16 Bias in the Machine

How Artificial Intelligence Perpetuates Ableism in Society

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Introduction

"We're sold this [technology] as a good thing, but it actually seems like a desperately sad world… partially genocidal, if you're a Deaf person and your culture will die out because of technological means" (E_04), reflects one expert's sharp critique of Artificial Intelligence's (AI) encroachment into disability domains. This tension between the promise of progress and the peril of cultural erasure captures the core paradox at the heart of AI's expansion into the disability field. The analysis presented in this chapter unpacks this contradiction by situating AI within two interrelated frameworks: technoableism and the supercrip narrative, both of which illuminate how technological solutions can reinforce, rather than dismantle, ableist norms.

The goal of this chapter is to examine how AI upholds ableist norms by pressuring people with disabilities to assimilate into dominant technological frameworks, often at the cost of their autonomy, cultural identity, or inclusion, and to critically analyze the implications of this dynamic for the future of disability justice.

The Evolution of Ableism into Technoableism

Ableism refers to discrimination and prejudice against people with disabilities, rooted in societal norms that prioritize able-bodiedness. Early conceptualizations of ableism positioned disability as a deviation from an ideal norm, reinforcing the idea that people with disabilities needed to be fixed or cured (Campbell, 2009). Ableist attitudes have emerged and evolved due to a combination of historical, cultural, scientific, and economic factors that have shaped how societies perceive disability. The key reasons and mechanisms through which ableism developed, include the historical construction of "normalcy" (Thomas & Sakellariou, 2018), the medicalization of disability (Haydon–Laurelut, 2015), economic structures and social perceptions (Clifford, 2020; Russel, 2019), cultural and media representations (Nario–Redmond 2019; Johanssen & Garrisi, 2020). Moreover, it intersected with other forms of oppression, such as colonialism and racialized ableism, gender inequality, and disability (Dirth & Adams, 2019). Technoableism builds upon ableist ideologies by offering new means to control or normalize people with disabilities, while the societal norms of prioritizing standardization over diversity are reinforced through technological

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advancements. The medical model of disability has treated impairment as a personal deficiency, requiring cure, and contributed to technoableism by reinforcing the belief that technology could "normalize" bodies with disabilities rather than changing societal structures to accommodate them. The eugenics movement reinforced ableist hierarchies by promoting the idea that disability was undesirable and should be eliminated. Recent scholarly discourse suggests that technological advancements have led to the emergence of a new, technology-based eugenics movement (Smith, 1999; Marini & Stebnicki, 2019; Brown et al., 2019).

This example of technology-enabled shift in eugenics reflects a broader societal trend toward using technological interventions to manage and modify human traits, thereby perpetuating ableist ideologies under the guise of progress. The development of assistive technologies has been framed as a means of overcoming disability rather than embracing it. Bogart and Dunn (2019) note that AI-driven solutions frequently assume that people with disabilities should assimilate into able-bodied standards. This perspective aligns with the supercrip narrative, which is discussed below, where people with disabilities are celebrated for "overcoming" their impairments through technology, reinforcing the idea that disability is a burden to be minimized (Shew, 2023).

Cultural narratives, particularly the supercrip stereotype, play a crucial role in shaping public perceptions of disability. Media, as explored by Ellis and Kent (2011), portrays people with disabilities as heroic figures who overcome their impairments through exceptional effort or technological assistance, thereby reinforcing ableist expectations and overshadowing the systemic barriers they face. AI-driven solutions that highlight "miraculous" recoveries contribute to technoableism by suggesting that people with disability must either integrate seamlessly into technological systems or remain marginalized, further perpetuating the idea that technological integration equates to societal acceptance (Shew, 2023).

Since ableist attitudes permeate every aspect of the lives of people with disabilities, and technology is becoming increasingly ubiquitous across all facets of society, the consequences for individuals with disabilities are likely to be more perilous than promising. The use of these technologies, shaped by ableist assumptions, risks deepening existing inequalities and further marginalizing those who do not conform to normative standards of ability (Campbell, 2009). Rather than fostering genuine inclusion and accessibility, this trajectory may lead to the development of technological systems that reinforce ableist biases, solidifying societal barriers similar to those critiqued by Shakespeare (2013), who emphasizes social constructions contributing to disability exclusion. Technoableism is intricately linked with the supercrip narrative, both of which are rooted in ableist ideologies. Their interconnectedness and implications will be explored in greater detail in the subsequent section.

Technoableism and the Super-Crip narrative

Technoableism refers to the expectation that technology will "fix" disability, positioning AI as a tool that eliminates impairment rather than accommodating diverse

modes of existence. This perspective assumes that people with disabilities primarily seek technological solutions to their conditions, rather than broader societal accessibility and inclusion.

AI technologies reinforce technoableism by prioritizing innovations that attempt to normalize bodies with disability rather than adapting environments to diverse needs: exoskeletons for wheelchair users emphasize the ability to stand or walk; facial recognition systems fail to identify individuals with atypical facial features; and speech recognition software struggles with non-standard speech patterns. Marini and Stebnicki (2019) critically examine assistive technology, acknowledging its potential to enhance independence while also highlighting significant limitations. From a technoableism perspective, they discuss issues such as technology abandonment, emphasizing the role of user engagement, motivation, and environmental support in AI adoption.

Closely tied to technoableism is the supercrip narrative (Wolbring, 2024), which creates an implicit expectation that people with disabilities must achieve extraordinary feats to be valued by society. AI-driven assistive technologies reinforce this narrative by celebrating people with disabilities who successfully integrate into mainstream technological systems, rather than questioning whether those systems should be more inclusive: prosthetic limbs with AI-enhanced movement capabilities are marketed as "better than human" alternatives; AI-powered cognitive aids promote increased productivity in neurodivergent individuals; and automated hiring systems evaluate candidates with disabilities based on how well they conform to non-disabled communication and interaction norms.

Technoableism and the supercrip narrative are linked through their shared roots in ableist ideologies. The concept of technoableism involves the belief that technology can "fix" or eliminate disability, reflecting a broader ableist assumption that disability is inherently undesirable (Shew, 2023). Technoableism positions technology as a means to normalize disabled bodies and minds or offer a technological redemption (Shew, 2019). The supercrip narrative portrays individuals with disabilities as heroic figures who overcome their impairments through extraordinary effort or, increasingly often, through technological assistance (Wolbring, 2024). Cyborgs in media depictions are almost always the "apotheosis of human ability and appearance" (Shew & Earl, 2024, p. 6), further exemplifying how technological enhancement is framed as a means to transcend human limitations. Both technoableism and the supercrip narrative reinforce ableist norms by emphasizing the need for individuals with disabilities to conform to societal expectations and marginalize diverse experiences within the disability community. Technoableism does this by promoting technologies aimed at "overcoming" disability (Shew, 2023), while the supercrip narrative celebrates those who achieve remarkable accomplishments despite their impairments (Wolbring, 2024).

Methodology

The study aimed to explore how the AI shapes disability discourse through the perspectives of researchers, innovators, and disability activists with expertise linked to

the topic (hereafter referred to as *experts*). Semi-structured interviews were chosen as the data collection method, allowing for flexibility in the exploration of topics while maintaining consistency across interviews.

Data gathering for this research involved conducting semi-structured interviews with seven experts. This method is well suited to contexts where little is known about the subject, as it enables the collection of rich qualitative data and supports the exploration of how people construct meaning around new phenomena. A purposive sampling strategy was used to select interviewees with relevant expertise in AI and assistive technologies in disability. The interviews were carried out from November 2024 to March 2025. The interviews explored expert perspectives on the challenges of addressing disability in AI systems, including methods for involving individuals with disabilities in data contribution and technology development, and strategies to address participation barriers.

Interview recordings were transcribed verbatim and subsequently analyzed using thematic analysis. Seven key thematic categories emerged that are grounded in recurring themes and distinct analytical perspectives raised by the experts: Bias and Representation; Policy and Governance; Inclusive Design and Co-Creation; Techno-Ableism; Ethical Challenges; Economic and Practical Barriers; and Applications and Impact on Lived Experience.

In 2024, ethical approval was granted by the Research Ethics Compliance Committee at Vilnius University prior to the study (No. (1.13 E) 250000-KT-70), with all experts providing informed consent and ensuring confidentiality.

Data Analysis and Discussion

Bias and Representation

One of the strongest themes across the interviews is that current AI systems inherit or amplify biases against people with disabilities. The data and algorithms underpinning AI can reflect societal ableism: simply adding words like "visually impaired" or "ADHD" to otherwise neutral sentences caused the AI to give those sentences a negative sentiment score, even when no negativity was present in the original content:

> When ableist data enters AI systems, it acts as an even stronger categorising factor in those systems. I mean, if a text can have subtleties and nuances, then AI just categorises it into a simple good-bad category and the result is even more stereotyped (E01).

The mere presence of a disability identifier skewed the AI's judgment, revealing representational bias, which is not just a hypothetical concern: as demonstrated in a study previously conducted by one of the experts, it statistically manifested in the model's outputs, and it mirrors harmful stereotypes in society.

AI models misrepresent people with disabilities due to biased or incomplete training data. The robotics engineer observed that many AI models trained on older or non-representative data end up being "very ableistic" and even more prejudiced

than society (E_06). If the training data does not include diverse disabled experiences or is drawn from non-disabled perspectives, the resulting model will likely reflect those exclusions: if the system of an autonomous vehicle has not been trained on examples of people using wheelchairs, it may not detect them on the street, posing a direct safety risk (E_05). People with disabilities are statistical "outliers" in many datasets and thus get overlooked by pattern-needing AI models. It is practically impossible to capture the full diversity of disability in one universal dataset, and even well-intentioned universal design in AI will inevitably miss some people; moreover, optimizing a design for one disability may inadvertently create new barriers for another, leading to "access conflicts" (E_03).

AI bias can also compound harm within the disability community. Discussions about AI bias have focused more on gender and race, with disability bias only starting to get attention. Thus, the understanding of disability discrimination in AI is still lagging behind (E_02). This means fewer auditing tools and less awareness, which could allow biased systems to proliferate unchecked. Experts suggested the concept of *cumulative harm*—the idea that even minor biases in AI systems can add up over time and across platforms to significantly harm people with disabilities (E_02).

Policy and Governance

Interviewees discussed current legislative frameworks and whether they adequately address disability concerns. The European Union's AI Act takes a risk-based regulatory approach, categorizing AI systems by risk levels. However, what regulators consider a "low or medium risk" use of AI for the general population might actually pose high risks for persons with disabilities. For instance, a recruitment AI tool might be seen as low-risk overall, but could systematically filter out neurodivergent candidates (E_02).

Disability advocates lobbied to get accessibility mentioned in the AI Act and succeeded, but mainly with respect to high-risk systems. For lower-risk categories, explicit disability safeguards are still lacking (E_02). Companies in the tech industry feel that regulations "shouldn't limit business possibilities", seeing requirements for inclusion as costly obstacles (E_04). With so much AI development happening in private companies, and public funding for research declining, there is a risk that "it doesn't look that promising for people with disabilities" if profit-driven firms aren't mandated to prioritize accessibility (E_04).

While the EU AI Act is "meant to protect people", its broad definitions are so general that they might impede deploying beneficial innovations in real-world care settings:

> But these rules don't really cover the research stage — they apply at the point of deployment. The AI Act is written in very broad terms, for example, saying you shouldn't cause "significant harm" to a person. But what exactly counts as harm isn't spelled out clearly. That makes it hard to apply — both in research and in practice (E_05).

Certain helpful interventions (like nudging a patient for their own health) might be classed as high-risk or unethical by a strict reading of the rules. This highlights a governance challenge: how to craft rules that protect vulnerable users without unduly stifling potentially positive assistive technologies. The expert has consequently begun working with lawyers and ethicists to find the right balance, indicating that practitioners are actively engaging with governance frameworks to interpret and possibly refine them (E_05).

Inclusive Design and Co-Creation

All experts touched on the crucial importance of involving people with disabilities in the design and development of AI, not just as end-users, but as active co-creators. Many problems stem from a lack of voices of people with disabilities: there is a "mismatch between technology and the user's needs" because "the producer doesn't understand what the person's needs are, and the person with needs can't communicate them" (E_04). Experts advocate for approaches like Value Sensitive Design, where developers begin by deeply analyzing the daily practices and values in the context where the technology will be used, and only then proceed with stakeholder-driven design. In their research groups, experts promote doing this kind of groundwork "before you start even deciding", then iteratively involving relevant stakeholders (including end-users with disabilities) to define needs and spot ethical risks early. This "slow motion" approach is "not at all what's happening in business" and generates a tension between an inclusive, participatory design and industry timelines (unless there is a strong mandate to do so). Co-creation matters, otherwise "many AI inventions…don't make it past the prototyping stage," specifically in the context of disability tech (E_02). A lot of pilots ended up not being adopted because they weren't actually useful, or ignored practicalities like the availability of support services or funding streams to sustain the product.

Historically, the engineer's work pattern was "we see a problem, we decide what the problem is, we invent a solution, then hand it to the users and assume it's solved", which often failed (E_06). Now there is a shift toward including users at the design level, albeit still asymmetrically, with the designer in charge and the person with disability in a consulting role (E_06). Experts find value in participatory design and point to an emerging practice of having people with disabilities hired as part of the research team (E_06), thus lived experience is treated as a form of expertise equal to technical expertise. Moreover, such an aspiration aligns with the broader disability rights principle "Nothing about us without us".

Beyond mainstream inclusion, technologies designed by people with disabilities themselves better meet their needs and avoid outsider assumptions (E_03). Inclusion isn't only about inviting users to critique or contribute to nondisabled-led projects, but also about recognizing and supporting technologists and innovators with disabilities. Interviewees highlighted structural ways to support co-creation, such as a "testing infrastructure" where people with disabilities are paid to give feedback (E_02). Paying users, rather than relying on unpaid input, could enable more consistent, diverse participation and help make participatory design standard practice.

Techno-Ableism

Several experts referred to the tension between the perspective that sees technology primarily as a means to "fix" disability, and another that emphasizes accepting disability as a valuable diversity, as techno-ableism—when technology is driven by ableist assumptions that people with disability should strive to become as "normal" as possible.

When society imagines what is "good" for people with disabilities, it assumes all of them wish to be "fixed". This mindset can drive technology development in directions that undermine disability identity or pride: "sometimes when people imagine what's good for people with disabilities, they imagine all of them wish to be non-disabled" (E_03). A classic example is the enthusiasm around high-tech exoskeletons intended to help wheelchair users walk: "tech people think [the exoskeleton] is going to be the primary device… and people were like, 'well, my wheelchair is pretty great. Why does it always have to be one or the other?'" (E_03). Ableist bias in tech can frame a „normal" life as one that avoids using mobility aids, whereas persons with disabilities perceive them as enabling tools. Experts agreed that assuming "walking = better" or "hearing = better" without listening to those who live with a disability is a flawed starting point.

The debate over cochlear implants for Deaf individuals was repeatedly cited as emblematic of this clash. Experts discussed the "cochlear implant dilemma": many parents of Deaf children and medical professionals champion implants as a miraculous cure for deafness; whereas members of Deaf communities resist the idea that deafness needs curing, seeing it as a linguistic minority status. The expert empathized with parents' desire to provide opportunities for their child, but also conveyed the Deaf community's fear that the widespread adoption of cochlear implants could erode Deaf culture. This debate raises an ethical tension between normative individualism (doing what is best for an individual child, giving them hearing) and collective cultural rights (preserving a minority language).

Once a technology exists, even as an option, social pressure can arise: those who decline it may be stigmatized as "choosing to stay disabled." It is vital that tech does not become an excuse to withdraw other accommodations or to deem people who don't use the latest device as less worthy. In essence, society should continue to become more accessible regardless of new medical or assistive "cures," and this perspective argues that things like the exclusion of people with disabilities are social issues—you cannot simply "techno-fix" prejudice or inaccessibility by altering a person's body or abilities.

Techno-ableist narratives can even harm people with disabilities economically and socially: when technology is touted as a "solution", it can lead to scenarios where individuals with disabilities feel compelled to adopt expensive or invasive tech just to be seen as acceptable; otherwise, they risk further marginalization. Experts warned of a potential future where technologically enhanced individuals set a new bar for ability, and those who remain unenhanced are seen as a disadvantaged class—a dystopia of stratified ability (E_07) and put it pointedly: "You can't technologize yourself out of being bullied" or discriminated against; if the root prejudice isn't addressed, the target simply shifts (E_07).

Ethical Challenges

The computer scientist discussed how their team uses techniques like nudging or even small deceptions in social robots to encourage patients to follow medical advice. While they noted that such strategies can be effectively used by therapists or parents in certain situations, they are acutely aware that when AI does this, it "of course has some ethical and legal concerns" (E_05). The ethical dilemma is that the robot is deliberately steering the person's behaviour by exploiting psychological levers, potentially "tailoring the behaviour…towards the vulnerabilities" of the patient (E_05). Even if the intent is benevolent, it raises questions: How much deception is it okay for a care robot to use? At what point does helpful persuasion become a violation of a person's informed consent or dignity? Similarly, the philosopher offered a thought experiment about AI "mental extenders" for people with cognitive disabilities or ADHD and imagined AI tools that could, say, subtly reshape someone's preferences or assist in decision-making. Any technology that intervenes in "your preference formation, your belief formation…always carries the risk of having a causal impact on what you really desire or prefer, and that's seriously problematic for autonomy" (E_04).

Another ethical concern is privacy and surveillance, which disproportionately affect people with disabilities through social service checks or medical monitoring and may be intensified by AI. One expert's friend with a computerized prosthetic knee counts steps and is anxious that if she doesn't log "enough" steps, an insurer might deem her unworthy of the device, but if she exceeds expectations, they might also take it away, assuming she is "too functional" (E_03). As the expert put it, "the sort of counting and scrutiny of our bodies" via data is worrisome: every action on a smart device creates logs, and "that can be weaponized against me" (E_03). People with disabilities might get flagged by automated systems simply for being different. AI systems deployed for security can disproportionately harm individuals with disabilities by misclassifying disability-related behaviour as suspicious. High-tech solutions should not replace humane approaches: if someone doesn't accept a person with disability for who they are, giving that person with disability a fancy technology won't change the prejudice, and might even add new stigma (E_07).

Safety is another concern, as many AI systems are essentially "black boxes"—their internal decision logic is opaque; it's hard to predict or explain their behaviour, which is a safety issue for users. We "never know the exact decision-making" of these models (E_01): if an AI healthcare tool denies a disability benefit or a social service, both the user and the officials might not know why it made that call, making it difficult to fix errors (E_01, E_02).

When it comes to robots and AI caretakers, emotional safety and well-being also arise. Social robots can provide companionship to lonely individuals or repetitive patience to someone with dementia, but some people may become too attached to robots or prefer them to humans, which would ultimately deepen their isolation. People who "suffer from a bit of disconnection" might confuse robot companions for real, reciprocal relationships (E_05): an elderly person might emotionally bond with a robot pet and then experience distress because that bond is not "real". If

such a robot were later taken away, the person could be worse off emotionally than if they had never had it. Ethically, this raises questions about designing robots that deliberately encourage emotional attachment. The robotics expert echoed this concern, noting that "sometimes, particularly with people who suffer from loneliness, the robot becomes a main part of their life," which in some cases can exacerbate psychological issues (E_06). On the other hand, experts recognized that for some individuals, some interaction (even with a machine) is better than none.

Economic and Practical Barriers

Even the most innovative AI solution can be rendered moot if it is not accessible or affordable to those who need it. A significant theme in the interviews was the set of economic and practical challenges that determine whether AI technologies actually benefit people with disabilities on a broad scale. Experts pointed out that high costs, market incentives misaligned with inclusion, and a lack of support infrastructure can all impede the equitable distribution of beneficial tech.

Many advanced technologies are extremely expensive. The vast majority of people with disabilities would "never be able to afford" these innovations (E_07). Historically, approaches like Community-Based Rehabilitation arose precisely because giving everyone personalized high-tech devices was not feasible in poorer regions; instead, communities focused on low-cost environmental modifications and peer support (E_07). This perspective suggests that while AI devices capture headlines, simpler, cheaper solutions, like making schools and workplaces accessible, might yield more immediate benefits to more people. There is a risk that a focus on high-tech cures diverts attention from these more accessible solutions. The expert also mentioned research documenting that many people with disabilities do not want certain assistive technologies either because the devices don't meet their needs or because they prefer managing without them rather than using something cumbersome or stigmatizing (E_07).

Another economic barrier is that even when good assistive technologies exist, getting them to individuals requires strong support systems: a fancy assistive device might not get adopted in a country if there is no policy for insurance or no training program for users, making it effectively infeasible (E_02). Even if a future technology could replace wheelchairs, if it's not universally affordable and serviced, society cannot rely on it; we must continue to invest in basic accessibility. Moreover, technology can fail or break (E_06).

Experts painted a potential scenario where advanced enhancements create a new class divide: wealthier people with disabilities become more competitive in workplaces, while those who cannot afford enhancements fall further behind (E_07). This could worsen internal disparities within the disability community. Without interventions, we risk a hierarchy where, for example, one amputee with a bionic arm might outperform another amputee with a basic prosthesis, and society might start expecting the latter to "upgrade or step aside" (E_07).

Experts argue that an equitable approach is to invest in public goods and universal design that benefit everyone, with or without disability, rather than

super-specialized tech for a few. For example, making AI voice assistants better at understanding slurred speech or different communication modes might help not only people with speech disabilities but also the general population. Ensuring websites and apps meet accessibility guidelines benefits a broad user base. These kinds of improvements have relatively low marginal cost and high social benefit, but they may not happen without policy enforcement.

Lastly, the experts highlight the importance of holistic thinking, and lack thereof and an "overemphasis on just the technical perspectives" lead to failures (E_02). Holistic planning includes training users, supporting low-cost or open-source AI, and valuing simple, scalable community solutions over expensive high-tech options (E_03).

Applications and Impact on Lived Experience

Experts highlighted several promising use cases, such as a social robot deployed in schools to conduct an initial screening for eating disorders among teens: the robot engages with students to gather health data, working from a script developed with psychologists (E_05). This sort of application shows AI's potential to augment healthcare: it can perform routine yet sensitive tasks in a way that might even feel less stigmatizing to some students than talking directly to an adult. Robots can also be used to ease patient anxiety during medical procedures: a robot distracts children while they receive a shot (E_05). A social robot is used to encourage adherence in cardiac rehabilitation patients. Such rehab requires patients to come exercise regularly for months, and dropout rates are high. The robot acts as a coach to motivate patients to keep attending sessions, and the robot's social presence is the intervention. The result, ideally, is improved health outcomes for patients because they stick with their therapy (E_06). Using AI as avatars or extensions of a person can be transformative for social inclusion, as technology enables participation that would have been impossible before. The expert sees such robots that combine physical assistance and social interaction as the future of assistive tech (E_06).

However, the interviews also discuss limitations and unintended consequences of these applications. One recurring concern is the risk of dehumanization or reduced human contact. Some elderly individuals or those with a disability might end up with most of their interaction being with a machine if a care home over-relies on robotic caregivers (E_05). If a social robot greets you, feeds you, and reminds you to take medicine, but no one else comes to spend time with you, loneliness could persist or worsen. Experts mentioned cases where people might even prefer the robot because it doesn't judge or get impatient, which might lead them to withdraw from human relationships (E_05). Ethicists would call this the "substitution effect": the robot is meant to supplement, but it might substitute for human care due to cost-cutting or convenience, and that's ethically fraught.

Nurses might shift into more supervisory or technical roles, managing AI outputs, and focus more on interpersonal aspects of care, or it could lead to deskilling in some areas. Big tech companies likely have the know-how to make things accessible, but they sometimes balk due to expense—integrating AI could either lighten caregivers' workload or be seen as a way to cut staffing (E_02, E_05).

There are also cultural impacts: as certain assistive technologies become more advanced and even fashionable, it might change social perceptions of disability. An advanced prosthetic arm could even become a kind of status symbol or at least not something to be ashamed of, perhaps reducing stigma (E_03). However, this verge into "transhumanism" introduces new questions: if prosthetics surpass typical human abilities, are we creating pressure for people with disabilities to go beyond "normal" to be accepted (E_03, E_07)?

Many experts celebrated how AI and tech, when done right, can increase independence for people with disabilities. Technologies like exoskeletons or brain interfaces are ethically sound if they indeed give an individual more autonomy, and it's "what they want" (E_04). For permanent disabilities, the aim of the AI is to "improve their lives with the disability, not to eradicate [it]", by providing tools that grant more freedom (E_05).

Conclusion

This study confirms and advances the concept of technoableism as a critical framework for understanding how AI is reshaping the disability field. Technoableism refers to the ideological expectation that technology should "fix" disability, often sidelining the broader social and structural changes needed to foster real inclusion. Through empirical data drawn from expert interviews, this research demonstrates how technoableism operates not only discursively but materially, throughout design processes, policy frameworks, and the everyday realities of people with disabilities interacting (or refusing to interact) with AI.

Technoableist assumptions manifest in all thematic categories emerging from the data and reveal a recurring pattern: AI systems are frequently designed to make people with disabilities more "acceptable" to existing norms, rather than making society more accommodating to difference. Likewise, the prioritization of "supercrip" narratives, where individuals with disabilities are celebrated only when they overcome impairments via high-tech solutions (Wolbring, 2024), continues to marginalize those who resist or cannot access such pathways.

The findings outlined in this chapter contribute new layers to existing scholarship. First, the concept of cumulative technoableist harm emerges as a powerful analytical tool, showing how repeated minor misrepresentations in AI systems compound into significant exclusion. This insight extends the critique of technoableism into governance, revealing a lack of disability-centred regulation that challenges the market-driven logic framing inclusion as a cost rather than a design priority. Second, the study highlights how technoableism is sustained through economic and regulatory structures that disincentivize inclusive design: co-creation with users who have disabilities is often undervalued, unpaid, or tokenistic, despite its proven potential to reduce technology abandonment and increase ethical alignment.

This study provides both confirmation and expansion of the technoableism framework. It shows how AI-driven disability innovations are shaped by long-standing cultural, economic, and political forces, and suggests that unless these forces are actively confronted, technological progress will continue to deepen

existing inequalities. The future of AI in disability must not be measured by how efficiently it normalizes difference, but by how radically it reimagines inclusion. Scholars such as Clare (2017) and Shew (2023) argue that genuine accessibility is not achieved through technological assimilation but through collective restructuring of the social order to embrace human diversity, or, as one of the experts put it: "if we're using technologies to solve social problems, it's never a good idea… social problems need social remedies" (E_07).

Implications

The data suggests pathways toward more emancipatory possibilities. Meaningful involvement of people with disabilities offers benefits beyond addressing specific functional needs. It elevates lived experience to the level of high-value expertise, enabling more inclusive and contextually grounded technological design. Experts emphasized the value of technologies designed by people with disabilities, not merely for them, challenging the hierarchical model of innovation and promoting the principle of "Nothing about us without us": inclusive, disability-led design is more likely to produce technologies that genuinely improve lives rather than reinscribe ableist norms.

Data shows how the role of designers is shifting—from creating discrete tools or functionalities to shaping vehicles for participation, inclusion, and attitudinal change. However, this transformative potential also carries risks: designers' creations can function as delayed-action mechanisms, with uncontrollable triggers and unpredictable effects. Design practices reshape social structures, influence societal cohesion, increase social distance, and alter the roles and responsibilities of traditional professions. Moreover, while they may help to challenge certain forms of stigma, they can simultaneously produce new and unforeseen forms of discrimination. Designers, developers, and innovators themselves possess a form of lived experience within the innovation ecosystem—embodied knowledge of creation processes, technical constraints, and emerging possibilities. When this insider perspective intersects with disability expertise, it exposes how innovation cultures operate and how design choices carry embedded social meanings, thereby shaping the trajectory of technological development. This combined expertise could offer unique insights into the (mis)alignment between innovation practices and regulatory intentions, making it a valuable resource for informing policy and legislative processes in ways that reflect both technical realities and social implications.

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