Design Meets Disability

By Graham Pullin. Cambridge, MA: M.I.T. Press, 2011, paperbound.

"In accordance with postmodernism's premise that the margins constitute the center, I probe the peripheral so as to view the whole in a fresh way."

-Garland Thomson [3]

nitially released as a hardcover volume in 2009, designer and former medical researcher Graham Pullin's provocative and engaging book *Design Meets Disability* aims to entice and excite designers about the possibilities and prospects of designing for disabled people. Pullin argues, however, that good design will not *only* be utilized by disabled people.

With his concept of "resonant design," defined as "design intended to address the needs of some people with a particular disability and other people without that disability but perhaps finding themselves in similar circumstances," Pullin tries to skirt the tensions between particularity and generality. He argues that designing for disability can invigorate design practices and inject different ways of thinking into the design community.

The book is divided into two sections.

The first outlines a series of tensions or "meetings" between key issues ostensibly separating the worlds of design and disability. Pullin believes that such tensions, such as the tension between fashion and discretion and the tension between exploring and solving, for example, need to be reconciled in order for successful design for disability to take place.

In the second section of the book, Pullin engages in a series of (imaginary and real) conversations with chosen designers about designing a specific product

Designing for disability can invigorate design practices and inject different ways of thinking into the design

community.

for disabled people. For example, he talks to Tomoko Azumi about designing stepstools for little people and to Crispin Jones about designing watches for visually disabled people. Some of these conversations are longer than others and include sketches and drawings. Visually, this book is incredibly striking: there are beautiful images of products ranging from iPhones to designer

spectacles to artsy fuzzy sweaters. This is clearly a book meant to inspire, motivate, and impress upon designers the opportunities of designing for disabled people.

Yet, Pullin's choice of word order for his title is telling: design meets disability and not disability meets design. While Pullin begins, on page one, by stating: "This is a book about how the worlds of design and disability could inspire each other," it is not clear what the "world of disability" is. While there are designers

with names and personalities who loom large, the same cannot be said for disabled people who largely remain absent from the book's pages. While this is arguably a book written for designers and not for disabled people, I am not convinced that Pullin adequately introduces designers to the (diverse and varied) stakes of disability. And this is a book about products and not people, a problem when we consider that the category of disability is created through social relations and processes.

To be fair, Pullin diligently tries to use appropriate language and terminology. He makes a distinction between "impairment" and "disability," defining the former in terms of function and the latter in terms

Digital Object Identifier 10.1109/MTS.2013.2247727 Date of publication: 14 March 2013

Michele Friedner is a National Science Foundation postdoctoral fellow in M.I.T.'s Anthropology program. Her research analyzes the moral and social practices of sign language-using deaf young adults in Bangalore, India. She is a former board member of the Society for Disability Studies and on the editorial board of Disability Studies Quarterly. She can be reached at mfriedne@mit.edu.

of the relationship between a person's function and society. As he writes: "People are therefore disabled by the society that they live in, not directly by their impairment, which is an argument for using the term disabled people rather than people with disabilities..." (italics in text). This use of language is in line with Disability Studies scholarship which argues that social structures, policies, and institutions disable people [2]. That is, to make a simple statement, a wheelchair user does not have a disability until she attempts to go somewhere where there is no ramp.

Pullin's choice of language therefore reflects an awareness of the importance of reform in political, economic, and social structures in order to improve the status of disabled people.

But is this awareness carried forward throughout the book and does it influence Pullin's main points? The book's "poster child" (and I use the phrase "poster child" intentionally, as it is used by disability activists to discuss the production of images of disabled children by organizations such as the Muscular Dystrophy Foundation to invoke feelings of pity) is Aimee Mullins, a double amputee athlete and model. In his discussion of prosthetics, or "legwear," Pullin includes an alluring image of Mullins, topless and wearing tight athletic pants, balanced gracefully on woven carbon fiber prosthetics. Mullins does not invoke feelings of pity but

rather of inspiration. In a recent Technology, Education, Design (TED) talk, surrounded by various pairs of different kinds of prosthetics, Mullins discussed an encounter with a woman who told her that it was not fair that she could change her height depending on her mood. This encounter spurred the following reaction:

And that's when I knew – that's when I knew that the conversation with society has changed profoundly in this last decade. It is no longer a conversation about overcoming deficiency. It's a conversation about augmentation. It's a conversation about potential. A prosthetic limb doesn't represent the need to replace loss anymore. It can stand as a symbol that the wearer has the power to create whatever it is that they want to create in that space. So people that society once considered to be disabled can now become the architects of their own identities and indeed continue to change those identitiesby designing their bodiesfrom a place of empowerment. (http://www.ted.com/talks/aimee_mullins prosthetic aesthetics.html)

I quote Mullins at such length because she is the kind of person who Pullin's designers are designing for... and she does not consider herself to be disabled. Rather, she considers herself to be enabled, augmented, and empowered. Such post-human or futuristic fantasies are prevalent in Pullin's book in the form of prosthetics that enable their users to run faster than non-augmented people and hearing aids that result in better than average, or "superhuman," hearing ability. With this focus on the post-human, Pullin successfully bypasses both the stigma and structural barriers that are (still) connected

with disability. He also avoids one of the key issues at the heart of disability today: the tension between independence and dependence, and the mistaken assumption that all disabled people want to be independent.

Pullin's main argument is: "More confident and accomplished design could support more positive images of disability." That is, if disabled people had fancier, bolder, and more fashionable wheelchairs, hearing aids, and communication systems, there would be less stigma. Indeed, Pullin goes so far to propose that wheelchairs be renamed "chairwear" and hearing aids "hearwear" in the same way that eyeglasses/ spectacles have been renamed "eyewear." Along with renaming, Pullin is advocating for a reorienting and relocating of where one accesses such devices. Just as we can now buy eyewear in

trendy boutiques, we should also be able to buy fashionable hearing aids in similar settings. In advocating a move from the medical showroom to the boutique, Pullin is urging a shift from a prescription model to a consumption model. He wants disabled people to have choices, to be able to purchase hearing aids in a variety of colors and styles, for instance, instead of just flesh colored ones.

While demedicalization and the availability of additional choices sounds wonderful in theory, and while it presumably democratizes questions of expertise, I am concerned about how this will work in practice. Pullin's argument, that devices should become just another commodity to be bought and sold in the marketplace as a transaction between designers and "empowered" disabled consumers, is a classic neoliberal argument under which responsibility is foisted on to the individual, often in the name of choice [5]. While I am sure that most disabled consumers would not object to having the opportunity to purchase a fashionable wheelchair at a boutique, the question remains about the state's responsibility to ensure both that disabled people have access to appropriate

Pullin makes a distinction between "impairment" and "disability," defining the former in terms of function and the latter in terms of the relationship between a person's function and society.

devices and to remove structural barriers facing disabled people.

Similarly, I am concerned about where and how class fits in this picture. While Pullin is committed to design that is simple and that elicits "engagement, experience, and emotion," he does not devote any page space to questions of affordability or democratic design. Presumably, designer "chairwear," "hearwear," and "eyewear" will be as costly as most products made by high-end designers. How does Pullin intend to reconcile this with the fact that the majority of disabled people, due to the practices and processes of disablement, are often at the bottom of the economic ladder? An answer to this pressing question might be found in a discussion of "diverse wheelchairs." In this section, Pullin discusses the work of Motivation, a charitable organization that designs, builds, and distributes wheelchairs throughout the developing world, using sustainable and locally sourced materials to the extent possible.

Noting the creativity and innovation harnessed in designing these wheelchairs, Pullin asks: "Could and should some of this diversity be brought back to wheelchair design in Europe and North America, as a tool to break away from conventional solutions and open up new dimensions, or even as a goal in itself, in order to increase variety and choice?" While this question offers up tantalizing possibilities of mixing up the relationship between the center and the periphery, developed and developing, Pullin does not push this line of questioning any further nor does he actually interact or engage with designers in the developing world.

Finally, in a section titled "identity meets ability," Pullin brings up the concepts of "Disabled with a capital D" and "Deaf with a capital D" and he states that "Disabled" and "Deaf" can be seen as identities. Unfortunately, Pullin does not explain what the stakes of these concepts-as-identities actually *are*. Capital D in both cases, especially in the case of Deaf, signifies Disability and Deafness as an identity, a way of life, an ontology. For example, Deaf people often consider themselves to be a linguistic minority

group with a "different center" than hearing people (i.e., [4]). For such people, hearing aids are often less important than access to sign language as a modality of communication. And so more welcome than hearing aids would be technology or devices that promote the use of sign language. Along these lines, as sign language is a visual language, there has been a recent and sustained focus within Deaf Studies and Deaf activism on the importance of visuality and the visual: Deaf futures are visual futures [1] and institutes such as the National Science Foundation funded Visual Language and Visual Learning Center at Gallaudet University (http://vl2.gallaudet.edu/) bear witness to this. As such, if designers wanted to design appropriately for Deaf people, they would need to have some context about what is important to members of that community —and elegant white hearing aids designed by Jonathan Ives would not do the trick (although perhaps a sign language dictionary on an iPad would).

Pullin's book is an engaging and accessible read. As it is rare to find work about disability outside the field of Disability Studies, Pullin is to be commended for his efforts to place design and disability in conversation. In directing his efforts at recruiting designers to the field of disability, perhaps new collaborations and affinities will emerge. And Pullin is right that the stakes of designing for disability are high: a wheelchair, even when renamed "chairwear," is not just another chair. I just wish that there were more disabled people actually present in the pages of the book.

References

[1] B. Bahan, "On the formation of the visual variety of the human race," in *Open Your Eyes: Deaf Studies Talking*, H- Dirksen L. Bauman, Ed. Minneapolis, MN: Univ. of Minnesota Press, 2005, pp. 83–99.

[2] C. Barnes and G. Mercer. Key Concepts: Disability. Malden: Blackwell. 2003.

[3] R. Garland Thomson, Extraordinary Bodies: Figuring Physical Disability in American Culture and Literature. New York, NY: Columbia Univ. Press, 1997.

[4] C. Padden and T. Humphries, *Deaf in America: Voices from a Culture*. Cambridge, MA: Harvard Univ. Press, 1988.

[5] N. Rose, *The Powers of Freedom*. Cambridge, U.K.: Cambridge Univ. Press, 1999.