

Duration	Activity
1 hour	Opening and Introductions
10 minutes	Break
1 hour 20 minutes	Breakout Groups
10 minutes	Break
1 hour 20 minutes	Reflection and closing remarks

Table 1: Workshop schedule

8 POST-WORKSHOP PLANS

All notes and materials from the workshop will be documented, made accessible, and shared asynchronously with participants through Discord and email. We plan to summarize learnings from the workshop with the broader HCI community through blog posts, social media, or an article in Interactions magazine. We also will keep the Discord to continue discussion and community-building after the workshop.

9 CALL FOR PARTICIPATION

The integration of disability justice and HCI could bring promising opportunities for solidarity and justice as well as knowledge production and design. However, little is known about the potential roles disability justice can play within HCI, raising questions such as: How to integrate accessible methods and collective access into research practices? How does disability intersect with other marginal identities? This leads to several concerns, e.g. injustice/unfairness

and further oppression within technology building spaces. Specifically, we invite submissions to approach the following questions:

(1) How does disability intersect with other overlapping systems of oppression (racism, anti-Blackness, sexism, classism, colonialism, etc) and how does it inform the technologies we design?
(2) How does disability justice expand and complicate human-centered approaches in HCI research?
(3) What might disability justice look like in HCI?
(4) How can we as HCI researchers create and maintain a practice of care in creating access?

We are interested in a variety of submissions that concern research, design, reflections, and even personal experiences related to disability justice and HCI. We are paying special attention to the following topics:

- Intersections of disability with race, gender, sexuality, and class
- Accessible ways of doing research which also reciprocate community needs
- Disability justice and AI/ML systems
- Disability justice in the Global South
- Tensions in academia and disability justice

Through this virtual workshop, we will provide a forum to discuss and exchange experiences on intersectional approaches to designing technology with/for disabled people. We will pay close attention to the ways we might operationalize a disability justice approach in HCI. We invite researchers, designers, practitioners, activists, and community members to submit materials that reflect their interest in the aforementioned topics. These materials may be one of the following:

- 300-word abstract
- 1-2 page statement of interest or position paper
- Short video (45 seconds or more)
- Blog post
- Pictorial

Accepted submissions will be featured on the workshop's website. Per SIGCHI requirements, at least one author of each accepted submission must attend the workshop and all participants must register for both the workshop and for at least one day of the CHI 2022 conference. All submissions must be accessible and our website will include detailed instructions on how to make various submissions accessible.

If you would like to further discuss how your work with/for disabled people might fit the focus of this workshop, please email organizers@disabilityjusticeinhci.org to brainstorm potential synergies. Upon request, the organizers will attempt to secure funding for those who need financial support to attend.

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