

*What Can a Body Do?: How We Meet the Built World.* By Sara Hendren. New York: Riverhead Books, 2020. \$20.08 Hardcover.

Reviewed by Erica Biegelow, *University of Washington.*

Published several months into the COVID-19 pandemic, Sara Hendren's *What Can a Body Do?* offers a particularly timely look at how spaces—physical and not—are built and maintained. The pandemic forced—and continues to force—individuals to reconsider even the most mundane aspects of our shared spaces. “How many people can fit in a space?” and “How ought those people to be arranged?” are questions that have often remained unasked, especially by non-disabled people, but whose consideration has become second nature during COVID. For many, this was the first time that the taken-for-grantedness of the world became apparent. As its title suggests, Hendren's book is structured by a number of questions that often remain similarly uninterrogated, but that can reveal fundamental assumptions about the world(s) we share.

*What can a body do?* and *Who is the world built for?* are two of the book's guiding questions first explored in the introduction, and they fittingly help readers to understand the approach Hendren takes. In asking what the body can do, Hendren asks readers to conceptually begin, not from some abstract, idealized human subject, but from the actual lived body and its wide range of possible experiences. In asking who the world is built for, she is asking about who the built world is set up to accommodate without additional modification. Importantly, both of these approaches entail centering real, lived experiences of disability as conceptual starting places, thus ensuring that theorizing about disability avoids speaking about it in the abstract. Hendren characterizes such an approach as necessitating a “use-centered analysis of prosthetic technology,” where disabled persons' usage—i.e., the actual, rather than hypothetical, usage—of adaptive technology is centered and used as the basis for further research and innovation (51). Centering use in this way subsequently centers individual and social values, e.g., which activities (and thus the body's ability to perform them) are valued.

Hendren's book combines her own experiences as an engineering design scholar and parent to a son with Down syndrome with critical disability studies, universal design principles, and a number of anecdotes and case studies of adaptive technology in action. Writing from a background in the arts and humanities, Hendren quite seamlessly unmask some of the assumptions that we outsiders often have about STEM fields—namely, that “engineering [is] only ever about building things in a straightforwardly practical way,” and that normative work is the exclusive domain of the humanities and, perhaps to a lesser extent, the social sciences (17). The

unique intersections among her academic concentrations renders Hendren's book accessible, yet still undoubtedly intellectually stimulating, for readers across disciplines. What Hendren's work allows us to see, through its combination of applied engineering with individual firsthand accounts of adaptive technology and disability theory, is the distinctly human side of engineering, and the ways that the field is itself grounded in understandings both of the human body and of what the ideal interaction between it and its environment looks like. There are, in other words, deeply normative assumptions that underpin even the most 'practical' fields. For instance, Hendren describes her own students' reckoning with preconceived ideas about disability and engineering, namely the assumption about the relationship between disability and cure that many students bring into her classroom. This attitude, which may be taken-for-granted in traditionally empirical fields, is among a number of assumptions directly challenged in contemporary disability theory (see, for instance, Alison Kafer's and Eli Clare's works on the curative imaginary).

Rather than looking at adaptive technologies as fixing problems, or fixing problem people, Hendren suggests a view of technology as telling us something about bodies and worlds, and the moment(s) at which they come into contact. To that end, Hendren often invokes an understanding of disability that draws from Rosemarie Garland-Thomson's misfit model. Such a model consists in the idea that disability cannot be located solely in the bodymind or environment, but is instead constituted by "a disharmony that runs both ways, body to world and back" (15). Consequently, then, she presents a view of body and world not as two distinct entities that happen to appear alongside one another, but as intricately responsive to and constantly (re)constructed by one another. Hendren also highlights the deliberate aspect of some misfits; the human aspect of the built world means that there is often an intention behind built structures. Regardless of whether the intending agents would consciously endorse ableism, they create aspects of the world, and thus create or enable moments of misfit.

Methodologically speaking, Hendren takes a bottom-up approach in *What Can a Body Do?*, though even the latter sections of her book remain grounded in real-world experiences. Hendren moves from the individual outward, beginning in the first chapter ("Limb") with a discussion of unique adaptive technologies, including but far from limited to traditional prostheses, that help amputees find a greater fit with the world. She then moves to a discussion of larger, but still individually-oriented, pieces of technology in "Chair." In "Room," a chapter which includes a detailed account of different areas on Gallaudet University's campus, where the majority of students are d/Deaf or hard-of-hearing, Hendren explores the ways that physical spaces—academic buildings, classrooms, even a Starbucks location—can be designed with access in mind, simultaneously unmasking the potential inaccessibility of spaces we might not otherwise pay much attention to. Hendren characterizes

the broad accessibility-driven design at Gallaudet as motivated by a principle of “*sensory reach*,” whereby different sensory inputs are manipulated to help accomplish some of the same work that, for a nondisabled person, might be done by other senses (103). “Street” takes the analysis of design in spaces even further, looking not only at distinct accessible rooms but at entire systems of interconnected spaces and buildings, and at ways that such spaces can be designed to promote a greater frequency of fit. The last of the main chapters, “Clock,” focuses on the notion of *crip time* as an overarching means of rethinking our world’s guiding structures. Here, Hendren draws from Alison Kafer’s understanding of *crip time* as time “not just expanded but exploded” by the misfit between disabled persons and traditional, linear notions of time (168).

Throughout her book, which is worthwhile reading for engineers, designers, and disability studies scholars, including both undergraduates and established faculty, Hendren challenges prevailing understandings of the trajectory of technology. Traditional views of medical and technological innovation are upward and linear, assuming that technology will gradually but steadily get ‘better’ over time, where ‘better’ technology is more advanced, more complex, and so on. Hendren draws attention to the ways that adaptive technologies—or accessibility itself—is made accessible when biotechnology makes use of readily available materials. This allows, moreover, for more specificity, so that different adaptive technologies can be custom-fitted to the bodies and environments with which they’ll be used. Hendren profiles the Adaptive Design Association (ADA), a Manhattan-based nonprofit organization that crafts custom-fitted adaptive devices largely out of cardboard. Accessibility is central to ADA’s mission in more ways than one; its devices, which promote access, are made from accessible materials, and the design process itself is intensely collaborative (71). Even though cardboard devices may not be the most ‘technologically advanced,’ Hendren’s work shows readers that constantly seeking advancement is not always necessary or even possible, and that the quality of adaptive technologies ought to be evaluated from the standpoint of disabled users’ lived experiences.

Hendren’s book draws our attention to the contingency of those features of the built world that often go unnoticed, particularly by nondisabled people. The normative—or *normalized*—encounter with the world is one of relative transparency and fluidity. It is one, according to Garland-Thomson’s model, characterized by fit. Counter to this is what Hendren dubs the “*conspicuous body*,” that which stands out as marked in some way (38). Combining this with her view of disability as misfit, then, the ‘moment’ of misfit can be understood on Hendren’s view as the moment at which the disharmony between body and world becomes apparent, or that at which the body or the mind becomes apparent in a way that it previously hadn’t. Bodies

become conspicuous when they do not fit neatly within, or when they begin to stand out against the background of, their surroundings.

Above all else, Hendren's book is an appeal to imagination. Namely, it is an appeal to the kind of imagination that is not necessarily grounded in "some lavish spectacle or fantasy," some fiction that asks us to separate ourselves from ourselves, but a subtler form, the kind of imagination that invites us to believe and invest in better, more accessible futures (204). These futures are not, as eugenicist ideologies would have us believe, ones without disability, but ones in which a greater number of bodies are brought into fit, or alignment, with the built world. Such futures are best imagined in community, thus highlighting the importance of communities consisting of disabled people, their families and friends, medical professionals, and relative strangers alike. Moreover, a focus on community as the locus of disability-related theory and innovation can help instill a sense of shared social responsibility, one which may otherwise be difficult to parse out in cases where "injustice is tied up with the physical spaces of cities and the policies that create them," because the norms governing these spaces and policies often cannot be attributed to a single actor (148).

The COVID-19 pandemic has given rise to otherwise un- and under-interrogated questions about the built world we share. Moreover, the pandemic has drawn attention to the contingency of the world, and the fact that things do not have to be as they "always" have been. *What Can a Body Do?* presses such concerns onto readers, urging us all to reconsider the aspects of the built world that we take for granted, or that we think of as evaluatively neutral. Sara Hendren resists the notion that the post-COVID future is a return to the pre-COVID past, instead urging readers to consider—or *imagine*—new possibilities.

*Erica Bigelow*  
*University of Washington*