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Immersive Journalism: Empathy through Virtuous Virtual Reality?

Introduction

“When you’re sitting there in [Sidra’s] room, watching her...you’re not watching it through a television screen (virtual reality) ... you’re sitting there with her ... [B]ecause of that, you feel her humanity in a deeper way. You *empathize* with her in a deeper way” (Milk).

In his iconic TED show in March 2015, Chris Milk (a film producer who collaborated with the United Nations to produce the acclaimed VR film *Clouds over Sidra* about the Zaatari Refugee Camp in Jordan) proclaimed the potential of VR to be “the ultimate empathy machine” (Milk). Rejecting the mainstream idea of VR as merely a “video game peripheral,” Milk believed that VR could “connect humans to other humans in a profound way” by allowing those with access to VR to experience the life of others, eliciting audiences’ empathy with the people in the VR narration to promote prosocial actions (Milk). Specifically, *Clouds over Sidra* is a 360-degree VR film targeting influential western policymakers whose decisions could affect millions of lives. In Milk’s vision, virtual reality as an empathy machine could change the world and make us “more human.”

Milk is not alone. Humanitarian organizations (such as the United Nations) and technology companies have long embraced and been propagandizing Milk's idea of the "empathy machine." For instance, Mark Zuckerberg, whose Facebook acquired the start-up Oculus VR in 2014, commented, "[o]ne of the most powerful features of VR is empathy...[it] can raise awareness and help us see what's happening in different parts of the world" (Tarnoff).

Although the concept of "empathy machine" sounds conveniently promising to many, virtual reality's actual effectiveness in eliciting empathy and its moral and practical implications have remained a controversial topic in academia. In this paper, I will examine the existing literature that either supports virtual reality as a significant empathy and prosocial behavior stimulator or rejects it as an ineffective and immoral tool that intensifies existing problems and encourages the turn-away from reality. In the end, I argue that, just like social media, virtual reality is ultimately a double-edged sword that needs to be utilized and regulated carefully to avoid the aggravation of existing power hierarchy and infringement of human rights. To achieve it, we need governmental and public scrutiny of the creators (tech firms, international organizations) and distributors.

How does the "Empathy Machine" Work?

The rationale behind virtual reality being used as an empathy machine by humanitarian organizations is simple: to enable the more privileged populations to walk in someone else's shoes, especially the disadvantaged communities (e.g., the refugees, the homeless, and the disabled). In other words, VR as an empathy machine is to humanize its audience. Even though

other media (e.g., television and literature) have long been accepted as means to empathize with others, what distinguishes VR is believed to be its superior “visuals, sound, compelling narrative, and haptics” (Suzuki). As a result, extra immersion and presence enable a higher level of engagement and intensify the blurring of “the line between reality and imagination” (Shin). More specifically, by virtually occupying others’ bodies, the audience gets to experience the inhabitable protagonists’ life from a first-person perspective, prompting them to engage in the narration more deeply and identify/empathize with the protagonists, which fosters greater social bonding and an urge to engage in prosocial actions for the betterment of the society (Decety).

To examine the above theoretical effect of virtual reality on empathy and prosocial behaviors, Schutte and Stilić conducted research that had participants randomly assigned to watch *Clouds Over Sidra* through a headset either in the original VR 360-degree, interactive, and immersive format or in a two-dimensional format, after which the participants’ engagement and empathy were measured (Schutte and Stilić). The result of the study indicated that, compared to the two-dimensional narration, the VR format prompted a significant increase in participants’ engagement that induced greater empathy (empathic perspective-taking and empathic concern) for Sidra, the film's protagonist (Schutte and Stilić). Similarly, Shin finds that “the immersive properties of a VR story promote the perception that the story is real and live” and the consequent felt presence (i.e., “a feeling of being connected to other social users” in the virtual space) positively affects empathy within VR (Shin). Moreover, a higher level of empathy can result in “more prosocial behavior, more socially competent behavior, and better social adjustment” (Schutte and Stilić; Blanke et al.; Eisenberg, and Miller).

In addition, a study focusing on human rights attitudes (HRA) found that VR immersive journalism (e.g., *Clouds over Sidra* and *The Sea Prayer*, another VR film about Syrian refugees) leads to participants' better performance in human rights attitudes test compared to written journalism (Bujić et al.). Particularly, consuming VR journalistic content elicited a more significant "positive attitudinal shift" in the ¹Social Security and ²Equality dimensions of HRA (which also includes the ³Civilian Constraint) than 2D format and written article format, which respectively elicited a less prominent attitudinal shift and no shift at all (Bujić et al.). This result highlights VR's effectiveness in eliciting certain dimensions of empathy due to its superior immersiveness. Indirectly supporting the notion of the "empathy machine," Bujić et al. believe that immersive journalism and VR would open a gate to "[engage] consumers in otherwise inaccessible events or experiences" and "[subjectify] distant, or otherwise non-comprehensible human experiences," such as those of the refugees (Bujić et al.).

Furthermore, even though VR stories usually focus on a limited number of protagonists, it is suggested by a study that "empathy does transfer beyond the specific content of the VR experience" (e.g., "a VR experience about a single child refugee is likely to increase empathy toward all child refugees") and such positive effects on empathy may persist over time (Martingano et al.).

¹ "Attitude towards the right of access or entitlement to adequate standards of living" (Bujić et al.).

² "Attitude towards equal access to basic rights for all individual regardless of race, gender, or beliefs" (Bujić et al.).

³ "Attitude towards ensuring individual civic and political rights, or the limitation of thereof" (Bujić et al.).

Where does the “Empathy Machine” Fall Short of its Promise?

Despite the eloquent propaganda and supporting research for the conception of the “empathy machine,” further examination of this machine’s nature and impact has exposed limitations of virtual reality’s impact on empathy and prosocial behaviors.

VR’s Under-Stimulation of and Immersion’s Questionable Impact on Cognitive Empathy

Although not rejecting the general idea that virtual reality could engender empathy, Martingano et al. argue that VR is only effective at generating emotional empathy, not cognitive empathy (Martingano et al.). Their argument is based on a dual-process model of empathy, according to which “cognitive empathy is aroused by more conscious and effortful mental processes, whereas emotional empathy is automatic and requires fewer mental resources” (Martingano et al.).

Martingano et al. explain that as a type of “Hot Media,” VR storytelling “[presents] the thoughts and feelings of others explicitly,” thereby disengaging the audience from proactive mental effort in understanding others’ mental states, preventing the experiences from increasing cognitive empathy (Martingano et al.). In plain words, “the rush of emotions elicited on behalf of virtual victims does not appear to translate into an improvement in understanding their experiences,” making it easier to *feel* but not to *think* about others’ perspectives (Martingano et al.).

Martingano et al.’s meta-analysis also confirms that VR has a significant positive impact on empathy, yet with more prominence on emotional empathy than cognitive empathy. It is

assumed that the overwhelming “simultaneous sensory, motor, emotional and cognitive demands of VR” overloads the VR users’ processing capacity, thus restricting the development of cognitive empathy (Martingano et al.). Another possibility is that the limited time duration of VR immersion may under-stimulate cognitive empathy since it is “a skillset learned over several years...[and] may not be enhanced with a single-session VR experience” (Martingano et al.).

Since this study finds that VR could elicit emotional empathy but falls short of stimulating cognitive empathy, it implies the importance for the creators to find out which type of empathy could match their intended prosocial behaviors. For instance, fundraising campaigns could capitalize on VR’s stimulation of emotional response from users to collect donations while failing to enable better understanding among the politicians of the marginalized and disadvantaged to make more informed policy decisions (Martingano et al.). Also, unconditional reliance on VR to generate empathy threatens to inhibit users’ own development of cognitive empathic skills. It might “[render the users] unable to empathize with anyone who is not presented in 3D high definition with surround sound technology” (Martingano et al.).

Another surprising finding from the study is that “head mounted displays did not have a significantly larger effect on empathy than non-immersive delivery devices that ran on a normal computer desktop or headphones,” posing doubts on previous research supporting the positive impact on empathy through augmented immersion (Martingano et al.). If the finding were true, it also challenges current technology companies and humanitarian organizations’ chosen path to create and narrate VR stories through means more technologically advanced and presumably

more engaging, yet more expensive and no more effective than the less advanced counterparts (Martingano et al.).

Identity Tourism, Schadenfreude, and Epistemic Arrogance

The tech industry proclaims that the new VR would be an affective and compassionate technology that could teach “ethical decision-making and moral education” and become a cure to social injustice by allowing users to develop empathy with and experience the life of marginalized groups (Nakamura). However, in her paper “Feeling Good about Feeling Bad,” Nakamura blatantly criticizes such propaganda as a defensive strategy for the technology industry to wash away their stigma of exacerbating inequality, sexism, and racism and infringing privacy, while enabling a more undetectable form of exploitation of the marginalized groups (Nakamura).

The problems of the new “virtuous virtual reality” are multi-dimensional. The notion that the life of the marginalized and oppressed could be modeled and entered is “a profound insult to those who live with challenges that cannot be simulated” and another form of domestic surveillance, a flagrant infringement of privacy (Nakamura). Given that the voices of the oppressed and marginalized are usually ignored and overshadowed in the mainstream politics, the trend to virtually experience others’ misery reflects the disheartening situation where we “cannot trust marginalized people when they speak their own truth or...suffering, but...have to experience it...through digital representation, to know that it is true” (Nakamura). The users of virtuous VR “circumvent cruel or indifferent thoughts about already immiserated people” by replacing them

with spurious feelings of empathy from intense sensory input that causes a sense of presence with the VR protagonists (Nakamura). The empathy produced also risks devaluing into “empty empathy,” which is usually temporary and often meaningless (Kaplan). Moreover, “virtuous virtual reality” can potentially degrade into a new form of *schadenfreude* and disaster tourism, consumerism exploiting the marginalized and oppressed bodies that allows the users of VR to feel “pleasurable pain” (Nakamura). In other words, the users gain a sense of self-virtue and satisfaction through empathizing and feeling bad for the marginalized groups through touring the VR stories, which poses the threat of “[replacing] social and institutional responsibility and reform” (Nakamura). Meanwhile, it is virtually “[putting] the undercommons to work providing empathy content: their recorded ‘experiences’ become the alibi for VR’s excesses and un-virtuous uses” (Nakamura).

From the limited yet emotionally stimulating VR experience, the users feel good about themselves as they develop what Liebow and Ades call “Synecdoche Epistemic Arrogance,” meaning a false assumption that the users have learned what it is like to be marginalized, oppressed, and disprivileged as experienced through VR (Liebow and Ades). Yet VR being a temporary and limited experience of embodiment means that it is far “insufficient to give [the users] the sort of epistemic credibility they claim to have” (Liebow and Ades).

Synecdoche epistemic arrogance, usually on the part of the more privileged white, cisgender, and able-bodied male population, can have serious social implications as it is associated with “ignorance, disregard for full persons, false moral purity, and cultural co-opting” (Liebow and

Ades). Ignorance of one's own inadequate understanding of racism, for example, could "[hinder] curiosity, learning, and humility with regard to one's knowledge gaps about racism" (Liebow and Ades). Disregard for full persons can happen when an able-bodied person with a temporary experience of disability sees it as "a loss" and the life of the disabled as incomplete and undesirable (Liebow and Ades). A false moral purity, resulting from a sense of absolution from "knowing how being oppressed is like," falsely excludes the privileged from being part of the problem and can reinforce structural inequality (Liebow and Ades). Cultural co-opting occurs as a new form of cultural imperialism as the dominant groups, under synecdoche epistemic arrogance, assimilate and appropriate tools like activism used by the marginalized groups for their own benefits. These conditions "contribute to and reinforce large-scale patterns of domination and subordination [of the oppressed groups]" (Liebow and Ades).

"Forced Empathy" and Manipulation

In another study, Schlembach and Clewer point out the danger of the manipulative nature of immersive virtual reality titles that stimulate the users' empathic identification with the narrated subjects, or in their words, "forced empathy" (Schlembach and Clewer). One of the implications of the claims of virtuous VR advocates that it can directly arouse emotional response and empathy to produce prosocial actions is that this "affective machine" bypasses cognitive process to induce behaviors "irrespective of user agency...[suggesting] a loss of control of rational judgement" (Schlembach and Clewer). Therefore, virtuous VR and its "forced empathy" by definition have a hardly detectable, manipulative nature. Although it could be regarded as an "obvious solution to social injustice," it is imperative to question "what other meanings and

purposes might be attached to the claim that empathy is lacking in contemporary politics” (Schlembach and Clewer). We have to be cautious of “manipulation of empathy by nation-states and international institutions for purposes of political and social control” in the name of “care, compassion and empathy” (Schlembach and Clewer).

Clouds over Sidra and its Attempt of Humanization

In her paper, “The Limits of Humanisation,” Suzuki focuses her analysis on *Clouds over Sidra* and its attempts to achieve humanization of the audience, which is referred to the “recognition of another as a fellow human being,” and she points out several flaws in the VR film’s approaches to humanization (Suzuki). The foremost problems of *Clouds over Sidra* Suzuki mentions are the prevailing normality, exploitation of innocence, over-generalization and stereotyping of refugees, and political decontextualization. In the film, the narrator/protagonist is the girl Sidra who wears a hijab (a typical figure of a feminised and veiled refugee) and a majority of the scenes depicts innocent children smiling, playing, and walking to class (exploitation of innocence) and how normal and relatable life is in the refugee camp (a decontextualization of the displacement of the refugees). Suzuki criticizes the film’s overrepresentation of children, a void of contextualization, and depoliticization of the tragic displacement of refugees, which she believes “will inevitably reproduce a hierarchy of humanity” (Suzuki).

Conclusion

The age of VR 2.0 comes with big promises and challenges. Big Techs and humanitarian organizations agree on the potential of virtual reality to become an “empathy machine” with the

capacity of stimulating our empathy with the marginalized and oppressed groups and promoting prosocial behaviors such as donation and more informed and humane policymaking for the betterment of society. However, the subsequent scrutiny from the academia has exposed the flaws of such claims, pointing out the inadequacy of virtual reality in eliciting cognitive empathy, and potential ineffectiveness and necessity of the expensive, immersive VR machines as well as dangers of disaster tourism, cultural appropriation, privacy infringement, manipulation, synecdoche epistemic arrogance and real-life apathy.

Even though the presented literature indicates the potential danger of virtual reality, it does not overshadow its great potential to shape the behaviors and attitudes of its users to enact a greater societal change. We are facing the same big promises as years ago when the first generation of social media (e.g. Facebook) came out, except that we have learned what this industry can cost the society if it goes under-regulated. Infringement of privacy, illegal capitalization on users' data, cyberbullying, political manipulation and nesting of extremist parties through online echo chambers are the lessons we have learned from the abuse of social media. And the same lesson also applies to virtual reality: it all comes down to how virtual reality as an empathy machine will be produced and used, and most importantly regulated and scrutinized.

I am asking the following questions that the tech industry, humanitarian organizations, government and the embracers of VR need to deliberate over. Will we be able to produce VR narratives that actively engage the audience to not only empathize with the subject on an emotional level but an intellectual level, to try to actually understand them instead of just feeling

for them? Will we create VR stories that don't place the western, wealthier audience in a more privileged position that in turn reinforces the existing power hierarchy and inequality? Will we be able to not infringe the humane rights of the narrated subjects while we are trying to walk into their life? Will we prevent the empathy machine from degrading into a tool of consuming others' misery and turn away from actions in real life? Will we ensure that the empathy machine does not become a manipulative machine for the tech industry and demagogues?

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