Part 1
The Body in the XR Community
Against the Instrumentalization of Empathy: Immersive Technologies and Social Change

Rebecca Rouse
University of Skövde, Kanikegränd 3a, 541 34 Skövde, Sweden
Email: Rebecca.Rouse@his.se

Chapter 1

Introduction: Technology as Solution

“It’s a machine, but inside of it, it feels like real life, it feels like truth.”
– Chris Milk (2015)

“A continual retreat from the discomfort of authentic racial engagement results in a perpetual cycle that works to hold racism in place.”
– Robin DiAngelo (2011) p. 66

Technologies have a long history of being sought after as panaceas for complex human problems. Recently, I had a front row seat to this type of thinking at the previous university where I taught. In the midst of a discussion on the development of a new AR/VR lab on campus, the Dean of Engineering asked me, “Could you develop a VR game to teach our faculty diversity and inclusion?” The context for his question was increasingly visible activism from Black student groups on our campus in response to systemic racism, hostile faculty and administrators, and a lack of structural support. It was an open secret that the predominantly white campus lacked in faculty training resources, and that many faculty held racist and other deeply prejudicial views that were expressed in their teaching and interactions with students, negatively impacting the retention rates of students, faculty, and staff of color. While the administration had begun a small effort to provide occasional optional training, the Dean was clearly reacting to the great need with his suggestion to develop a VR game to ‘solve the problem.’ As an out lesbian (albeit white and cisgendered) I was one of the few ‘diverse’ games faculty, and the only one actively involved in campus diversity and inclusion work, and therefore an obvious candidate in the Dean’s mind to do this work and design a VR game to enlighten recalcitrant faculty members.
After recovering from my initial shock at the question, I did my best to describe why I felt the project would not succeed in the way he seemed to imagine.

My colleague’s incredible faith in technology has good company. Think, for example, of the work of immersive journalists and documentary filmmakers such as Chris Milk, Nonny de la Peña, the Be Another research collective, and others. Milk famously described VR as an “empathy machine” in his 2015 TED Talk, stating that by using VR “[...] we become more compassionate, we become more empathetic, and we become more connected. And ultimately we become more human” (Milk, 2015). Milk’s claim — which may seem glib at first — has been astutely critiqued by many (Clune, 2016; Murray, 2020; Nakamura, 2020). It is worth further examination, however, because it is emblematic of a pervasive perspective on technology today often encountered in the technology industry, STEM disciplines, and even popular culture at large. The seeming simplicity of this perspective belies the many layers of assumption underneath, many of which I believe hamper designers in achieving meaningful impact with their works. In this chapter the layers of assumption in the empathy machine perspective are examined, and an alternative way of structuring the human-technology relationships that occur in the design process is suggested.

First, let us examine the tacit assumptions that underlie statements about VR as an empathy machine. There are two main parts to this larger claim. One part is a claim about what empathy is, and how it can influence people and society. A second claim centers on the nature of interactive, immersive media as particularly conducive to fostering this specific type of empathy in viewers. What is meant by empathy in the usage from Milk and other journalists and documentary makers working in immersive media today should be made explicit. Empathy in this case is used to denote a positive outcome in the viewers, due to change in attitude or belief, with a likelihood that this change may result in pro-social behavior and even actions advancing justice. It is worth examining how this colloquial understanding of empathy holds up against scholarship on the topic, which will be discussed below. More deeply embedded in this definition is an implied mental model of how social change works, and so the question also arises as to whether not this empathy-based model of social change is accurate. At the foundation of this set of assumptions is an idea about the ontology of technology itself, as a labor saving device that is capable of simplifying complexity.

Viewed from this perspective, it becomes easy to see why this idea of the ‘empathy machine’ could be so attractive to many across the technology industries, STEM disciplines, and popular culture in the West. The reasoning may go something like this: if only we can use AR/VR to unlearn prejudice and inspire action, then the hard, painful work of the emotional and intellectual labor of coming to terms with prejudicial beliefs and attitudes could be made easier. There is a connection to be made here with Robin DiAngelo’s concept of white fragility as discussed in her original paper (2011). DiAngelo developed the concept of white fragility to understand and name the defensiveness, fear, misdirected anger, and inaction often displayed by white people when confronted with their participation and complicity in perpetuating oppressive racist systems and these systems’ devastating costs to others. The idea of using a technology, such as AR or VR, to ‘change minds’ via empathy
(understood as an almost involuntary, emotional response) plays into a fantasy that neatly aligns with a privileged positionality, seeking quick, easy, and relatively painless methods of mitigation that fall far short of actual change.

This perspective on technology as labor-saving device fits well with dominant so-called common-sense but wrongheaded ideas about technologies as neutral tools that can take on the burden of labor from humans and increase efficiency, notably critiqued by Langdon Winner (1980), Susan Leigh Star (1999) and others. Other methods for prejudice reduction, such as in-person intergroup dialogue training, require many resources (mostly trained practitioners and teachers, who must be paid) and quite a lot of time—even years. The technological fantasy of the immersive media empathy machine imagines a mass medium that can seamlessly reach scores of individuals, necessitate no actual interpersonal contact with the ‘others’ these individuals seek to empathize with, and smoothly and easily change minds in minutes. Unfortunately, these foundational ontologies of both technology and social change are at odds with key concepts in scholarly research on social change, and the media artifacts produced within this imaginary are more likely to serve to assuage the privileged person’s guilt and enrich the artifact’s creators (through money or social capital, or both) rather than effect true social transformation. This ironic moral pitfall is discussed in depth by Kate Nash (Nash 2018), in her examination of the difficulties of designing an effective experience in VR for witnessing the suffering of others.

De la Peña’s 2012 *Hunger in Los Angeles* provides just one example of the many immersive media projects that function in this manner and fall prey to what Nash describes (Nash, 2018). In De la Peña’s 2012 piece, a spatial 3D rendering created in the Unity game engine displays a reenactment of people standing in line at a food bank in L.A., using actual audio recorded from the real food bank line. The situation becomes increasingly stressed as one man succumbs to a diabetic seizure and collapses on the sidewalk. The VR interactor, however, is prevented from taking any action let alone an ethical one to help the man and can only continue as a passive voyeur in the scene. But, the question is opened, even if the interactor could make choices to help the sick man or the many hungry people, how meaningful would that be? Ultimately, the work presents a simulation with little functional connection to reality, transforming the very real suffering of people struggling with poverty and disease into a simulated spectacle.

In an interview with Lizzy Goodman (2012) de la Peña discusses interactors’ reactions to the piece as emotionally intense, citing interactors’ tears and aggrieved facial expressions following the experience. Remarkably, de la Peña expresses her complete surprise that interactors would want to help the stricken man, stating “It’s shocking to me the number of people who were so upset that they couldn’t help this guy.” This statement reveals far more about de la Peña’s understanding of people than the reactions of the interactors who experienced the VR piece. It is also important to note that throughout the interview de la Peña refers to the sick man as “this guy” and “some guy,” but never by name, which suggests she does not know the man and made no effort to involve him in the design of the work, or seek his consent. In terms of the value of the VR work, the article mentions it was prominently exhibited at the prestigious Sundance film festival, and de la Peña discusses the need to “think about
experience as part of your overall business plan [...] The idea of commodifying experience is not new but this is like commodifying emotion” (Goodman, 2012). No positive impacts for the actual people struggling with hunger and illness are mentioned, and so it seems the largest positive impact of the work was for de la Peña herself. As discussed by Joshua Fisher (2017) it is all too common in the case of this genre of VR work that the interactor ends up empathizing most closely with the VR designer, and not the subject (Fisher, 2017). This brings to mind the many examples of mediated witnessing that lack authentic or meaningful engagement with the person suffering but bring value to the designer, such as photographer Dorothea Lange’s cursory interaction with and ultimate exploration of Florence Owens Thompson, better known as ‘Migrant Mother’ (1936).

**Empathy, Ethics, and Social Change**

“*What [white Americans] see is a disastrous, continuing, present condition which menaces them, and for which they bear an inescapable responsibility. But since, in the main, they appear to lack the energy to change this condition, they would rather not be reminded of it.*”


What exactly is empathy? Is it an emotion, a media-induced response, a personality-based positioning, or something else? There is a wealth of scholarship on empathy and related phenomena such as compassion, identification, and transference. Steve Larocco’s research provides an important perspective on the ethical complexity of empathy, which is relevant to our discussion given the focus on social change. Larocco understands empathy as a type of positioning of the self towards the other, as opposed to an emotion or feeling (Larocco, 2018). Larocco underscores the uncertainty around the potential of this empathic positioning, as there are many possibilities along a spectrum, all the way from authentic identification with another to selective empathy that seeks to misconstrue the other as similar to the self, or identifies only with aspects of the other perceived as similar to the self. Larocco points out that due to this wide range of empathic responses, it is a mistake to draw a causal relationship between empathy and compassion.

While empathy is commonly thought of as a positive, warm emotional response, it can also be directed and instrumentalized or used as a tool in a predatory manner. A fictional example that nicely illustrates this usage of empathy is the interrogation scene in *Star Wars: The Force Awakens* (2015). The villainous Kylo Ren seeks to understand resistance fighter Rey in order to probe for weaknesses in her psyche so that he may more easily defeat her. This capacity to weaponize empathy has been important in the development of early VR systems, which were first designed to facilitate military training and simulation. In these systems, such as *FlatWorld* (Pair et. al., 2003), *America’s Army* (Zyda et. al, 2005), *Living Worlds* (Zielke et. al.,2009) and *HuSIS* (Schubert et. al., 2016), soldiers are trained to empathize with an other, characterized as an enemy, in order to anticipate their actions so that they may be more efficiently killed. Indeed, one of the earliest immersive interactive systems, Frank
Waller’s gunnery trainer designed for the US Army during the Second World War, was declassified after the war and commercialized as Cinerama, an early immersive cinema format that presaged IMAX and later VR cave technologies. VR and game technologies have a long history of entanglement in military simulation, which cannot be discounted when seeking to understand the embedded values designed into such systems even as they are repurposed for entertainment today (Zyda et. al., 2005; Smith, 2010).

Empathy’s invasive potentials have been noted by several theorists, such as bell hooks (1992) and Lisa Nakamura (2020) as particularly evident in technological systems that seek to provide the viewer or interactor with an empathic response experience. Hooks’ discussion of supposedly empathy-inducing films draws out the absence of the actual ‘other’ who is represented, meaning the direct experience of empathy, which normally involves a process of consent and negotiation from all participants, cannot take place since the filmic ‘other’ is absent. This total absence of the other persists in immersive media, neatly preserving a privileged interactor’s safety and comfort over the consent and agency of the ‘others’ represented. Why is the other’s story more palatable as a mediation, as opposed to in direct human interaction? Hooks further unpacks this unilateral gaze at the representational other as colonizing and racist, as ‘taking’ voice more than giving it, and at the core of cultural appropriation. There is a connection to be made here between the twin logics of the racist colonizing gaze and Laura Mulvey’s theorizing of the filmic ‘male gaze’ (Mulvey, 1975). After all, white supremacy and misogyny are old bedfellows. Nakamura bridges this argument with a discussion of capitalism, and delves into the dubious motivations of technology companies who in the face of their industry’s morally bankrupt history of systems that instrumentalize empathy for exploitation and violence, now find it expedient to recast their systems as in service of the social good in an opportunistic but ultimately empty gesture (Nakamura, 2020).

Philosopher Paul Bloom’s research further critiques empathy as a dangerously ambiguous compass for moral decision making. Bloom points out that studies of empathy are based on individuals identifying with other individuals, but not situated within the large social contexts that surround us all and make actual social problems complex (Bloom, 2016; p. 85). Examples are discussed such as the funds directed toward the Make-A-Wish foundation, which provides a wonderful personal experience to terminally ill children, versus funds directed to the Against Malaria foundation, which supplies mosquito netting to children in need, saving many hundreds of children’s lives. Bloom points out that because Make-A-Wish so effectively leverages empathy in its solicitations, it is able to garner far more funding than the malaria foundation. Empathically, donors feel connected to the promises and pathos of Make-A-Wish. But morally and rationally, it must be agreed that saving many children’s lives is a better goal than providing a single child with a wonderful experience, no matter how deserving the child or emotionally fulfilling for the giver.

Bloom also reminds us of the uneven legacy of empathic artifacts in spurring social change that advances justice. He notes that while novels such as Dickens’ Oliver Twist and Beecher Stowe’s Uncle Tom’s Cabin have been cited as helping to motivate social change, they also misfire badly in many ways, exploiting and
appropriating those who they hope to support. And, we must also remember there are counterpart works of social significance that have advanced causes furthering oppression and domination through empathy, such as Ayn Rand’s novels or Adolph Hitler’s memoir, in which the reader is encouraged to empathize with beleaguered protagonists who fend off others characterized as social spongers and degenerates, to rise above, victorious. Certainly, these empathic artifacts have also functioned as their creators intended, inspiring many to join oppressive and violent causes.

Shifting our focus to immersive media more specifically, the problems found in older media discussed above persist in many of the AR and VR experiences designed today for empathic response. Clouds Over Sidra, Chris Milk’s 2015 VR documentary about the Syrian refugee crisis falls into this category. Milk promoted the VR experience as successful due to the medium’s ability to fill the viewer’s field of view, thus creating a virtual sense of presence for the viewer, who feels ‘as if’ they are co-located in a Syrian refugee camp with the film’s protagonist. However, this conflation of simulated co-location with empathy and social change has been astutely critiqued by Clune (2016), who noted that while VR may virtually place the viewer in another space, the viewer is still themselves, with their own subjectivity and positionality. Clune points out that other peoples’ consciousnesses are not simply ‘other spaces,’ and highlights that the ‘as if’ of VR is not at all the same thing as the lived reality of fleeing to a refugee camp. The VR viewer can simply remove the HMD when they tire of the experience; leaving a refugee camp is more complex, difficult, and dangerous by many orders of magnitude.

This myth that merely by entering an immersive simulation of another person’s environment you can understand their perspective has insidious effects even for well-intentioned viewers. In the case of white viewers seeking empathy with the perspectives of people of color, there is a long, racist history of whites donning Blackness that must be considered. The ongoing legacies of minstrelsy and blackface persist, as does the equally misguided impulse toward what Alisha Gaines describes as cross-racial identification, with seemingly well-intentioned white people seeking to become ‘black for a day’ to advance their own personal understanding of racism (Gaines, 2017). Gaines’ research highlights that even when whites may approach such an ill-advised project with the aim of advancing social justice, this outcome has yet to materialize from these types of appropriative, invasive moves. In the end, the people who benefitted most were the white impersonators, both monetarily and in terms of social capital. This type of instrumentalized empathy functions in the same manner as the colonialist rhetoric of extraction, allowing the white oppressor to mine a Black other for value, knowledge, and power.

The narcissistic qualities of the VR medium may make the technology predisposed to the creation of these types of extractive, exploitive experiences. In the case of VR works that are designed for a single interactor to access via a head-mounted display, the interactor is hermetically sealed inside a mediation with only their own reactions and responses. Echoing the narcissism of one of VR’s media ancestors, video, as discussed by Rosalind Krauss (1976) this solitary isolation stands in the way of any true dialogue, active listening, or meaningful witnessing that could have
the potential to lead to impactful, co-consensual exchange. This narcissistic nature of VR perpetuates the centering of white perspectives that DiAngelo (2011) discusses as a key factor in the development of white fragility and maintenance of racially unjust social structures. As Kate Nash (2009) identifies in her analysis of failed attempts at global cosmopolitan human rights movements, “The creation of feeling for the suffering of distant people, which can generate a collective understanding of moral obligation to act to relieve that suffering, always risks degenerating into an emotionally indulgent admiration of one’s own sensitivity, sincerity and strength of will” (Nash 2009, p. 153). Next, we will examine scholarship on the nature of social change, its many actors and processes, and discuss what role, if any, immersive media can play.

Just as empathy is complex, so too is social change. Two major camps of thought could be described as the prejudice reduction model, and the collaborative social action model. The scholarship on prejudice reduction dates from the post Second World War era (interestingly, during the same period when we see the birth of VR) and centers on individuals in society who hold positions of power and prejudicial opinions about those they oppress. The focus in this scholarship is on reducing prejudice among these individual actors by providing corrective information that counters negative stereotypes. The aim is to reduce conflict and mitigate harm (Devine & Levine, 2012). A second camp of research on social change focuses on coalition building and intergroup relations, with the aim of facilitating collaborative social action. The focus here is the disruption of existing systems and structures, which may indeed necessitate conflict, and even, in some cases, violence (Wetherell, 1992/2012). Both models of social change are necessary, with focus at times on individuals and the mitigation of harm, and at times on coalitions and the overhaul of systems, but the question is how to balance these two perspectives.

However, it must be pointed out there is a potentially dangerous alignment between the focus on individualism in the prejudice reduction model of social change and the emphasis on white individualism as discussed by DiAngelo (2011). This emphasis on individualism can act to thwart meaningful change by providing absolution for members of oppressive groups such as white people who feel they have already ‘done the work’ or are ‘woke enough,’ and because they ‘aren’t racists’ individually they do not need to work actively to dismantle the logics and structures of whiteness. Nevertheless, there is a place for individual focus and learning in terms of examining one’s own biases and prejudices. Sociologist Bobbie Harro’s scholarship (Harro, 2000) provides a useful graphic model of how these two perspectives on social change can operate in confluence in her conception of the cycles of socialization (i.e., oppression) and liberation. Harro provides insight into how oppression may be disrupted through the cycle of liberation, opening up opportunities (but not guarantees) for shifts toward social justice. In Harro’s models, we see that media participate as just one node among many that work in collaboration and sometimes opposition to shift any one individual’s attitudes, beliefs, and actions. There is no research showing that it is possible to use a single technology to circumvent the complex and arduous labor of the cycle of liberation.
Persuasive Media

“But to substitute monologue, slogans, and communiqués for dialogue is to attempt to liberate the oppressed with the instruments of domestication.”


So how do media participate in these cycles of socialization and liberation as described by Harro? While a single media artifact functions as just one node among many, the role of media in aggregate is still significant. Even media that are not explicitly designed to teach or persuade will carry some embedded values of the society they are created within, and therefore do the important work of reinforcing dominant narratives. Dominant narratives are not necessarily bad; for example, ‘treat your neighbor as yourself’ could be considered a dominant narrative that encourages pro-social behavior and even kindness. Other dominant narratives, however, include oppressive ideas that target marginalized groups such as women, trans and non-binary people, people of color, people with disabilities, people struggling in poverty, and immigrants. These oppressive dominant narratives reinforce negative stereotyping about these groups and function to maintain or even worsen these groups’ marginalized status and hamper access to power.

But within media at large there are also examples explicitly designed to teach, persuade, or even coerce. We might discuss this subset as ‘persuasive media.’ Communication technologies, broadly understood as encompassing speech, books, images, and mechanical and digital technologies have long been implemented in service of persuasion. Some of these efforts have proved successful, others have not. Often it may be difficult to disentangle one media artifact’s role in a large social shift and determine the precise ways in which it may have helped or hurt a particular cause. Some of the most persuasive media artifacts that have successfully instigated or cemented social change are understood as propaganda. A recent example of this propagandistic use of media was the ‘pizza-gate’ conspiracy of 2016 designed to cast then presidential candidate Hillary Clinton as the leader of a satanic child trafficking ring run out of a Washington DC pizza restaurant (Robb, 2017). This example of propaganda against Clinton is particularly clear as it exhibits a key characteristic of classic propaganda, serving to reinforce existing attitudes, solidify them as beliefs, and ignite action. Leveraging empathy for the nonexistent child victims of the alleged scheme, this propaganda campaign was successful enough to convince a man from North Carolina to travel to the Washington DC restaurant and fire several rounds from his AR-15 in what he described as an attempt to liberate the captive children.

Another illustrative example is Leni Riefenstahl’s 1935 Nazi propaganda film, Triumph of the Will. Watching this film alone will not convince you to become a Nazi, but if you are already a Nazi it will help to cement and celebrate those beliefs and attitudes. Watching it while steeped in a culture and mediascape that also celebrates and normalizes the values of National Socialism might indeed convince you to join the cause, particularly if other nodes in the cycle of socialization such as friends and family members have already bought into the ideology. As Harro’s model depicts, media participate as just one node among many in the powerful forces of
socialization that work to instruct us, from the youngest age, as to how we should
behave to maintain the status quo in social structures of power (Harro, 2000).

How media are received and interpreted by viewers has been the subject of
study of many fields for more than a century, from psychology to communications
and cultural studies. Of particular importance are Stuart Hall’s theories on reception
that recognize the creative agency of the viewer in the interpretive act (Hall, 1973).
While Hall’s focus was mostly television, his perspective remains relevant for
understanding media reception today. The core of Hall’s reception theory describes a
range of possibilities for the viewer as part of what Hall terms the encoding/decoding
process of communications. While media creators seek to encode messages in their
artifacts, viewers engage in a decoding process to interpret these artifacts. Hall
describes three broad types of decoding that viewers may participate in, even shifting
between modes at times. These reception modes are: dominant/hegemonic (in which
the viewer accepts the canonical or intended meaning encoded in the artifact by
the creator); negotiated (in which the viewer accepts some parts of the canonical
message but takes issue with other aspects); and oppositional (in which the viewer
disagrees with the canonical message and/or may creatively appropriate and re-
interpret intended meanings to shift them to fit their own value system) (Hall, 1973).

Shifting to examine the experiences of interactive, immersive media, as opposed
to television, it must first be noted that while the terms ‘immersion’ and ‘interactivity’
are commonly used to denote good or pleasurable experiences, this is not a default.
Interactivity can be generative and engaging, but it can also be tedious—hence
the concept of decision fatigue. Immersion, too, is not necessarily a good thing.
The 1965 Michael Caine film *The Ipcress File* provides a compelling fictional
illustration of the unpleasant side of immersion, with its portrayal of a proto-VR
cave system utilized as a torture device. And, real life architectures of immersion,
such as Governor Nelson Rockefeller’s Empire State Plaza in Albany, New York
also provide good counterexamples to arguments that essentialize immersion as
pleasurable. The Plaza is a seamless white marble monstrosity, constructed at giant
scale, and often unacknowledged human cost. The state had to forcibly displace
several neighborhoods with thousands of inhabitants to create this fantasy of seamless
modernity and power (Paley, 2014). Experienced in person the Plaza feels more like
a suffocating enclosure, a horror of whiteness, in which participation is only possible
as texture, as one of a crowd.

Pleasurable or not, media interactors today experience interactive, immersive
artifacts in a variety of ways. Scholar Jay David Bolter has identified two main
modes of interaction for contemporary media; catharsis and flow (Bolter, 2014).
Bolter discusses the aims of more traditional media, such as the novel and Hollywood
cinema, as evoking catharsis or an emotional release in the viewer. Interactive media,
on the other hand, he argues work to perpetuate a state of flow for the interactor.
Flow is a concept developed by psychologist Mihaly Csikszentmihalyi (1991) and
describes an individual state that differs quite a bit from catharsis. Bolter describes
this disjunction as follows: “Catharsis aims at the achievement of a desired emotional
state, whereas the state of flow wants to continue forever, with minor variations in
the intensity of involvement. Flow is the negation of desire [...] because it does not
move toward its own repletion” (Bolter, 2014, p. 123). Bolter goes on to identify a third mode of reception as reflectivity, citing the modernist avant-garde’s strategy to disrupt aesthetics of immersion and flow, with the aim of shifting the viewer into a position of critical distance from the work, in which reflection may be possible.

This tripartite taxonomy of media aesthetics and reception (catharsis - flow - reflectivity) is very useful for mapping the majority of media experiences available today. Most do indeed fit within this scope, and many do make use of all three aesthetics to lesser or greater degrees. Interestingly, these three modes of reception are largely characterized as individual, not only by Bolter but by other theorists as well including Csikszentmihalyi, Raymond Williams, Stuart Hall, and others. This individualist focus is useful and necessary for understanding how a single interactor may experience a work, but it is less useful for examining how a work may function in terms of reception if the work aims to instigate social change. Social change, after all, must happen in the realm of the social—in other words, with other actual humans as opposed to mediated representations of others. Acknowledging the co-constitutive nature of the social, it is necessary to push past the individualist focus of the concepts of catharsis, flow, and even reflectivity, to discuss an aesthetic and reception mode that centers the relationships and communication between multiple humans. Dialogue is a good possibility for this and may provide a way forward as an interaction mode that has potential to foster conditions necessary to enact social change.

Dialogue, as described by David Bohm, functions in many ways that are opposite from persuasive media (Bohm, 1996). As a communication practice that is distinct from discussion or debate, dialogue prioritizes active listening, attention to process, and questioning for understanding. While a dialogue is often established within a framework of co-designed guidelines, these guidelines are not rules and may be changed as participants’ needs shift and emerge. Unlike a game, a dialogue has no winners or losers, and as Bohm states, “Everybody wins if anybody wins. There is a different sort of spirit to it. In a dialogue, there is no attempt to gain points, or to make your particular point of view prevail. Rather, whenever any mistake is discovered on the part of anybody, everybody gains” (Bohm, 7). In my own collaborative research with Amy Corron, we have already seen positive results in the application of a critical feminist pedagogy based in dialogue in the transformation of game design curriculum (Rouse & Corron, 2020). Considering the aesthetics of dialogue and the modes of reception and interaction in dialogic communication practices may be a promising way for AR and VR designers to begin to rethink approaches to creating immersive interactive media intended to support social change.

**Conclusion: Against the Instrumentalization of Empathy**

“[…] cultural, ethnic, and racial differences will be continually commodified and offered up as new dishes to enhance the white palate […] the Other will be eaten, consumed, and forgotten.”

– bell hooks (1992) p. 39
Defined in terms of aims, many in contemporary culture have instrumentalized empathy as a means to an end. Instrumentalization refers to the characterizing of something as a tool or instrument, mistakenly viewed as neutral and unproblematically not entangled in culture and politics, in a fantasy of separation. A shift away from the instrumentalization of empathy in interactive immersive media design will not be easy. The empathy-centric approach has strongly entrenched for at least the past twenty years and has had far-reaching consequences. To examine these consequences, it is helpful to return to Lisa Nakamura’s work to understand her explanation of how instrumentalized uses of empathy cross over into a kind of violence, which she describes as “toxic empathy” (Nakamura, 2020). She further identifies the cathartic experience of empathy, often accompanied by tears from a privileged viewer, as actually serving as a kind of ‘alibi’ for the viewer by supplying a surfeit of feeling as a way to overwhelm the senses and avoid the labor of taking constructive action.

Disturbingly, empathy has also been explicitly instrumentalized as a design tool. This has been done to make the design process more efficient and easier, by providing the designer with a more seamless way to access the other, who is being designed for, as opposed to with. The commercial design firm IDEO has published a set of cards intended to assist designers by sharing approaches and methods. One such card is the ‘Empathy Tools’ card, which describes the shallow, appropriative methods used by the designers to claim access to the subjectivities of potential users of their products who are disabled. The card describes the method as follows:

“How: Use tools like clouded glasses and weighted gloves to experience processes as though you yourself have the abilities of different users.

Why: This is an easy way to prompt an empathic understanding for users with disabilities or special conditions.

IDEO designers wore gloves to help them evaluate the suitability of cords and buttons for a home health monitor designed for people with reduced dexterity and tactile sensation” (IDEO, 2003).

Similar to the well-intentioned but ultimately racist and misguided moves by white people to experience empathy for Black people by ‘blacking up’ themselves (Gaines, 2017), this instrumentalization of empathy as design tool suggests the designer can access the experience of disability in a meaningful way by putting on a pair of gloves or glasses. This reduction of disability to a single mechanic, like the reduction of Blackness to skin color, and the refugee experience to (virtual) presence in a location all rest on twisted notions of empathy, technology, and social change that have little basis in scholarly research or reality, and utterly fail to take into account the designer’s own positionality. More recent work from the fields of co-design, participatory design, and socially engaged art provide helpful contributions for moving away from this approach of designing for others and shifting toward designing with and in communities (Helguera, 2011; Friedman & Hendry, 2012; Bardzell & Bardzell, 2013; Cipolla & Bartholo, 2014; Sanders & Stappers, 2014).

Focusing again on the category of works discussed at the opening of the chapter, VR experiences like de la Pena’s *Hunger in Los Angeles* (2012), *One Dark Night*...
Augmented and Mixed Reality for Communities

(2015), and Out of Exile: Daniel’s Story (2017), projects from the Be Another Lab research collective (2012 - ongoing), and Milk’s Clouds Over Sidra (2015) have so many layers to unpack, revealing these works as actually functioning to re-inscribe the oppression they claim to push back against. Beyond the aesthetics and ontology of the particular technology and underlying assumptions regarding the empathic mode of reception, there is also the ethically fraught issue of telling someone else’s story, no matter the medium (Shuman, 2005; Parvin, 2018; Rouse, 2019). In the realm of nonfiction, as all these examples are, this issue is particularly charged. These examples are rife with serious missteps such as the taking of voice as opposed to giving it, cultural appropriation, and colonizing moves to extract things of value from the oppressed. These problems are particularly highlighted in the case of others’ stories of pain, oppression and violence, when the designer and interactor are not part of the community experiencing these horrors (Baker, 2015; Fisher & Schoemann, 2018). This extraction and remediation as safe simulation can provide viewers with a perverse sense of pleasure in the suffering of others, even if that pleasure is construed as morally ‘good’ in the name of providing information for the aim of prejudice reduction.

Where does the landscape of instrumentalized empathy leave immersive technologies like AR and VR in the quest for social change and justice? First, designers must find our own place in the conversation, and then consider technology. This means designers must first work to cultivate critical self-awareness and understanding of their own positionality as always already culturally and politically entangled. The neutral designer is a myth. This self-knowledge is necessary as a foundation to be able to critically assess how one’s own creations participate in the cycles of socialization and/or liberation. In addition, in the journey to develop self-awareness, it is necessary to maintain the humility to know and hopefully enjoy the fact that we never stop learning and this journey is never complete. Never-ending learning means continually finding out that previously held ideas are wrong. This is a fact of life; the only alternative is willful ignorance.

With this in mind, I suggest a set of dichotomous qualities that are intended to help designers think towards an anti-instrumentalist design approach. This approach is centered on dialogue as opposed to any particular media technology, and prioritizes human-to-human interaction as opposed to simulation.

The qualities associated with human dialogue are counterintuitive for many design processes. The process of dialogue is not quick, its outcomes are not disposable, its work is never finished, and it is not productive in the capitalist sense nor easy to monetize. This approach can be, however, transformative, as opposed to informative. While a dichotomy is certainly reductive, its value is in the structure it can provide as a frame for supporting inquiry. There is an interesting middle space, a third possibility, between human dialogue and media simulation, that is inhabited by mixed reality. This blended space may provide the most fertile ground for experimentation in the work of socially engaged immersive design moving forward.

In practice, the type of process suggested by the above qualities takes place over multiple years. Pushing back against the language of speed so common in industrial design terms, such as the design “sprint” (Knapp et. al., 2016), a design process
centered in dialogue could be described as a slow approach to design, or design in real time, as opposed to machine time. If the ultimate goal is to develop an AR or VR project that will be truly transformative, the first step is for the designer or designers to engage in learning about and examining their own social identities, and practice being in dialogue with others who have different social identities than their own. This step might take a few months, or even a year, or more. It certainly cannot be accomplished in a five-day design sprint. Many resources for this first step of self-examination and dialogue with others are discussed in Rouse & Corron (2020).

Following this first step, a second step is for the designer to spend time in their own community, considering who—including the designer themselves—needs to learn what. This step may also take a year or so, and the resources needed will depend on the particular qualities of the community in which the designer finds themselves, and how they are positioned within that community. This second step should also include developing genuine relationships in the community that are naturally pertinent to the design aim. For example, if the aim is to design for middle school children, consider becoming a volunteer homework tutor at the local middle school or public library; if the aim is to design applications for cultural heritage, visit local museums and heritage sites and get to know the curators and patrons there. Following these first two steps, designers will be armed with invaluable resources of knowledge and connections that elude many designers who seek to skip ahead.

In a third step, the designer should work with their now-developed network of contacts to create a series of community roundtables and participatory design
workshops to begin to explore the design space of their own community with fellow community members. These events should be designed to facilitate knowledge sharing between the designer, their network, and others. The designer might find themselves in the position of educating others on the how-to's of AR technology, for example, while learning from others about the spaces and history they care about most in the community. For some examples of projects developed in this manner see Rouse (2019). This third step may take several months. Finally, a fourth step involves gathering a more formalized design team, and working toward a functional prototype that can be shared with the community in a participatory fashion at iterative stages, leading to a finished project. Many designers begin with this fourth step, and it is easy to see why the projects that result are often informational only, and not transformational.

This is the crux; if social transformation is the true goal, designers must seek methods that truly transform themselves and participants through co-constituted, consensual, collaborative means that result in transformational knowledge production and meaningful experience. Continuing to cosset designers and interactors in simulation can only result in the perpetuation of systems of oppression.

**Acknowledgements**

The author thanks Professor Nassim Parvin for her insightful and generous mentorship on this research.

**Put it Into Practice**

Taking the lessons from this chapter, envision a multiyear project that uses XR for social change but does not seek to do so through the instrumentalization of empathy.

1. Engage in learning about and examining your own social identities, and practice being in dialogue with others who have different social identities than your own.
2. The designer must then spend time in their own community, considering who—including the designer themselves—needs to learn what. This second step should also include developing genuine relationships in the community that are naturally pertinent to the design aim. Following these first two steps, designers will be armed with invaluable resources of knowledge and connections that elude many designers who seek to skip ahead.
3. The designer should work with their now-developed network of contacts to create a series of community roundtables and participatory design workshops to begin to explore the design space of their own community with fellow community members.
4. The fourth step involves gathering a more formalized design team, and working toward a functional prototype that can be shared with the community in a participatory fashion at iterative stages, leading to a finished project.
References


