

Empathetic Design: Misconceptions and how True Empathy Can Make the World a Better Place

I. INTRODUCTION

A common definition for empathy given both in studio and by my peers revolves around the idea of being able to truly understand another's situation, perspective, and emotions. However, I will argue that this ability alone doesn't lead to engineering designs that better society. While an engineer who is able to view the world from the perspective of their stakeholder can create a design that genuinely benefits them, this engineer would also know how to exploit their weaknesses. Empathetic design, which I envision to bring unity, is a lot more nuanced than what these simple definitions may present. I propose that empathetic design is rooted in selflessness, but I will also discuss the intricacies when applying selflessness to real world design work.

II. UNDERSTANDING OTHERS IS A DOUBLE-EDGED SWORD

In studio, we were shown a video by Prof. Brené Brown, whose research area is in social work. She describes an empathic response as "Hey! I know what it's like down here. And you're not alone." [1] While this is a great way to comfort a friend in need, it also reminds me of tactics used by many con artists. Psychologist Maria Konnikova who studies con artists describes that successful cons "require the creation of empathy and rapport," [2] yet these scammers are not empathetic.

This suggests that empathy isn't just the ability to understand, but the actions you take matter as well. I like to imagine many corporations as advanced con artists. By being able to genuinely understand their user's emotions, corporations can exploit them and manipulate users into giving them money without the users realizing they are being tricked!

In a leaked Facebook presentation [3], one slide shamelessly read "Our algorithms exploit the human brain's attraction to divisiveness." Part of Facebook's success is their ability to visualize how their users think, but they chose to abuse our vulnerabilities. It would be inappropriate to call this an empathetic design because while con artists and corporations like Facebook go to extreme lengths in order to understand their clients, the decisions they make based off of that understanding is rooted in selfishness.

III. SELFLESSNESS IN EMPATHY

This is why I propose empathetic design should be rooted in selflessness. As engineers, when we try to understand a group of people, we should do so with the intent of genuinely helping them, and not with the intent of driving more sales. This is an extreme stance, but I believe that corporations who profit off of users buying their product can never truly be empathetic, even though if they attempt to act that way.

I live by the philosophy that we should perform authentic design work in order to create unity in society as our ultimate goal. I, alongside millions of other developers, believe in and practice open source work. Furthermore, I like to typeset professional notes for my STEM courses, as well as create educational content in the form of solution manuals and handouts, and release it on the internet for free even though I have received comments from people who are willing to purchase them.

Developers who work on free open-source software (FOSS) projects are the backbone to our society. Many of the tools used in academia and software engineering are created and maintained by volunteers who do so out of selflessness. In fact, 50% of software developers engage in FOSS projects on a daily basis[4]. Even Facebook is engaging in FOSS projects such as *React*, a framework for building web applications available for everyone. As a result, the engineers who actively maintain it are able to practice truly empathetic design and not be limited by ulterior motives.

Of course, selflessness alone doesn't qualify as empathy, though it is an important part of it. In my projects, I need to work on ap-

proaching this topic from how the perspective of my audience. If I am writing a segment to introduce a physics concept in a novel way to beginner students, it is very difficult to let go of my biases of what is "trivial," though it is something I will get better at by consciously practicing my empathy.

IV. REALITY

The software engineering world has shown that developers can engage in FOSS projects, and still make money. Why then, can't engineers in other domains do the same? Making projects such as SolidWorks, MATLAB, etc. open source will allow these technologies to advance faster and more innovative designs can be created.

The reality is that the 100% empathetic design utopia I described will never happen, but that's okay. While corporations may not be empathetic, individuals can still attempt to practice empathetic design. After all, there is overlap between designs that genuinely benefit people and designs that make a lot of money. Perhaps as engineers we can't control how are products are marketed, but let this article be a reminder to my future self and readers that we should aim to be a bit more selfless as well when trying to understand our users.

[1] D. S. Psihoterapeut, "Brene brown on empathy vs sympathy," 2016.
[2] M. Konnikova, "Con artists use these psychological tactics to manipulate people to believe them every time," 2016.

[3] J. Horwitz and D. Seetharaman, "Facebook executives shut down efforts to make the site less divisive," May 2020.
[4] M. Asay, "For 50 percent of developers, open source is a 9-to-5 job," September 2014.