THE PROBLEM OF TECHNOLOGY AND DISABILITY

Review of Shew, A. (2023). Against Technoableism: Rethinking Who Needs Improvement. New York City: W. W. Norton & Company. (176 pages)

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Ashley Shew's *Against Technoableism* is one of the most important and original works in the philosophy of technology of the current generation. This short and accessible volume offers a clear and sharp-elbowed critique of ablism as it relates to technology, a useful introduction to many ideas from work in disability studies, as well as deeply-penetrating insights into how to think about technology generally. These insights challenge our intuitions about technologies—including those held by engineers, philosophers, and other card-carrying technology experts—about everything from the politics of technology, to the impact of media narratives, to what it means to develop technology to solve a problem for someone. What problem? Whose problem? Framed, defined, and articulated by whom?

Against Technoableism is written in an approachable style and is built for easy integration into course syllabi. The writing itself is often quite casual, funny, and very easy to read. The arguments are straightforward and don't hold their punches. The topics are handled in an introductory manner, without assuming the audience already possesses any technical knowledge, and without relying on abstract terminology. When technical ideas are taken up—mostly terminology from disability studies—they are introduced and defined. The chapters are modular, readable separately and in any order. Crucially, *Against Technoableism* is full of concrete details on life with disabilities. This involves some autobiography, as the author's own experiences with disability are described across the volume, including amputation and tinnitus, among other things. The book engages deeply with disability scholarship and activism, drawing from a variety of sources, academic and otherwise. There's a standout chapter on the topic of neurodiversity. The final chapter even includes a surprising discussion of the prospects for disabled people in space exploration.

While the book serves as a thoroughgoing condemnation of the pervasive ableism that exists throughout society and across the media, *Against Technoableism* is neither dystopian nor anti-technology. Disabled people do have problems. And technologies can be part of the solution to those problems. However, across the book, a central theme emerges: so much of the attitude around the contemporary development of engineering solutions is misguided.

The central new notion advanced by Shew appears in the book's title: technoableism. If ableism refers to discrimination and prejudice against disabled people, then technoableism is one specific species of it. This refers to the common idea within the design community that disability should be approached as something to be corrected by technology, and corrected in such a way as to render the disabled person as similar as possible to nondisabled people. Shew writes:

> Technoableism is a belief in the power of technology that considers the elimination of disability a good thing, something we could strive for. It's a classic form of ableism—bias against disabled people, bias in favor of nondisabled ways of life. Technoableism is the use of technologies to reassert those biases, often under the guise of empowerment. (p. 8)

The technoableist approach is multiply troublesome. These troubles include the fact that this model tends to fail to address the real problems disabled people face. As Shew observes, "Too many people going into these professions want to go and design and make and therapeutize and 'help' without ever having a deep understanding of the people they want to work with and for—without understanding the context of our lives" (p. 19). An example of technoableism would be the impulse to develop costly and high-tech computerized prostheses (say, exo-suit-style mechanical legs), debuted through a splashy media narrative about eliminating disability. Such a project, if developed without the inclusion of the expertise of disabled people themselves, could ignore real-world concerns about cost, about individual bodily fit, about why users should prefer mechanical nondisabled-like walking over useful tools like wheelchairs,

about who is expected to perform upkeep on such a high-tech device or make repairs (surely not the user, at least for fear of voiding some warranty, and if not, then that user is now dependent on outside technicians, scheduling appointments with service centers, etc.), and so on. Shew writes, "When people assume that one device will 'fix' us, they don't pay attention to the host of other concerns around disability technology—the bad planning and design, the need for constant ongoing maintenance, the problem of money…, and the staggering lack of social support for disability accommodations" (pp. 8-9). Rather than address the real and various problems that disabled people encounter, under a technoableist attitude, disability is approached as itself the problem.

As Shew writes, "Framing disability as *the* problem turns attention away from the real problem: the world is set up to exclude disabled people" (p. 56). This impulse to "help" in a way that merely attempts to eliminate the disability, rather than work to address the actual lived problems that disabled people experience, thus not only fails the task of helping, it perpetuates ableism all while posturing as if it's doing the opposite. Shew explains that the technoableist attitude accords with what activists and scholars refer to as the "medical model of disability," an approach that takes disability as something to be "cured" through medical intervention, with an ultimate goal of eliminating that disability and bringing that person closer to a norm of nondisabled people. This contrasts with "the social model of disability," which instead approaches the problems faced by disabled people in terms of the surrounding society, pushing for accommodations and for building an inclusive world that appreciates various forms of diversity. Shew writes, "In other words, people won't become nondisabled through the social model—it just changes where we seek reform" (p. 87). For example, instead of putting our efforts into media-friendly high-tech exosuit-style leg replacements, an approach that instead builds from the social model may highlight the need for ramps and other accommodations made to the built environment that could enable everyone to use such spaces.

Although Shew doesn't use this terminology, the arguments of *Against Technoableism* have an explicit and well-developed dimension of political epistemology. That is, the book has important things to say about the relationship between the knowledge possessed by individuals (as well as the political situatedness of individuals and their communities) and the design of technologies to assist the disabled. And I suggest that there are deep implications for the philosophy of technology more broadly.

In particular, Shew argues persuasively across the book—over and over in different ways—that we have an imperative to *include the expertise of disabled people* in the design of solutions for problems faced by disabled people. Ableism is so deeply and pervasively ensconced across society—in media images, in the built environment, in everyday language, and so on—that the perspectives of those who actually live with disabilities are necessary for circumventing some of those biases. As Shew puts it, "It should go without saying that we need to center disabled people as experts about disability and technology. Yet if we do, we really trouble some underlying assumptions of the ableist world we're in" (p. 17). This imperative holds for the design lab as well. Shew argues that "*no nondisabled person without experiential knowledge of disability and engagement with the disability community should be making claims or decisions about the future of disability and disabled people*" (p. 119). Engineering culture is deeply susceptible to technoableism, and the expertise of disabled people is crucial for the development of an understanding of the real problems disabled people actually face and for the design of the solutions that are actually helpful.

The author even details these epistemological points in terms of her own changing experiences. For example, she was not always so explicitly aware of many of the ableist elements built into her own surroundings. It was an eye-opening experience to return to the university campus where she works after her amputation. Shew writes:

> Every space that once I had breezed through without noticing was transformed… My bodymind was no longer the type of person who could feel welcome and at home on campus: *every place was unprepared for me*. The entrances to buildings I needed to use were all on the back or the side, impossible to find. There were stairs everywhere. (p. 78)

Merely being a concerned citizen is not enough. Merely being a smart philosopher in an armchair is not enough. And merely assuming that what it must mean to design for disability is to design away that disability is not enough. These issues, Shew argues, "should not be the exclusive province of abstract philosophical speculation or techno-futurist disruptors. They must be grounded in the real experiences of real disabled people, whose lives and bodies are a special testing ground for these ideas" (p. 60). The kinds of experiences Shew outlines throughout *Against Technoableism* reveal the importance of developing philosophies of technology and design practices that are not merely aware of the concerns of disabled folks, but that include the perspectives of disabled people in the process.

In sum, this important book builds much-needed bridges between disability studies and the philosophy of technology. The ideas developed along the way should be of interest not only to those specifically concerned with issues of the intersection of tech and disability but to anyone studying either issues of disability or issues of technology. There is an existential point here. As Shew puts it, "Eventually, everyone becomes disabled if they live long enough; like death and taxes, aging is inevitable" (p. 52). This means that any account of technology, any account of our technological condition today, any account of technology and human experience, or any account of the social and political dynamics of technology necessarily intersects in an ineliminable way with issues of disability. As *Against Technoableism* makes clear, this means that the expertise of disabled people is critical to how we understand technological culture. An engagement with difference, it turns out, is crucial to the philosophy of technology. As Shew writes, "When we don't listen to those with actual experience, we often get accounts of disability *and* technology wrong" (p.10).

References

Shew, A. (2023). *Against Technoableism: Rethinking who needs improvement*. W. W. Norton & Company.