Film Review

Title: FIXED: The Science/Fiction of Human Enhancement

Filmmaker: Regan Brashear

Production Company: New Day Films, Blooming Grove, NY

Cost: \$325, Educational DVD; \$375, Institutional Streaming (3 years)

Reviewer: Amanda McLaughlin

What does the word "disabled" mean to you? Google says it pertains to "having a physical or mental condition that limits movements, senses, or activities." So, if it were possible to eliminate these limitations by simply taking advantage of technology, robotics, or medication, would disability disappear? Would we want that? What if adaptive technologies, such as leg prostheses, used as adaptations for people with disabilities to have "normal" functioning, actually allowed them to *surpass* average ability, for example, to become taller than an original height, or to run faster? Who, then, would be "disabled?" Human enhancement technology is defined as, "Using medicine, or surgery, or other kinds of medical technology not just to cure or control illnesses but rather to enhance, or improve, human capacities and characteristics" (Elliott, 1998). The creation of these technologies offers solutions to what have been seen as "problems" for centuries. But with every solution arises a new set of issues. Will we slow down long enough to consider the end result?

FIXED: The Science/Fiction of Human Enhancement asks this question, offering an unbiased journey towards understanding the human reaction to disability and our need to "fix" that which creates disability. Researchers and scientists from every corner of the world are currently developing technology to eliminate impairment and enhance the human body in ways many of us could have never imagined. FIXED shows us the often radical technological innovations that allow us to transition from what was previously allocated to science fiction, to our current reality, and its potential ramifications.

This probing documentary opens with a family talking about what enhancements they would prefer if given a choice. Their answers, like that of many people, reach back to childhood superhero desires. It is not surprising to want to fly, have super strength, or enhanced vision or hearing. In a society that glorifies all that is "super," it is hard to imagine not wishing for something to make you better than your competitor, something to push you beyond your limits, making you enviable to those around you. Is it merely human to want more, to crave better, to desire bigger, stronger, and faster? We are undeniably competitive creatures, but at what cost?

The viewer is shown a barrage of clips of various body enhancement examples: a bionic arm for a soldier, a mechanical eye, prosthetic legs for a sprinter, and hearing aids. We are in the midst of burgeoning adaptive and assistive technologies. It is around us all the time, sometimes in an unavoidable flashy display and other times hidden from the naked eye.

John Hockenberry, a journalist with a spinal cord injury and a Distinguished Fellow at the Massachusetts Institute of Technology's (MIT) Media Lab, talks of the importance of people with disabilities in advancing these technologies, as they "are on the front lines" trying them out.

They can offer a wealth of information about human/machine collaboration because they are so accustomed to working with machines in their everyday lives. When asked about how he was able to so successful, despite his disability, he responds:

"It is normal to do what I've done. It is absolutely. This [people with disabilities] is part of the human story. Disability, improvising in the face of obstacles and change; I think this is what human beings do. This is why there are 6 billion of them on the planet, because we are very good at this sort of thing."

Next, we meet Hugh Herr, Engineer and Director of MIT's Biomechatronics Lab. While mountain climbing as a young man, he survived a storm that left his legs badly frostbitten. Both legs were amputated due to his injuries. One year after he lost his legs, he was able to climb better than he was before the accident due to prostheses he designed. He says:

"I no longer viewed my body in the way society viewed it, as being broken, as being disabled, as being crippled. I started to view, not my biological body in that way, but the artificial part of my body, that it was crippled and disabled. As a young man I imagined a world, a future in which technology so advanced that I could largely eliminate disability in my own life, extending that to other human beings to eliminate disability across society."

Herr focused on developing wearable robotic systems that would augment human physical capability. He hopes to assist those that have had limb amputations, and those with intact physiologies, to surpass their current abilities.

Gregor Wolbring is a Biochemist and Ability Studies Scholar at the University of Calgary in Canada. We meet Gregor as he prepares himself for the day. He lives in a modest house in Calgary. He chooses to crawl when in his apartment, instead of using his wheelchair. He explains that crawling may be seen as demeaning to some, but to him is simply a way to be self-sufficient. He has a likeable softness to him but it is very clear that he has unshakable conviction about his work and his stance on ableism. He explains:

"[There is the idea that] the only way you can gain respect is to show you are superior to someone else. This is ableism. Ableism is our obsession with certain abilities and the treatment of people that don't have these kinds of abilities."

Patty Berne, Project Director of Disability and Eugenics at the Center for Genetics and Society in Berkeley, California, brings the viewer into her home. She is struggling with getting someone to come over and repair her wheelchair. It is obvious that this is an ongoing battle. She talks about how funding to ensure those with disabilities have their basics needs met - for example, that everyone who needs a functioning wheelchair has one - should be the priority. Using that money to create advanced technology that will not be used by the average person with a disability, seems wasteful to her. She goes further, talking about how we could instead create a more accessible environment, and how far we have to go before our world is one of complete inclusion. Patty says:

"People look at disability as a personal tragedy, as something located in the body. For example, someone would see me and say, you have a problem because you cannot walk and so you have different needs so that you can fit in. But from the disability rights perspective, the problem is not in my body, but the problem is in the social disregard and a lack of integration of people with disabilities."

The film's creator, Regan Brashear, has been working on labor, race, youth, LGBTQ (Lesbian, Gay, Bisexual, Transgender, Queer), and disability issues for over 20 years through documentary film, union organizing, community forums, and grassroots activism. When asked why she was interested in making the film, she states:

"Quite simply, as a person with a disability, I wanted to make a film that seriously engages with both disability and technology in new ways and provokes questions about what human enhancement technologies mean for you and me. What are they? Will they improve our world? Who will they benefit? And at what cost?"

By using an entertaining and creative mixture of dance footage, as well as archival and interview footage, *FIXED* forces the viewer to consider notions of "normal," to contemplate our relationship to our bodies and to examine what being human means in the modern age.

FIXED is a useful tool to arouse discussion on the direction of adaptive technology, what it means to those with and without disabilities, and the moral implications of the decisions we make having to do with our bodies. This documentary has a social science, disability studies, occupational therapy, engineering, medicine and nursing, and fine arts appeal.

Amanda McLaughlin is an editorial assistant at the Center on Disability Studies at the University of Hawaii, Manoa. She holds a Bachelor's Degree in Media Communications with an emphasis in Film. You may contact her at amandat2@hawaii.edu.

References

Elliott, C. (Feb. 26, 1998). What's wrong with enhancement technologies? [Word document]. Retrieved from the University College, London's Department of Ageing http://www.ucl.ac.uk/~ucbtdag/bioethics/writings/Elliott.html