

The Brain's perception of the "Abnormal"

By: Helen Bouchard

At 7:15 AM, the abrupt buzz of my phone alarm pulls me out of sleep. I groan, my hand struggling to silence the sound, and I force myself to sit upright, letting the morning air hit my skin as I try to gather enough awareness to begin the day. To my left, like every morning, lies my prosthetic leg. I glance at it for a moment, then reach over and begin the repetitive, automatic motions of putting it on. There's a moment of quiet before I swing my legs over the edge of the bed and begin to climb down the ladder from my loft, already bracing myself for the discomfort that will come. I start my daily routine like anyone else, brushing my teeth, throwing on clothes, heading to class. However with each step, I feel the subtle shifts in balance, the unevenness of the ground beneath me, the silent but constant pressure the prosthesis places on what's left of my limb. The soft ache, the slight rubbing, the mental pattern of each movement, these have all become second nature to me. My body and mind have adapted to this routine over the past 18 years. Living as a lower-limb amputee isn't something I think about constantly anymore, it's simply who I am.

What I haven't adapted to, however, are the eyes. The stares. The sideways glances that shoot down to my leg and then quickly away, as if acknowledging my difference is somehow illegal. Let's say it's one of those perfect spring days, 80 degrees, sun warming up everything it touches. For most people, it's the kind of day that calls for shorts and tank tops, a casual ease in showing skin. But for me, that same warmth brings on an internal debate. Do I wear shorts and let my prosthetic leg show, exposing myself not just to the sun but to the discomfort of being looked at like a curiosity, or an abnormal outsider? Or do I choose jeans, covering up a part of my body and, in doing so, hiding a part of who I am? It's not just about clothing, it's about

identity, and the draining mental toll of navigating a world that constantly reminds me that I'm "different." The unspoken thoughts linger in the stares: What happened to you? Why do you look like that? Society tends to treat people with disabilities as if we are mutations, almost as if we exist outside the bounds of normal human experience. We're expected to inspire, to be brave, or to be pitied. Rarely are we just seen.

This societal discomfort traces back to neurological patterns, implicit biases, and cognitive shortcuts that humans develop early on. The brain tends to favor familiarity and symmetry; anything outside that, like an amputated limb, triggers discomfort, curiosity, or even fear. These mental shortcuts dehumanize people like me, turning us into "the abnormal" in a story we didn't write. But by understanding the way the brain works, how it categorizes people and assigns value based on appearance or perceived ability, we can begin to eradicate this stereotype. Through education, open conversation, and representation, we can shift societal perceptions, encouraging empathy instead of judgment, curiosity instead of fear, and, most importantly, respect instead of pity. Because at the end of the day, my prosthetic leg doesn't define who I am, how people choose to see me does.

Diving into the brain, we will be talking about the two hemispheres. Within the documentary *The Divided Brain*, the researcher likes to think of the brain as actually two brains, due to the complexity of both sides. The left hemisphere of the brain is used mostly for speech and cognitive thinking. It controls the right side of the body, and is known for being the more straightforward and structured half; focusing on analytical skills, and being sequential. This is where patterns are normalized, and symmetry comes into play. In contrast, the right hemisphere of the brain is mostly used for image processing, spatial thinking, and the movement of the left side of the body; focusing on the emotional aspects of humanity and looking at life more

holistically. The right side is artistically driven, opening doors for curiosity and wonder. Many think of the left as the science and logistical side and the right being the philosophical and artistic side. I personally think of the two hemispheres as a pencil (does its job) and a colored pencil (adds creativity).

Throughout society, many believe that the left side of our brain is used more now than our right. Within *The Divided Brain* documentary, the film explores the potential imbalance between the left and right hemispheres of the brain and its impact on modern society, particularly in the context of the Industrial Revolution. Technological advances occurred, allowing for machinery to uproar, and art to change from abstract to more pattern oriented. This allowed for the left hemisphere to thrive on its emphasis on science, math, and logistics. Expanding on the idea that our left brain is exercised more than the right hemisphere within our society. This is because we now have everyday work patterns, modern day technologies, and rely on everything being in “order”. However, it can also be a reason for the stereotypical perception of people with disabilities. For instance, in a recent study, their “findings support the hypothesis that the regions of the right hemisphere are more active in the interpretation of social information processing than those regions in the left hemisphere” (Semrud-Clikeman, 2011). If the right side of the brain is used mostly for our emotional intelligence and we aren’t practicing it as much, this can truly affect how society views and reacts to things that are “different”. Our brain coordinates the body symmetrically, when people with such disabilities counteract that, society doesn’t know how to treat the difference. This can cause increased insecurities of people with disabilities, as they don’t fit into the Barbie-like category.

Although the brain does control our thoughts, it is important to recognize that there is often an external producer or influence behind the formation of these thoughts. One significant

source of influence comes from the literature we consume. While reading an article on this topic, I discovered that many literary works featuring characters with disabilities often contribute to the formation of lasting stereotypes in the minds of readers. These stereotypes can persist regardless of whether the book is fictional or non-fictional. The article explains that when characters with disabilities are portrayed negatively, readers may internalize those depictions and apply them to real-world perceptions of people with disabilities. For example, it states, “The results show that literary works with negative stereotypes have an impact on students' attitudes towards people with disabilities, so their critical analysis is recommended” (Gulya, 2023). This emphasizes the importance of critical analytical engagement with literature, especially when it includes marginalized characters, to avoid reinforcing harmful biases and to promote a more accurate and respectful understanding of disability.

While it seems we have done well to bring equality and eliminate discrimination, there are mental and emotional impacts that still affect many different communities and specific groups of people. For example, while yes I am able to find accessible options, there are still the people that treat you differently, positively and negatively. Many times I've gotten asked if I need help, just because of the prosthetic showing, or even been told that I could get anything because of my disability. Although people try to be nice, there is still a hint of discrimination, as it points out a difference instead of a similarity. Personally, I would love to be portrayed as more than a disability, and have people not assume that I am incapable of activities due to this unfortunate gift.

All of these efforts are connected to the broader issue, the perception of people with disabilities. There are practical and effective ways to raise awareness and promote greater understanding. One simple yet powerful tool is social media and the stories we share through it.

By portraying people with disabilities engaging in everyday activities and sharing images that reflect confidence and authenticity, we can shift the narrative. When people view these shared moments, they're more likely to appreciate the people with disabilities as something greater than different. It's a bit like starting a dance party. Once a few people join in, others follow, and soon it feels like a shared experience. When representation of disability becomes a normalized part of public life, the labels and stereotypes start to fade away. Social media has a big effect on this, as trends begin to arise.

I also believe that public education could do a lot better on supporting people with disabilities. One improvement would be educating society on the world of disabilities and shining a light on the fact that people with disabilities are still just as human as without. Not only this, but hearing the community with physical and mental disabilities and their needs. I have walked into the accessibility office at my university and have been turned down for accommodations because my disability is not enough of a reason. This made me feel as if I was suffocating in an environment that is supposed to be my oxygen. If there was one thing I could change about offices for accessible education, I would make sure the board has people with existing disabilities on it so there are leaders with real experience that can better represent and support my community.

In order to create a more inclusive and equitable world, we must challenge our own perceptions of disabilities and move beyond outdated stereotypes. Advocacy begins with awareness, recognizing that disability is not a flaw, but a natural part of human diversity. By listening to the voices of people with disabilities, promoting authentic representation, and embracing accessibility as a shared value, we take meaningful steps toward dismantling barriers. Most importantly, we each have a role to play in examining our assumptions and ensuring that

our language, actions, and environments reflect respect and inclusion. Only through this conscious effort can we shift the cultural narrative and build a society where everyone, regardless of ability, is seen, heard, and valued.

Works Cited

Chimicz, Dorota. “The Perception of People with Disabilities by Elementary School Students. Transformation as a Result of Educational Activities – DOAJ.” *Lubelski Rocznik Pedagogiczny*, Maria Curie-Skłodowska University, Lublin, Poland, 1 Apr. 2018, doaj.org/article/40cdb8d347fc4a57a513901d21938e43.

Gulya, Nikoletta et al. “The Impact of Literary Works Containing Characters with Disabilities on Students’ Perception and Attitudes towards People with Disabilities.” *International Journal of Educational Research*, Pergamon, 7 Jan. 2023, www.sciencedirect.com/science/article/pii/S0883035522002051.

Machalski, Damian, et al. “The Perception of People with Disabilities in Society – DOAJ.” *Health Promotion & Physical Activity*, University of Applied Sciences in Tarnow, Poland, 1 Dec. 2019, doaj.org/article/37916227bb184d068861b2ba67ff4142.

McGilchrist, Iain. *The Master and His Emissary: The Divided Brain and the Making of the Western World*. Yale University Press, 2019.

DC;, Semrud-Clikeman M;Fine JG;Zhu. “The Role of the Right Hemisphere for Processing of Social Interactions in Normal Adults Using Functional Magnetic Resonance Imaging.” *Neuropsychobiology*, U.S. National Library of Medicine, pubmed.ncbi.nlm.nih.gov/21606658/#:~:text=Conclusion%3A%20These%20findings%20support%20the,regions%20in%20the%20left%20hemisphere. Accessed 11 May 2025.

