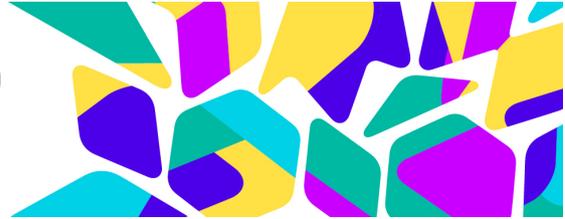


DRS2020
BRISBANE, 11–14 AUG
SYNERGY



Anti-Oppression Mindsets for Collaborative Design

Hillary Carey ^{a*},

^a School of Design, Carnegie Mellon University

*Corresponding author e-mail: hac@andrew.cmu.edu

doi: 10.21606/drs.2020.277

Abstract: There is a growing synergy between design research and social justice. As design moves from commercial contexts into the community, we become advocates for creating more inclusive and equitable systems. But the traditionally nonpolitical posture of design practice leaves us ill-equipped for approaching complex challenges. Learning new approaches to be open to other perspectives improves our insights and fosters deeper collaboration. Without an awareness of historical privilege and oppression, we can unintentionally harm the people with whom we collaborate. Design Research practices are not yet considerate of people at the margins— people we may be working side by side with to unravel wicked problems. Drawing from multicultural psychology and design for social justice, I propose ways that collaborative design projects can be more aware of power and equity throughout the process.

Keywords: Racism, Social Justice, Decolonising Design, Collaboration

1. Introduction

“The production of knowledge is a social political process, steeped in history (Torre, 2009, p. 177).”

Until very recently, Design education has centered around business needs, maintaining an apolitical posture. New movements in Design are shifting these creative, holistic tools from business-driven to community-driven settings. Such new work applies the skills for shaping the tangible, everyday experiences of people onto the complex social and ecological challenges that are threatening our futures. However, many Design approaches are ill-equipped to consider and work with difficult, politically involved, social elements like structural oppression that are the foundation of many of our societal issues.

We need new approaches to truly see current systems and work with communities in ways that are just. Most designing for social-good projects involve diverse, multiracial participants, and as our field grows, practitioners will be increasingly diverse. However, our collaborative approaches do not adequately consider the influence of race and racism on the



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

systems we design for and the dynamics between facilitators and participants. An anti-oppression approach for design can build fluency around the role that racism and other historically marginalizing identities play in how we structure, facilitate, interpret, and storytell our co-creation work.

The stance of color-blind racism pervades most design approaches, maintaining the belief that we can or should ignore race because it no longer shapes experiences in modern society (Ortiz Guzman, 2017, Ogbonnaya-Ogburu et al, 2020). Yet our design fields remain whiter than the national or global population, and the products created by designers continue to overlook the experiences of users who are not white. “Racism is pervasive and ordinary in our society’s digital platforms and the larger socio-technical systems in which they are embedded,” is how Ogbonnaya-Ogburu and her co-authors reframe a starting point for ethical approaches to design processes (2020, p. 2). Are we equipped with knowledge and methods that would help us incorporate such an awareness into our solutioning? Recent work in Participatory Design describes approaches for working with “marginalized communities,” but this work rarely reflects on how to acknowledge race in that design process (Björgvinsson 2012, Le Dantec 2012). A lack of reflexivity can be problematic. Boehnert, Elzenbaumer & Onafuwa offer the critique that “what may at first glance seem neutral also reveals underlying assumptions and prejudices resulting from social distances between designers and [their] diverse audiences (2016).” Without addressing racial differences more directly, design processes can perpetuate a color-blind approach to work on social issues that, presumably unintentionally, denies structural oppressions.

Such limited design practices miss crucial elements of systems that have historically and deliberately marginalized people based on race, gender, religion, ability, sexuality, and more. The nature of Participatory, Social Innovation, and Transition Design approaches gives voice and decision-making power to traditionally marginalized people. But it also may put typically white designers in positions of power to dominate research processes, ignore important stories, and continue histories of extracting and abandoning different communities.

The work of this paper is to propose ways that researchers from all backgrounds can be more adept at seeing, hearing, understanding, and acting on the effects of race and racism in contemporary society. This consideration is especially crucial for new design practices that value deeper collaboration because these are places where we can empower, and we can harm. Here I will draw on Critical Race and Feminist theories to shift design practice out of color-blind mindsets and into political stances that seek to disrupt oppressive practices at the root. Additionally, this paper will draw on guidance from multicultural psychology to step through the ways that we, as collaborators, should be more mindful when working across difference. This leads to a framework of harm and empowerment, identifying key areas where color-blind research processes can alienate participants or lift up and celebrate alternative experiences. I hope to support ongoing justice-oriented design approaches in establishing a more reflective, self-aware design process that finds inspiration in other ways of knowing.

2. Defining an Anti-Oppression Stance

We need both a political, critical worldview and an ability to listen to stories from alternate places to shape a more resilient path to the future. As Design takes a position as intervener-for-good in socio-political problem spaces, we need mindsets that help us see the full picture. Scholars of color from around the world, particularly from the Global South and the Decolonising Design movement, challenge the dominant paradigms of design. From this critical perspective, these scholars assert that design actively contributes to oppressive practices, and therefore must actively consider ways to undo structural bias in every design project. The Decolonising Design editorial statement from 2016 asserts, “We strongly believe that design, as a field of study, has systematically failed to address the questions of power that have shaped its own practice (Ansari et al., 2016).” As Design breaks new ground in holistic strategies for intervention, we cannot omit the political postures needed to see current systems for what they are: corrupted by historical injustice.

Histories of dominance act as blinders that keep many of us from seeing the full truth of the world. Throughout the history of the United States, people in power built white supremacist thinking into the institutions that inform our worldview: government, education, and media (hooks, 2014; Kendi, 2017; Morales, 2019). These mechanisms shape our perspectives with stories of why some groups of people are not worth respecting. We justify racially biased practices like incarceration, gentrification, and segregated education systems through stories of *undeserving*, rather than *under-served* populations (Bonilla-Silva, 2018; Kendi, 2017).

Yet there are substantial barriers to consciousness-raising. Multicultural counseling experts in Psychology, Derald Wing Sue et al., describe a resistance to learning about and talking about inequity: “Issues of race, gender, sexual orientation, and disability seem to touch hot buttons in all of us because they bring to light issues of oppression and the unpleasantness of personal biases (2015, p. 45).” Robin DiAngelo (2018) has named this “White Fragility,” which is particular to white people who can often live life insulated from needing to understand racism. Sue et al. describe how discussions of race are too easily brushed aside because of this discomfort, “As a result, race becomes less salient and allows us to avoid addressing problems of racial prejudice, racial discrimination, and systemic racial oppression (2015, p. 42).” The structural inequality that new design approaches hope to confront cannot fall only on the shoulders of people of color. We all need to become racially fluent.

A core purpose of racist ideology is to teach us to blame individuals rather than structures, which is a particularly dangerous trap for designers who work to understand and intervene at a systems level. Ibram X. Kendi describes white supremacist thinking this way, “This is the consistent function of racist ideas— and of any kind of bigotry more broadly: to manipulate us into seeing *people* as the problem, instead of the policies that ensnare them (2019, Loc. 152).” Aurora Levins Morales writes about the stories of oppression that have dehumanized people and the unjust structures of society that distort us into “making it look like the

reason we're thirsty is not that we're being denied water, but our own lack of initiative in the midst of plenty (2019, p. 55)." When we are blind to the injustice that has happened for centuries, then we are left to create stories that blame some groups and applaud others for their achievements. If we are to intervene in the right places, it is essential that we develop a critical lens that examines bias within systems and questions their roots.

3. Developing Cultural Competence

Derald Wing Sue's in-depth analysis of interpersonal interactions can help prepare design researchers to work with participants with wisdom and respect. His core textbook in Multicultural Psychology, *Counseling the Culturally Diverse: Theory and Practice* (2015), offers advice for providing therapy to clients from different cultural and identity backgrounds. He outlines the work of developing a cultural competence that is needed to work across cultural boundaries. When we, as design collaborators, look out into the world for new perspectives that we then interpret and materialize, it is worth doing the work of deconstructing our subconscious explanations for the inequities in our societies.

Because the structures of colonial, white supremacy unwittingly teach us to be dismissive of other ways of being, working to undo that will offer a new way of seeing the structures and daily experiences of the people who live different lives than us. It may not be devaluing of a race or ethnicity as a whole, as it was in the past; it is more likely that racist thinking is built into our beliefs about gentrification, public schools, poverty, food, immigration, or access to services. Sue points to the emotional outcomes of multicultural training, as "less intimidation and fear of differences, and an increased compassion for others, a broadening of their horizons, appreciation of people of all colors and cultures, and a greater sense of belonging and connectedness with all groups (2015, p. 34)." Adding to our research techniques to include a more profound openness to the experiences of people who have been marginalized will have a synergistic benefit to our design outcomes while protecting the people we connect with along the way.

We can all benefit from the work of checking on our internal stories of why some groups of people are not doing as well as others. Our cultural interpretations are at work when we engage participants in research and design practices. The norms of our practices are not universal nor neutral: "Many of our standards of professional competence are derived primarily from the values, belief systems, cultural assumptions, and traditions of the larger (Eurocentric) society (Sue et al. 2015)." The authors may be referring to modern psychology here, but we can trust that it applies to our Bauhaus-informed design practices and the Scandinavian heritage of Participatory Design. Those of us who have lived our lives within a EuroAmerican context may have a hard time seeing the boundaries of these norms.

In *Design for the Pluriverse*, Arturo Escobar warns, "Do design practices participate in the sociology of absences by overlooking non-expert subaltern knowledges (2018, loc. 1669)?" If we fail to open up our mindsets through deep reflection on our biases, we run the risk of missing out on hard-won wisdom present in the standpoints of other ways of navigating.

Cultural humility and cultural competence are vital in unlocking those subaltern ways of knowing. This greater openness to ideas from different types of people is an essential posture for design work that is informed by and shapes culture— which is to say, all design work.

4. Anti-Oppression Approaches

To facilitate successful co-creation sessions that reduce harm and increase insight, I have synthesized recommendations from across socially oriented design and multicultural psychology. I come to this as a white, female, design researcher who practiced in commercial settings for many years and began to transition to community contexts without taking the time to learn community-based or anti-oppression approaches. This set of postures reflects my ongoing, deliberate work to recognize the necessary anti-racist mindsets and techniques that I did not learn in traditional design practice. The framework in Table 1 proposes how designers might prepare to lead projects with racial fluency and attention to anti-oppression strategies.

Table 1 Anti-oppression approaches for collaborative projects

	Areas for Harm	Opportunities for Empowerment
Interpersonal	Othering and microaggressions	Build trust and accept mistrust
	Trusting meritocracy	Become comfortable with discomfort
	Exerting power	Share power and expertise
Interpretation	Overlooking structural inequity	See the entire system
	Emphasizing weaknesses	Look through the community’s lens
	Dismissing individual stories	Value individual stories
Structure	Determining goals externally	Define the problem-space together
	Abandoning projects	Plan to continue

Interpersonal Interactions Need Care

Cultural competence is required when working alongside communities who are at the center of complex problems. When we haven’t reflected enough on the role that race plays in society, we can reveal ways that we think of some people as “other,” non-standard, or exotic. Racial microaggressions are an example of careless actions that disrupt relationship-building. These are slights that non-white people experience nearly every day in the United States. Common racial microaggressions that people face over and over again include: asking to touch a black person’s hair (this objectifies their body and signals their appearance as

abnormal), complimenting someone's ability to speak English— which happens disappointingly often to American-born people of color, especially Asian Americans. This reveals that the commenter has expected their English to be weak and marks the recipient as non-native. Also, comments such as, "There is only one race, the human race," denies the role that race plays in the experiences of people in a society (Sue et al., 2010. p. 276). In a diverse setting, these actions and comments can signal that the offender has not done the work of reflecting on race and privilege.

Lead designers should be careful to mitigate the automatic power they have as leaders when working in small and large groups, even in one on one interactions. Participatory and collaborative techniques involve particularly intimate interactions between designers and non-designers. Many forms of power are present when a diverse group of people come together. It is important to learn about and reflect on the way race, sex, gender, ability, education, access, wealth, authority, and many other attributes shape who has priority and who may be left out. As the people in the room with the most expertise in designing, we may unintentionally dominate many discussions about process without giving enough space and attention to those who have questions and concerns. Time should be spent planning ways to care for all people in the conversations and working sessions.

It is likely to take time to build trust between designers and community collaborators. There is an awkwardness to the new relationship for any set of participants. For those who have experienced racism, sexism, classism, and various types of othering, it is natural for them to feel distrustful. We can approach this skepticism with empathy by remembering that much research before us has had, "a legacy of ethnocentric and racist beliefs and practices that had harmed people of color (Sue et al., 2015, p. 8)." When there is resistance to our engagement, we should dis-identify personally with the work and understand that caution is a natural defense to the unknown. Take time to listen to concerns and re-center the work on the needs of the community at that moment.

Christine Marie Ortiz Guzman (2017) offers a poignant critique of design thinking processes as relying too heavily on meritocracy. Jonathan Mijs confirms the problems of meritocracy, describing how, "opportunities for merit are themselves determined by non-meritocratic factors (2016, p. 14)." In status quo thinking we take group voting and sharing ideas aloud in unstructured conversations as a natural way to distribute power, but in practice meritocracy upholds existing unequal power structures. Those with the most power in the room will likely feel comfortable and confident to speak the most and their ideas will be given the most attention by others. Essential voices can be ignored if space is not made to hear from those who are typically at the edges. Without tools to actively redistribute power, we may continue to privilege those who have always been centered in the design process.

In a community-based project a few years ago, my team learned a hard lesson in valuing other forms of expertise. I was part of a team of "design thinking experts" who were hired to bring new thinking and user perspectives into a philanthropic organization. The project focused on understanding poverty and uncovering new opportunities in the local area. Our

design team walked into the project as the experts, ready to apply standard tools to a complex project on inequity. Several of the program directors at the organization, with in-depth knowledge of their areas of focus (education, housing, immigration), pushed back against our naïve application of design tools. It was a frustrating lesson in the importance of sharing expertise. After our resistance to being questioned faded and cooled, we learned a great deal from the holistic, systemic perspectives they built into new design approaches. It is essential that we rid ourselves of our need to be the experts. A posture of partnership to share knowledge and leadership is required to respond to the dynamics of complex social challenges.

Designers involved with social issues must overcome the learned discomfort in talking about race and racism, to understand the full context of challenges that most often have a history in structural, purposeful inequality (DiAngelo, 2018). As educator Beverly Tatum advised, it is very difficult to avoid racist thinking when embedded in unjust societies:

“Because of the prejudice and racism inherent in our environments when we were children, I assume that we cannot be blamed for learning what we were taught (intentionally or unintentionally). Yet as adults, we have a responsibility to try to identify and interrupt the cycle of oppression (1992, p. 4).”

Multicultural Psychology advises developing sensitivity and wisdom as “an active, developmental, and ongoing process that is aspirational rather than achieved (Sue, 2015, chapter 2).” The mindset of anti-oppression is a continuous learning experience.

Interpretation that Values Marginalized Voices

To wield our power as researchers justly, we must develop an aptitude in issues of structural inequity. Design can learn a great deal from the critical thinking of equity-oriented scholars who can teach us to hold a healthy skepticism about institutions built by the powerful. We need to learn to question the structures that Bonilla-Silva describes as, “the particular social, economic, political, social control, and ideological mechanisms responsible for the reproduction of racial privilege in a society (Bonilla-Silva, 2018, p. 9).” Similarly, intersectionality author and educator, bell hooks, consistently uses this phrasing, “imperialist white-supremacist capitalist patriarchal values (hooks, 2010, p. 15),” to describe the structures that shape our democracy.

When seeking to understand impoverished or oppressed settings, an unfortunate habit is to amplify the bad and ignore the good, because we are oriented to seek ways to intervene. Ogbonnaya-Ogburu et al. (2020) warn the HCI community, “there is a tendency to assume deficit narratives, in which communities of color are cast as lacking something that can be supplied with technology-based interventions (p. 9).” Grant & Villalobos (2008) warn against defining problems from an external perspective, “The identified issue may only be a symptom of something else altogether; the issue may not actually be a problem in potential users’ eyes; or they may have other, more important needs and aspirations to address (p.

30).” These mistakes can bias our analysis and storytelling, missing important opportunities to leverage strengths and address meaningful problems. More importantly they can perpetuate detrimental stereotypes about different types of communities.

When we collect stories, if we are not attuned to the different experiences that people hold, we can overlook or underestimate the importance of anecdotes about oppressive structures and interactions. Sue et al. (2015) have researched instances of such dismissal in counseling, but it is likely to happen in qualitative research as well, where “Many people of color describe how their thoughts and feelings about race and racism are often ignored, dismissed, negated, or seen as having no basis in fact by majority group members (p.11).” Through synthesis and analysis stages it is natural to prioritize ideas that have some sort of energy around them, and discard ideas that have less potential. We must take caution that we are not giving more attention to problems we understand personally, and placing less value on those we understand less. Ortiz Guzman (2017) offers a new tool for capturing

“not just individual lived experiences but also the role of institutional and systemic forces. We have adjusted the user needs statement to be: (user) needs a way to [user need] because [user insight] but/and [level(s) of oppression at play] (p. 48).”

In this way, we can make space to consider equity throughout the facilitation and creative outputs of a traditionally oppression-agnostic process.

A strength of the design thinking process, and many other forms of design that draw inspiration from qualitative research, is that only a few powerful stories are needed to inspire change. Ortiz Guzman (2017) identifies this as an equitable practice because it “places value on the personal and emotional, the contextual and specific (p. 29).” In feminist practice, the concept of standpoint is powerful. It is the idea that people who are forced to experience systems from the margins will have more insight into how they truly work. They can offer more profound, more accurate, more justice-oriented perspectives (Wylie, 2013). In the United States, this means that people of color are likely to have more insight into social structures than the white majority, and women will have gained a more critical perspective on sexism from navigating traditionally male-dominated institutions. This approach is emphasized by Maria Elena Torre (2009) and in Bagele Chilisa’s textbook, *Indigenous Research Methodologies* (2012), in which she proposes that we should “conduct research in such a way that the worldviews of those who have suffered a long history of oppression and marginalization are given space to communicate from their frames of reference.” In design, when we are seeking points of inspiration and insight, it is not necessary to focus on the majority and most common experiences. We can value what we determine to be most important or most useful.

Structuring Equitable Projects

Because the experience of working in a true context is so valuable to designers, we can forget to ask ourselves what the community gains from our participation. Do their goals for the work truly align with our outputs? The way design is typically practiced, it has a shorter

timeframe than other community-based practices. We should ask, will needs be satisfied by a series of concept sketches, or insights about their needs? Grant and Villalobos (2008) discuss the concerns for setting expectations carefully, they write, “There are serious ethical implications in setting up a project that promises to help people, which is then unable to fulfill the promises and expectations that it has helped to raise (p. 34).” Practitioners and researchers need to be clear with community groups the timeframe available for the work, or find ways to make longer-term commitments to the project. In academia, leaving when the semester is over, rather than when the community it finished can damage trust between partners. Unfortunately, it often takes a long time to build rapport and trust, and then to build familiarity with design practices, before true collaboration can begin. Community facilitator Erica Dorn has suggested finding ways to understand and learn from the community on their own terms, if we cannot commit to long-term engagement. We can volunteer or spend time with a group of people to understand their experiences, in a way that is beneficial to them (personal communication, April 15, 2020). When we make time for the ongoing relationships that many projects require, Participatory Action Research and others find ways to structure long term engagements for community-based work.

It is an important task to make a clear and transparent commitment about the project scope, the definition of what issues to tackle, and how leadership will be shared. As Light and Luckin (2008) write, “If tools are designed to make change, but it is only change as decreed by the people in control of the design process, what kind of change is it (p. 10)?” It can be difficult to align our project-based needs to the longer-term work of deep collaboration. Grant & Villalobos (2008) remind us that true engagement and equitable partnerships require a much deeper involvement than simply asking for feedback on ideas: “In this approach, people’s only real involvement is to confirm decisions taken by others, and the power to make real decisions rests with the designers and experts (p. 16).” In the best cases, we can find ways to continue the work with partners beyond the first phases of needs identification or concept generation. Helping with implementation and building capacity for self-determination can deliver lasting value from our work.

5. What Anti-Oppression Design Practice Might Look Like

Although it requires a shift in our work processes, it is worth the additional time and effort of building relationships and supporting equitable decision-making. Adapting to the needs of the community is the only way to deliver offerings that are *of* and *for* the people who will ultimately own them. When we are aware of how some voices in our society are oppressed while others have learned to dominate, it becomes clear that additional care must be given to be sure that the contributions of marginalized people are acknowledged and considered.

These approaches can foster deeper, healthier collaborations in socially diverse settings beyond design for social impact projects. In any context where we are seeking to use design to create more desirable futures, we should take care to consider whose experiences are included, and who’s are overlooked, in shaping that future. If we continue to ignore the role

of race and structural oppression in our projects and their contexts, we may miss critical opportunities for insight. Embracing the self-reflection involved with acknowledging our own privilege and power and seeking to understand the different experiences of others can lead to synergistic practices that fulfill multiple needs. These are crucial steps toward de-centering whiteness in design practice and undoing the structural oppressions that are at the root of so many of the social and ecological challenges we seek to improve. When we incorporate the subjectivity of our perspectives into planning a complex design project, and then deliberately involve people with alternative standpoints, we can ensure more of the problem will be understood and incorporated into the solution. Developing a more critical lens to see more of the system leads to finding more collaborators and more opportunities to disrupt biased systems from the root.

6. Conclusion

When designing with and for a community, we are taking on more responsibility to intervene in systems that will have a more significant impact than traditional commercial settings. We must ensure we see the entire picture and structure our projects in anti-oppressive ways. We are now asking for a seat at the table to participate in long-term and deeply involved topics, and we need to do that with equity.

Attention to how we might harm and empower in our collaborations, through the practices outlined here can begin to prepare designers to understand and implement projects in diverse contexts that connect to communities ethically and with wisdom. We must continue to listen to the critique offered by those in the Decolonising Design movement and learn from the healthy skepticism in Critical Race Theory and Feminist practice to increase chances for success and reduce unintentional harm in our projects.

This paper seeks to further Design Research's ability to understand and affect systems-level change. New, more political design practices must recognize the responsibility inherent in deep collaboration and take time to support those we work with. Leaving behind the color-blind processes, an anti-oppression mindset acknowledges that different people have had very different experiences of the same system. Therefore, more care is needed our design approaches. It also creates opportunities to learn from different perspectives, if we can position ourselves as open to listen.

Acknowledgements: I would like to thank Ph.D. candidate Alexandra To, at Carnegie Mellon's Human Computer Interaction Institute, for the opportunity to collaborate on her research into racial microaggressions. Additional thanks to professor Dan Lockton and Ph.D. candidate Marysol Ortega Pallanez in the School of Design, for their detailed feedback on an earlier draft of this paper. Finally, I have gratitude for the patient, anonymous reviewers who waded through my too-wordy initial submission, saw the potential, and offered constructive feedback.

7. References

- Ansari, A., Abdulla. D., Canli, E., Keshavarz, M., Kiem, M., Oliveira, P., Prado L., and Schultz T. (2016). "A Statement on the Design Research Society Conference 2016." 27, June 2016. Retrieved from: <https://www.decolonisingdesign.com/statements/2016/drs2016statement/>
- Ansari, A. (2018). "What a Decolonisation of Design Involves: Two Programmes for Emancipation." Retrieved from: <https://tinyurl.com/ybl7rk25>
- Björgvinsson, E., Ehn, P. and Hillgren, P. (2012). "Agonistic participatory design: working with marginalised social movements." *CoDesign: International Journal of CoCreation in Design and the Arts*, 8:2-3, 127-144.
- Boehnert, J., Elzenbaumer, B., and Onafuwa, D. (2016). "Design as Symbolic Violence. Design for Social Justice." *Proceedings of DRS2016: Design+Research+Society – Future-focused Thinking*.
- Bonilla-Silva, E. (2018). *Racism Without Racists: Color-blind racism and the persistence of racial inequality in the United States*. Rowman & Littlefield Publishers.
- Chilisa, B. (2019). *Indigenous research methodologies*. Sage Publications.
- DiAngelo, R. (2018). *White Fragility: Why it's so hard for white people to talk about racism*. Beacon Press.
- Escobar, A. (2017). *Designs for the Pluriverse: Radical interdependence, autonomy, and the making of worlds*. Durham, NC: Duke University Press.
- Grant, L., and Villalobos, G. (2008). "Designing Educational Technologies for Social Justice: A Handbook from Futurelab." *Futurelab*. Retrieved from: <https://tinyurl.com/yadkdge7>
- Hooks, B. (2014). *Teaching to Transgress*. Routledge.
- Hooks, B. (2010). *Teaching Critical Thinking: Practical wisdom*. Routledge.
- Kendi, I. X. (2017). *Stamped from the Beginning: The definitive history of racist ideas in America*. Random House.
- Kendi, I. X. (2019). *How to be an Antiracist*. One World/Ballantine.
- Le Dantec, C. A. (2012). "Participation and Publics: Supporting Community Engagement." *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 1351–60. <https://doi.org/10.1145/2207676.2208593>.
- Light, A. and Luckin, R. (2008). "Designing for social justice: people, technology, learning." Futurelab. Retrieved from: <https://www.nfer.ac.uk/designing-for-social-justice-people-technology-learning/>
- Mijs, J.J.B. (2016). "The Unfulfillable Promise of Meritocracy: Three Lessons and Their Implications for Justice in Education." *Soc Just Res* 29, 14–34. <https://doi.org/10.1007/s11211-014-0228-0>
- Morales, A. L. (2019). *Medicine Stories: Essays for Radicals*. Durham: Duke University Press.
- Ogbonnaya-Ogburu, I. F., Smith, A. D., To, A., and Toyama, K. (2020). "Critical Race Theory for HCI." *Proceedings of the CHI '20 Conference*, Honolulu, HI, USA.
- Ortiz Guzman, C. M. (2017). *equityXdesign: Leveraging Identity Development in the Creation of an Anti-Racist Equitable Design Thinking Process*. PhD diss. Retrieved from: <http://nrs.harvard.edu/urn-3:HUL.InstRepos:33774659>
- Søndergaard, M. L. J., and Hansen, L. K. (2017). "Designing with Bias and Privilege." *Nordes 2017*, 7.
- Solórzano, D. G. & Yosso, T. J. (2002). "Critical Race Methodology: Counter-Storytelling as an Analytical Framework for Education Research." *Qualitative Inquiry*, 8, 1 (2 2002), 23–44.
- Sue, D. W., Sue, D., Neville, H. A. and Smith, L. (2015). *Counseling the Culturally Diverse: Theory and Practice*. John Wiley & Sons.

Sue, D. W. (2010). *Microaggressions in Everyday Life : Race, Gender, and Sexual Orientation*. John Wiley & Sons Inc.

Tatum, B. (1992). "Talking about race, learning about racism: The application of racial identity development theory in the classroom." *Harvard educational review*, 62(1), 1-25.

Torre, M. E. (2009). "Participatory Action Research and Critical Race Theory: Fueling spaces for nos-otras to research." *The Urban Review*, 41(1), 106-120.

Wylie, A. (2013). "Why Standpoint Matters." *Science and Other Cultures*, pp. 34-56. Routledge.

About the Author:

Hillary Carey is a Ph.D. candidate at Carnegie Mellon University's School of Design. She has headed Winnow Research Studio as a professional practice in California for eight years.