
(Ab)user-Centered Design? Considering the Involvement of Abusive Users in the Design Process

Example: Abusers appropriate technology to harm trans people

In February 2017, following the Ghost Ship fire, online trolls started a campaign on /pol/ on 4chan to shut down brick-and-mortar DIY and LGBT spaces [19]. These anonymous users displayed homophobic, transphobic, and racist rationalization for targeting these spaces. Though it is difficult to connect to the online trolls, the closing of these spaces results in evictions that could leave tenants homeless.

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Abstract

The abuse of others is a persistent problem online, boosting the need for deeper discussions around countering it. In our previous research with the transgender community, we found that online abuse impacted our participants' offline lives negatively. Inspired by this work, we present the notion of *Abuser-Centered Design* as a provocation to explore pragmatic and ethical ramifications of centering abusive users in design. Current design frameworks focus on target users; none that we know of view *abusers* as users. We hope to spur discussion around better understanding abuser motivations at design-time towards creating safer, more equitable spaces online.

Author Keywords

Abuser-centered design; design methodologies, ethics.

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Human-centered computing → HCI theory, concepts and models.

Introduction and Background

As of 2016, an estimated 1.4 million United States citizens identify as *transgender* [9]. Transgender, or trans, are individuals who do not identify with the

Towards Conceptualizing the Abuser

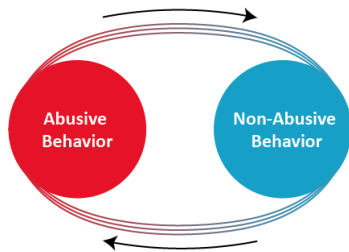


Figure 1. Temporality of Abuse.

The figure above represents the temporal conception of abuse. Are abusers always in a state of abusing online? Are activists never abusive to others online?

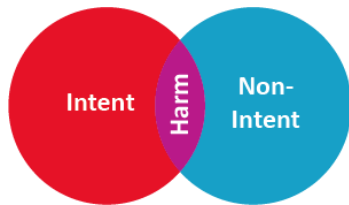


Figure 2. Intentional vs. Non-Intentional Abuse.

The diagram above shows the concept of both intentional and non-intentional abuse which may still cause harm. Is intent or harm the primary categorization of abusive behavior?

gender they were assigned at birth, including non-binary individuals. Trans individuals experience extremely high levels of abuse. The largest survey of transgender individuals conducted in the U.S. found that 46% of respondents experienced verbal harassment, 47% were sexually assaulted, and 54% experienced intimate partner violence; one in ten reported physical violence due to their gender identity [15].

The rise of information and communication technologies has significantly impacted the ways the trans community experiences safety. LGBTQ and transgender individuals have new avenues to access “safe spaces” through technology [17], but also face new risks of harassment, cyberbullying, stalking, and other forms of digital abuse [25], as well as technology-mediated violence in the physical world [16].

In a recent study, we explored the perceptions transgender users and technologists had of *Automatic Gender Recognition (AGR)* technology, which uses computer vision and/or automatic voice recognition to predict one’s gender [12]. We found that transgender individuals had many concerns about how AGR may negatively impact their safety and wellbeing. Participants were largely concerned that AGR would be a tool of oppression, in some cases allowing for “bad actors” to use AGR to prevent them from accessing bathrooms, to catalog their data in a transgender registry, etc. We characterize these bad actors as abusive users, or simply *abusers*.

Despite concerns within the transgender community, we have not found any documentation addressing potential abuse in research papers disseminating AGR

techniques and applications. There is an apparent need for better tools during the design process to anticipate likely abusers. We seek to discuss *how we might approach the (re)design of technologies in ways that preemptively thwart abusers, while protecting and empowering their targets.*

Abuser-Centered Design

With few exceptions (e.g., [5]), Human-Centered Design methodologies do not explicitly address the potential for design products to be used in nefarious ways by bad actors. Perhaps this is an outgrowth of design research’s roots in solutionism [2], wherein “problems” can be “solved” through design. While some embrace attempts to curb harassment and abuse through technological solutionism (eg. [23]), we believe that human behavior is too complex to be solved accurately by an algorithm. There is an apparent bias in design research toward designing for the “happy path,” [3] finding and rooting out benign or at least unintentional “errors,” [14] and generally creating fun, joyful, ludic user experiences [1,11,13]. Even speculative, critical, and adversarial design, which provoke dialogue around alternative realities, tend to engage undesirable technical outcomes at the systemic level: economic, political, social, cultural [8,20]. Towards a more pragmatic, actor-scale approach to disrupting abusive technology appropriation at design-time, we propose, primarily as provocation, an *Abuser-Centered Design*.

The notion of Abuser-Centered Design is a play on the canonical “User-Centered Design.” It implies adopting traditional representations (e.g., personas) and methods (e.g., contextual inquiry) as tools for coming to know technology abusers. Embracing abusers as

Towards Conceptualizing the Abuser, cont.

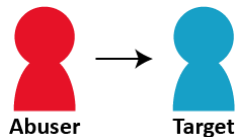


Figure 3. Direct Abuse.

The figure above conceptualizes "Direct" abuse. We conceptualize direct abuse as when an abuser targets another individual with their abusive behavior. How can engaging with abusers prevent direct abuse of others?



Figure 4. Indirect Abuse.

The figure above conceptualizes "Indirect" abuse. What if an abuser may exhibit abusive behavior online that harms bystanders who witness this behavior? How would we address this type of abuse in research and design?

users brings abusive behaviors out of the shadows for scrutiny of the values, motives, contexts, technical materials, tactics, and deterrents that characterize (ab)user experiences with technology. At the highest level, the goal of this approach is to enable designers to foresee and disrupt abusers' capacity to harm and more effectively empower victims to preserve their own safety. Of course, we cannot construe "abuser-centered" as permission to neglect the direct input and perspectives of victims of abuse in design. In the next several sections, we explore what taking Abuser-Centered Design to its logical conclusions might mean for responsible technology design.

Designing for and with (Ab)users in Mind

Ethical concerns in design research have been increasingly prominent in Human-Centered Design discourse, particularly with respect to vulnerable populations [4,10]. Any proposal to engage abusers in design processes, much less to center them, raises complex questions both in narrative and practice. Below, we briefly outline some of these questions. We are not proposing any of these as methods, but rather as discussion questions about involving abusers in the design process.

Abuser Centeredness

We want to discuss how adopting methods of abuser representation could potentially illuminate appropriation of technology for harm. While User-Centered Design seeks to create interfaces that are usable and enjoyable and empowering to users, the concept of Abuser-Centered Design is about disempowering abusive behavior. Statements like "The user is always right" and "know your user" have become mantras in the field of user-experience design, focusing on the importance

of placing the user and the user's goals at the center of the design process. We want to explore what it would mean to acknowledge abusers as users and put abusers at the center of these design processes. We invoke possible questions we may need to address when involving abusers in design:

- If abusers are users, is the user always right? Or conversely always wrong? Do our current user experience principles hide abuse by focusing only on the positive aspects and practices of users?
- "Target users" suggests static, uncomplicated, and benign user personalities that do not account for abusive behaviors, ingrained biases, and hateful identities. Should we include target "abusers" in our design thinking models? How can our own biases effect what we consider an "abuser"?
- When user experience designers interact with users, they often ask them to share their perspectives so they can *improve* their lives with technology. When advocating that we ask abusers to take part in similar design activities, is it ethical to use their perspectives against them? Are we arguing that we should mislead abusers when we invite them to participate in our studies?

Bias Towards Abusers?

There is also the possibility of involving abusers in design and research processes to gather deep, contextual data about their perspectives, experiences, and motives. Designers and researchers could use these insights to make informed decisions about the

way systems can be used to perpetrate abuse and harm.

At the same time, there are dangers to reducing abusers to simple, monolithic models. For example, casting African Americans in negative film roles has had a long-lasting negative impact on stereotypes about criminal “types.” With abuser engagement, questions about both research integrity and bias arise.

- Researchers and designers also hold biases and preconceptions. For example, a cisgender white man may have trouble identifying toxic masculinity as abusive behavior. Would researchers choose abusers who fit their own stereotypes of abusers?
- Abusive users are not continuously practicing harmful behaviors or expressing harmful beliefs. How would abusers be identified? Would abusive behavior and perspectives naturally come out in an experiment or would it require researcher prompting?

Risks Faced by Researchers

Beyond questions of integrity and bias in research settings, engaging abusers could negatively impact the designers and researchers involved. In User-Centered Design, empathy and even care have been put forth as the defining qualities of user-researcher relationships [22,24]. But, empathizing or caring for (ab)users can cause *emotional harm* to researchers [6,7]. Risk may be increased when abusers, who are known to have violent beliefs and behaviors, are the study subject. Engaging abusers could reasonably put researchers in *physical danger*, as well. Safety concerns may rise when the researcher identifies as a member of a

targeted group, especially when that researcher prefers to keep their identity private.

- Abusers, such as white supremacists, have been known to portray themselves as marginalized minorities or victims [18]. What measures can researchers take to reduce sympathy with abusers and focus on the goals of reducing harm? Could involving abusers exacerbate societal injustice and create systems which further ingrain cultural stigma and hate?
- There are complex considerations for choosing which researcher or designer on a team will interact with abusers. Researchers may identify as members of a targeted group, but wish to keep their identity private. How can researchers care for others with marginalized identities while respecting their choice to maintain privacy?
- What support can be provided to researchers with marginalized identities who encounter harm when researching abusers?

Conclusion and Future Work

That developers, researchers, and users still do not fully understand how destructive behaviors operate [21]—much less how to prevent them—motivates the need to consider new approaches in research and design. Taking Abuser-centered Design to its logical conclusion may help shed light on some of the limitations of user-centered design. While the questions we present are by no means exhaustive, they offer a starting point. Our future work will address direct observation of abusers towards designing safer, more inclusive systems for the transgender community.

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