



Article

Exploring opportunities and pitfalls of nurturing empathy through Virtual Reality in higher education in Norway

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Abstract

New media, such as virtual technologies (VR), are increasingly used with the aim of providing more immersive experiences in learning in schools and universities, including the nurturing of empathy, which is considered important for strengthening democracy, tolerance and social justice. In this article, we explore how students in higher education in Norway understand and interpret empathy in VR immersion. Students at two Norwegian universities watched three examples of VR videos designed to foster empathy, and our analysis is based on focus group discussions with these students. Our analysis is guided by anthropological and sociological conceptualisations of empathy, as well as decolonial perspectives on empathy that emphasise the need for cultural ‘translation’ for empathy to be meaningful across geopolitical contexts. Our results show that the concept empathy is more complex than often recognized by producers of VR content. For empathy to be transformative rather than result in ‘virtual othering’, it is essential to consider the significance of positionality and contextuality of those involved in empathic relations and encounters, rather than assume universality, both in terms of the actors involved (who the empathiser is) and conceptualisations of empathy (what empathy is).

Keywords: empathy, virtual reality, Othering, decolonial perspectives

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Introduction

The concept empathy is encapsulated in educational values and practices in the Nordic context, as part of an overall educational project that aims to instil Nordic children with cherished values such as respect and compassion for others, cooperation and tolerance (Boler, 1997; Dolby, 2012; Pedwell, 2016). Through different kinds of educational philosophies, practices, and methods, including digital technologies such as Virtual Reality (VR), the notion of empathy is considered beneficial in fostering democracy, tolerance and social justice (Bialystok & Kukar, 2018). However, as pointed out by researchers, there is not much evidence supporting the effectiveness of teaching empathy in this way in schools (Bialystok & Kukar, 2018). Boler (1997) warns against the danger of cultivating “passive empathy” through education. Although empathy is often advocated as the foundation for democracy and social change, Boler argues that the kind of empathy usually fostered through simple training programs “falls far short of assuring any basis for social change, and reinscribes a ‘consumptive’ mode of identification with the other” (Boler, 1997, p. 253). This article delves into this topic, exploring some potential taken-for-granted assumptions about fostering empathy through VR immersion, including its perceived positive outcomes.

Empathy is a complex concept that requires translation to be meaningful in particular contexts (Pedwell, 2016). In this article we critically address power dimensions and social hierarchies that complicate the relationship between those who are the recipients of the empathic response and those who give it. Drawing on students’ reactions to and reflections around watching VR 360 videos about people living in vulnerable situations, we analyse student’s experiences of the videos in relation to differences in previous experiences, cultural backgrounds and the context in which the students find themselves in. The concept empathy is approached using anthropological (Bubandt & Willerslev, 2015) and sociological (Ruiz-Junco, 2017) perspectives, aiming to nuance and problematize its assumed character as a positive moral virtue and to highlight its close connection to the previous life experiences of individual students. We also use decolonial perspectives on the transnational politics of empathy (Pedwell, 2016) to further explore understandings of empathy. Through our research question; *How can we understand empathy and its opportunities and pitfalls through VR immersion in higher education?*, we explore whether learning about people in vulnerable situations through VR immersion might lead to other outcomes than expected by the producers of such content. By looking closer at the students’ understandings of empathy, we argue that efforts to evoke empathy through VR immersion potentially risk (re)producing an unintended virtual kind of Othering (Said, 1978/2003, Spivak, 1985).

VR immersion and empathy in education

While some of the ways VR technology have been used in education have been documented, such as VR’s

potential as a tool for increasing pupils' motivation (Tai et al., 2022), VR in distance learning (Kavanagh et al., 2017), and VR as a substitute for field trips (Hu-Au & Lee, 2018), few studies include explorations of nonverbal and relational processes. A few studies have addressed VR's potential for evoking empathy, for example using VR in empathy training (Jackson et al., 2015), the limits of immersion in VR when adopting the role of a different gender (Chang et al., 2019), and the embodied experiences of racism (Roswell et al., 2020), but we have not found studies that analyse the potential risks associated with evoking empathy through VR. This article aims to contribute to both the emerging field of VR in education by looking more closely at how empathy is evoked and understood through VR, as well as empathy in education more broadly.

Empathy in VR is sought invoked through various means, where *presence* and *immersion* are the most central (Baños et al., 2004, p. 734). Research suggests that both immersion and affective content in virtual environments have an impact on presence (Baños et al., 2004). Carey et al. (2017) propose that empathy in VR builds on psychological understandings of empathy as a combination of cognitive (perspective taking) and emotional (embodied reaction) aspects, concerned with the "ability to understand another's emotions" (p. 552). Virtual reality environments "allow students to visualize abstract concepts, and to visit environments and interact with events that distance, time, or safety factors make unavailable" (Youngblut, 1998, p. 11). Others have shown that people react with the same level of concern and emotion to a person in need in a virtual environment as in real life, which supports the hypothesis that VR technology may influence behaviour in the real world (Gillath et al., 2008, p. 275). New technologies have allowed audiences to interact more with stories through interactive or immersive VR experiences, which are argued to lead to a deeper empathic experience (Doyle et al., 2016). Some even claim that VR is "the ultimate empathy machine" based on the idea that VR can evoke empathy by taking the perspective of another person (de la Peña, 2015; Hassan, 2020; Milk, 2015), as the technology can elicit a range of experiences, both visual and emotional.

In this article we analyse a type of VR called 360 video. 360 videos cover all angles, enabling the viewer to move around while wearing the equipment. The frame of the recorded film aligns with the direction of the movement of the head, making it possible to see what is happening both in front of, behind, above, and beside the viewer. Although 360 videos are often not considered "real VR" (Pirker & Dengel, 2021), we use 360 videos in our analysis of VR, because we do not focus on the technical aspects of VR, but rather on the potential for immersion, which both "real" VR and 360 video share. The focus for analysis in this article is three 360 videos that invite empathic responses from the viewer. The first video, *Clouds over Sidra*, was shot for the UN, and is about a 12-year-old girl who lives in a refugee camp in Jordan (UNVR, 2015). Originally commissioned for the 2014 World Economic Forum in Davos, one of the aims of Project Syria was to emphasise discussion of the humanitarian crisis among the world's most powerful people, aiming to

generate greater empathy and novel approaches to understanding the lives of people in vulnerable living conditions (UNVR, 2015). The second video was The New York Times' production *The Displaced*, about children's experiences with displacement in Ukraine, South Sudan, and Syria. The third video was produced by the Australian TV network SBS in 2017 and is about the prevalence of racism in Australia. The video is promoted as a "dramatic and confronting virtual reality video" that aims to "demonstrate the grave impact that such an attack can have on an individual"¹. While *Clouds over Sidra* and *The Displaced* fit into the humanitarian narrative as a moral and political project formed by transnational nongovernmental organizations (NGOs) (Ticktin, 2014, p. 274), the video *Is Australia racist* is made by a TV network and therefore operates outside the traditional humanitarian sector. Nevertheless, the video shares the narrative of a moral obligation to educate and enlighten the population. These three videos are examples of what is called virtual humanitarianism, which refers to digital experiences designed to bring attention to humanitarian or political issues using virtual reality (VR) or simulation platforms (O'Brien & Berents, 2019). Major humanitarian organizations such as the United Nations (UNVR, 2015) and Amnesty International (2016) have made use of VR technology in their advocacy and awareness raising, and report that they see a strong and often emotional response to their VR campaigns and a significant increase in donations towards their human rights work (Amnesty International, 2016).

Both digital, and non-digital, educational tools are often used in education to nurture empathy. As an explicit aim in education, empathy is often taught through methods that provide some form of affective experience (Cooper, 2011; Verducci, 2000). Common approaches include presenting students with "positive representations of groups usually portrayed negatively within the dominant culture, foregrounding the voices of those traditionally silenced, and creating facilitated role-plays that allow students to 'feel what it is like' to be marginalized", using a variety of methods, such as social media, testimonials, guest speakers, experiential learning, drama, or the reading of memoirs and fiction (Bialystok & Kukar, 2018, p. 30). The aim of such empathy training is for students to imagine themselves 'in the shoes' of someone else and thus "arrive at an understanding of their common humanity and tailor their subsequent actions to that understanding" (Bialystok & Kukar, 2018, p. 30). Digital tools, such as VR, have been used in schools in Norway and other parts of Europe as part of an overall focus on fostering life skills through taking the perspectives of others and building empathy in this process (Christensen, 2023). Digital methods of teaching Holocaust memory have also been initiated several places in Europe (Walden, 2022). In this article we look closer at a relatively new form of empathy training; 360 videos, which aim to nurture empathy through immersive experiences of marginalised people.

¹ SBS webpage promoting the video: <https://www.sbs.com.au/topics/life/culture/article/2017/02/23/can-vr-make-you-more-empathetic-and-less-racist-test-sbss-new-vr-video-and-find> (Accessed 15.11.2019)

Theorising empathy

In this article, we engage with the concept of ‘empathy’ using sociological (Ruiz-Junco, 2017) and anthropological (Bubandt & Willerslev, 2015) conceptualisations, to operationalise and nuance empathy. We also engage with decolonial perspectives of empathy, emphasising the need to contextualise and situate empathy in a wider geopolitical context (Pedwell, 2016). Finally, the postcolonial concept of Othering (Said, 1978/2003) is included to highlight processes of differentiation that can occur in virtual humanitarian spaces through VR immersion.

Ruiz-Junco (2017) proposes a framework for the sociology of empathy, drawing on interpretivist sociology. Using the interrelated notions of empathy *frames*, empathy *rules*, empathy *performances*, and empathy *paths*, she engages conceptually with the social construction of empathy. Empathy frames derive from Goffman’s (1986, as cited in Ruiz-Junco, 2017, p. 420) notion of *frame* as “definitions of a situation”. An empathy frame consists of an empathiser (individual or collective), a recipient (individual or collective), and a moral claim based on cultural understandings involving shared values (such as for example humanitarianism). Empathy frames also structure behaviour in a cultural sense, which may be taken-for-granted at the individual level (Ruiz-Junco, 2017, p. 420). Empathy rules are internalised expectations learned through social interaction (Ruiz-Junco, 2017, p. 422), shaping how people interpret and interact through empathy, for example in deeming what is worthy of empathy. Although empathy frames shape and structure how people interpret empathy as well as their empathic interactions, this tends to be ignored. Rather people “tend to consciously form, evaluate, and manipulate their empathic actions in response to empathy rules” (Ruiz-Junco, 2017, p. 422). In this way, empathy performances become established or positioned reactions to empathy rules (Ruiz-Junco, 2017, p. 424), which could be both spontaneous and calculated. As a complementary concept, empathy paths are understood as “recurrent patterns of empathic action and attachment, based on interpretive orientations built through cultural stocks of empathy knowledge” (Ruiz-Junco, 2017, p. 425). The metaphor *path*, borrowed from Sara Ahmed, builds on the idea of a path being constructed through people ‘treading’ on it – if they stop treading on the path, it will disappear (Ruiz-Junco, 2017, p. 426).

Anthropologists Bubandt and Willerslev (2015) find value in distinguishing between *empathy* and *sympathy*, as they are often used interchangeably, even if they speak of very different processes. They argue that “if *sympathy* is about communion, about feeling *with* the other person; then *empathy*, on the other hand, is about understanding the other vicariously without losing one’s own identity, a feeling *into* the other, as it were” (Bubandt & Willerslev, 2015, p. 7). Therefore, where sympathy is about achieving compassionate communion with another, empathy is being yourself while engaging with alterity. As such, empathy involves a “double movement of the imagination: a stepping into and a stepping back from the

perspective of the other, at once an identification with an other and a determined insistence on the other's alterity" (Bubandt & Willerslev, 2015, p. 7). Empathy does not have to presuppose the other – empathy may rather *construct* the other; Alterity is therefore not minimised in empathy but is instead at its core and at the basis of sociality itself (Bubandt & Willerslev, 2015). The emotional nature of empathy is not sentimental, as it is in sympathy (Bubandt & Willerslev, 2015, p. 18-19). Furthermore, since empathic action is simultaneously an individual and collective cultural matter, it needs to be situated and contextualised, that is, understood through the cultural filters determining what kind of empathetic relationships it is possible to establish. As emphasised by Bubandt and Willerslev (2015), the close link between Western understandings of empathy as moral virtue, compassion, and goodwill does not translate well across cultural contexts, nor is empathy always connected to morality in Western contexts. Empathy is argued to be foundational for sociality but not connected to morality or human virtue; it can be used for both constructive and destructive ends. Various forms of tactical empathy exist in different practices, such as for poker players, police profilers, military strategists and "everyday romantic Casanovas" (Bubandt & Willerslev, 2015, p. 8).

The unquestioned positive connotations of the concept of empathy have also been discussed and scrutinised through decolonial theory. As highlighted by Pedwell (2016), the wide and unquestioned 'goodness' of empathy may hinder rigorous conversation and analysis about its effects. The strong emphasis on how to cultivate empathy overshadows other questions such as what empathy is, what it does, what its risks are and "what happens after empathy" (Pedwell, 2016, p. 2-3). Pedwell (2016) attaches the unequivocal benefits of empathy to its perceived universal value as a tool for social justice but cautions against framing it as "an affective bridge between subjects, cultures or societies" as it cannot be assumed to be understood or felt the same across contexts and subjects (p. 12). In her efforts to unsettle such universalist emotional politics, Pedwell critiques the Euro-American calls to *put oneself in the other's shoes* (2016, p. 1), stressing that such perceptions are closely entangled with neo-colonial capitalist power structures in which the socially privileged subject is the "empathiser" who encounters difference and engages with feelings of empathy towards this difference (Pedwell, 2012; 2014; 2016). Instead, such claims to *know* or represent the experiences of *others* through cross-cultural or transnational empathy, may involve forms of projection and appropriation on the part of 'privileged' subjects, which can reify existing social hierarchies and silence 'marginal' subjects" (Spelman, 1997, as cited in Pedwell, 2012, p. 166). Pedwell suggests a move towards an idea of 'empathy as translation' – a reinterpretation of empathy in a transnational space, allowing for alternative meanings and potentialities (2016). Rather than assuming the possibility of *emotional equivalence* she stresses the "complex and ongoing set of translational processes involving conflict, negotiation and attunement" (Pedwell, 2016, p. 20). This is needed to avoid affective self-transformation becoming "commodified in ways that fix unequal affective subjects" (Pedwell, 2012, p. 163).

As such, empathy “must not only involve power, bartering and compromise, but also relationality, resistance, imagination and change” (Pedwell, 2016, p. 12). To engage in empathetic identification, privileged subjects not only need to go through radical transformation to obtain understanding and compassion with those differently positioned but also recognize their complicity in such power hierarchies (Pedwell, 2012).

Finally, transnational hierarchies of power are explored considering postcolonial concepts of Other(ing) (Said, 1978/2003; Spivak, 1985) to speak to issues of position and power in our exploration of empathy. Said’s (1978/2003) seminal work *Orientalism* highlights Western dichotomous constructions of its antithetical *Other*, where the Oriental is conceived as depraved, irrational and ‘different’ and the Occident (European or Western) as mature, virtuous and ‘normal’ (Said, 1978/2003, p. 41). Such powerful European ideological constructions are premised on exterior representations of Oriental Otherness, and presented as objective truths and consolidated across academia, art and in political and colonial structures of domination and interlinkages of knowledge and power (Said, 1978/2003). Spivak (1985) also engages with such theorisations in her work on historical records in the context of India. Through archival reading, she critiques history-as-imperialism in analyzing the production of othering – the “true” history of the “natives” by colonial administrators, through discourses of class, race and gender. *Othering* is thus a historical construction where the “native” is established as a self-consolidating other (Spivak, 1985, p. 250). This imperialist project is also characterized by the absence of any text that can “answer one back”, thus an “epistemic violence” rendering the other a voiceless “native” (Spivak, 1985, p. 251). Such perspectives will help us analyse how individual approaches to empathy are also collective and cultural, deeply immersed in an overall geopolitical space which plays in to the relationship between ‘empathizer’ and ‘recipient’ in a wider historical frame.

Method and ethics

We base our following discussion on empirical material from focus group discussions with students at two Norwegian universities who participated in seminars where we explored the potential of VR immersion in teaching, through three 360 videos. We held two seminars in 2018 with students at Master’s level in interdisciplinary child research at University 1, and four seminars in 2018/2019 with students at Bachelor’s level in teacher education at University 2. In University 1, videos were shown as part of a regular course but focus group discussions were held outside the regular course plan and participation was voluntary. In University 2, first year students were offered an extra seminar outside their regular activities, all attendance was voluntary, and none of the students took part in the authors’ regular courses.

A total of 85 students participated in the seminars. The students had varied cultural and disciplinary

backgrounds and experiences. The students at University 1 were international students from countries in Europe, Africa, and Asia, while all students at University 2 were from Norway. Students were between 20 and 30 years old, both genders were represented, but with a higher number of female students. In both universities, focus group discussions were held on the same day, after the seminars. Groups of three to five students discussed their individual experiences with watching the videos, the feeling or sense of immersion, their emotional responses to the videos, and their perceptions regarding the potential that virtual reality may have for understanding the situation of another and evoking empathy. The focus group discussions were recorded and transcribed. We were attentive to the fact that students could moderate their expressions in our presence (Jacobsen, 2012), and tried to make them feel comfortable and keep an informal tone. We underlined that the recordings would be anonymised, and that the conversations would not have any consequences for their participation in the course or the exam results.

In the seminars, the students tried different forms of VR technology, ranging from accessible and simple Google cardboard to more elaborate and advanced equipment such as high-quality HTC Vive with hand controllers in the Virtual Reality lab at the University. In the classroom we used both smartphones with Google cardboard and HTC Vive to watch the videos. The VR seminars held at University 1 and University 2 were offered to different student groups and had different theoretical foci. The aim for the University 1 seminars was to explore the potential of 'virtual experiences' for expanding students' understandings, perspectives, and perceptions regarding childhood experiences that might be taken for granted as a way of addressing cultural knowledge and understanding. These students watched the 360 videos *Clouds over Sidra* and *The Displaced*. The seminars in University 2 were held for pre-service teacher students in their first year of training. The topic of the seminar was racism and prejudice, and the students were given an introductory lecture of 30 minutes, before watching the 360 video *Is Australia Racist?*.

Focus group interviews form the basis for analysing students' experiences with the VR videos and their reflections on empathy. They are analysed using thematic analysis, a method designed to identify and analyse patterns (themes) in the data material (Braun & Clarke 2006). We used manual coding and employed a combination of theory-driven coding and data-driven coding (Fereday & Muir-Cochrane, 2006). We first categorised citations and observations in line with theoretical conceptualisations of empathy and decolonial perspectives (Bubandt & Willerslev, 2015; Pedwell, 2016; Ruiz-Junco, 2017), and then looked for new findings that could possibly elaborate or challenge the first round of coding. As we were researching some of our own students, we put extra emphasis on being reflexive and conscious about how we interpret the data material. Not to 'force' meaning onto the data was important to ensure that we interpreted the data in new ways and not 'reinventing' what is already known to us (Sundet, 2014, p. 36). This included giving extra room for curiosity and new ways of interpreting the focus group discussions to prevent our preconceptions from blocking out meaningful interpretations.

Notification to the Norwegian Agency for Shared Services in Education and Research was submitted and approved. Personally identifiable data was not sought in focus group discussions, as they focused only on experiences with VR, immersion and empathy. Ensuring compliance with ethical guidelines for research involving vulnerable groups was emphasised throughout the project. Oral informed consent was obtained from all participants, and their anonymity and confidentiality were rigorously maintained throughout the study. All participants were made aware and consented that the data collected would be used to improve the course and for peer-reviewed publications.

Empathy in heterogenous classrooms

Empathic Reactions to 360 Videos

The sense of *presence* and *immersion* is often considered key to empathy in virtual reality (Baños et al., 2004, p. 734). For our participants, the feeling of presence and immersion was particularly noticeable because the 360 videos had real-life footage and characters, and the experience of getting ‘eye contact’ with individuals in the videos was something that particularly intensified the experience. The sensation of watching the video ‘from within’ and forgetting about the ‘real world’ was also mentioned by several participants. One participant said that she was feeling a bit uncomfortable at the beginning, thinking about how she looked in the classroom (where the seminar was held), standing and moving around with the VR equipment over her head and maybe bumping into tables or chairs. However, she continued:

Really soon, you’re really in this world. Like really exclude everything from the outside and was just inside. That’s like, really a bit like standing there. Probably not the same, but...feels really close (participant, Uni1).

A sort of ‘confusion’ regarding ‘reality’ was furthermore emphasised, as expressed by one participant:

... it's not real, that's the fact. It's not real, but at split seconds, you tell yourself, 'this is not real'. But when you just focus and [...] then you feel like you are involved in that, and you see like, real... There was a time I was sitting, and there were these children sitting in the camp [Clouds over Sidra] and... with their parents and people passing around you, moving around you. You are like... almost, you are there... yeah. That's what I, that's the way I felt (participant, Uni1).

The experience of immersion as surprising was explained in this way by several participants. For some, this was exciting (“you can actually stand there and look around!”), whereas others felt strange, not knowing how to act, and feeling like everybody could see them, also inside the video. Some participants felt as if they were intruders, as if they were somewhere they should not be. Other participants had bodily reactions that could be observed during the immersive experience, such as twitching or being startled, or even waving to and ‘talking back’ to the actors they ‘met’ in the videos. One participant felt scared when watching *The Displaced*:

I was scared of this, because the journalist, I, the camera man, was standing in the swamp. And, probably there were crocodiles around him or her, yeah, so I was scared about that [*The Displaced*] (participant, Uni1).

The respondent who spoke about this fear came from a country that is geographically close to the country of the child narrating the story and knew that standing barefoot in the swamp or river was risky. This kind of personal experience made him emphasise this scene as the most immersive for him. Despite his concern for the 'camera man' ("probably there were crocodiles around him or her"), his way of relaying such experiences ("the journalist, I, the camera man") also illustrates the confusing multiplicity in presence experienced by the student. In some ways, this experience also became more memorable rather than the topic explored through the video (displacement).

Despite expressing a feeling of immersion, participants also noticed elements that disturbed their feeling of 'being there'. Sometimes, this was connected to the quality of the equipment (Google Cardboard was uncomfortable to wear compared to VR equipment) and to the mild feeling of nausea or dizziness some students experienced while watching the videos. Others also pointed to the disconnection between the bodily presence in real life and what they saw through the position of the camera, such as sitting down when the camera was filmed from a standing position (or vice versa) or height differences between children and adults for example.

Overall, the experience of '*being there*' and '*seeing it with one's own eyes*' gave participants a sense of knowledge acquisition that they found particularly to the use of the VR technology. Most stated that it was a different experience than watching a regular film or photo, and that they understood migration and displacement better from the characters' perspective. We will return to such matters later, where the feeling of obtaining knowledge through immersion is analysed as potentially problematic. Furthermore, as will be demonstrated, this experience neither equates to a sense of emotional closeness or compassion, nor does it automatically lead to self-transcendent empathy paths (Ruiz-Junco, 2017) or feeling the need to 'act'.

Those who had experienced VR before were less impressed by the videos and more critical of the technology than those who had never tried VR. This is in coherence with other research on VR that concludes that presence is determined by two general categories of variables: media characteristics and user characteristics (Baños et al., 2004, p. 734). We also experienced this in our focus group discussions: The interpretations of the same VR video varied widely depending on who watched it. The students came from several countries and cultural contexts, which impacted the ways in which they interpreted and reacted to the virtual environment. One student from University 1 for example mentioned that she was underwhelmed by the scenes and experiences of what she had seen in the videos, stating that the severity of the situation for the children was not as bad as in her home country – she had seen worse before.

Students at University 2, who were all Norwegian, had stronger feelings of sadness and sorrow when watching the videos. When watching the 360 video on racism in Australia, a common reaction was that of shock, feeling surprised that people could be so cruel, and stating that they had never seen anything like that before. When taking the perspective of the person experiencing racism in the video, several stated they felt anger towards a woman in the video shouting racist remarks to a person in a wheelchair, wanting to ‘kick her ass’, as one participant framed it. Several participants took off their VR glasses because they felt uncomfortable being in the position of the person who was subjected to racist remarks. Two participants stated:

I felt a bit like being attacked, a little uncomfortable, at least when taking the perspective of the person who was abused, to say it like that. I felt that it was really uncomfortable, I mean you felt like you wanted to move away or speak back, but you can't do that either because it is virtual and it is not real. You really get a personal experience of the event, you feel kind of targeted on a personal level as well (participant, Uni2).

I was very shocked really, that this is actually the everyday experience for some people. So I became a bit, I mean my feelings, I had the feeling of....maybe not fear, but I felt I was being attacked in a way (participant, Uni2).

Variations in how VR experiences were interpreted and understood by those watching, illustrate the need to contextualize and situate such processes. One way of operationalising such variations is through empathy frames (Ruiz-Junco, 2017). Our participants have different cultural backgrounds and individual experiences, which is illustrated in their individual and collective responses to their VR experiences. Our empirical data illustrate that native Norwegian students had a quite ‘unified’ response to the videos; an overall sense of shock, sadness, and anger, which might also be related to them having little or no personal experiences with overt racism, displacement, or extreme poverty. These students have been treading on empathy paths (Ruiz-Junco, 2017) that, for our participants growing up in a Norwegian context, can be connected to high living standards in a well-functioning welfare state with a strong emphasis on human rights, a sense of security and trust in the system, a national self-image as a benefactor and diplomatic peace-maker, a belief that racism is not as bad in Norway as elsewhere, as well as a society where humanitarian ethos (humanitarian aid) and Christian values (to help those in need) are strong. We can therefore sketch out an empathy frame (Ruiz-Junco, 2017) where the students are the empathizers, the victims of racism and displacement are the ones worthy of empathy, and the overall humanitarian ethos, where all people are equal and deserving of just and dignified treatment is the underlying moral claim. However, as will be explored below, the empathy *performances* (Ruiz-Junco, 2017) are not necessarily as clear.

A Potential ‘Sympathy Machine’

As demonstrated, our participants had varied interpretations and empathic reactions to their VR experiences, which illustrates that emotion and affect do not take on a singular meaning or form but are

rather interpreted and expressed differently in various individual and cultural contexts. Empathy cannot be translated easily; rather, experiences of immersion and perspective taking are formed by the subjectivity, background and life experiences of the person who is watching. What many of the students did share, however, was a reaction of *sympathy* towards actors in the videos. When seeing children and families in a refugee camp [*Clouds over Sidra*], a displaced boy standing in a swamp [*The Displaced*], the ruins of a school [*The Displaced*] and a man who was victim of a racist attack [*Is Australia Racist?*], they felt sad and angry on their behalf. A recurrent feeling, as expressed by one of the students: “I felt empathy on the films, a lot, I was really sad after the last one” [*The Displaced*] (participant, Uni1), demonstrates that the students clearly had emotional reactions after watching the videos. However, as Pedwell argues, while empathy indeed is needed to foster conversation and understanding, empathy as the affective ability to ‘put oneself in the other’s shoes’ - can easily become a kind of endpoint (2016, p. 2). Only feeling sympathy or sorrow for another person is not enough to enhance understanding of another’s situation or inspire interest in learning more about another person. Learning about the “Other” (Said, 1978/2003) by seeing the other in an underprivileged and passive position, on the contrary, may in fact reproduce the differences between the watcher and the one being watched (Said, 1978/2003; Spivak, 1985). It is through the reproduction of such positioning that traditional social and geo-political hierarchies are reinforced – or, in the context of virtual humanitarianism and the use of VR– where such positioning in geo-political asymmetries can be subject to a virtual kind of “Othering”. When a person feels sad on another person’s behalf, they might rather feel *sympathy* towards the other. In this vein, the VR experience might be less of an ‘empathy machine’ (Hassan, 2020) and more of a potential ‘sympathy machine’.

We thus end up with a paradoxical situation; the makers of the VR-videos we analyse in this article portray the videos as an empathy-generating machine while justifying or framing the promise of VR as if they meant sympathy. The potential consequence we have outlined above however, signals that processes of Othering are an integrated part of the concept of empathy (Bubandt & Willerslev, 2015). Receivers of humanitarian aid have a complex subject position in contemporary neoliberal times (O’Brien & Berents, 2019). Whereas direct encounters between ‘providers’ and ‘receivers’ of humanitarian aid may open a space for such dynamics to unfold, the VR experience provides a one-way approach to this ‘encounter’, which leaves the ‘receiving end’ muted and gives the ‘provider’, or ‘empathizer’, room for definitional power and interpretation. This affects the potential for self-transformational empathy (Ruiz-Junco, 2017) and the whole purpose of using empathy as a political tool for social justice (Pedwell, 2016), which was the goal of virtual humanitarian technologies in the first place. However, this does not mean that the experience of sympathy may not contribute as a condition for possible empathic encounters with other people at another time in life. Sympathy can be both the basis for stimulating students’ empathic capacity and empathic sensitivity, and at the same time risks that the consequence of using VR equipment is not

necessarily positive or good and can, in the process, have the unintended consequence of leading to processes of ‘virtual Othering’.

Virtual Privilege and Issues of Translation

Approaching the ‘empathizer’ as a socially privileged subject who encounters difference and engages (or not) with empathy towards this difference (Pedwell, 2016) is a notion that is ‘easily’ applicable in our material. Engaging in research with participants at university level in a Norwegian context creates a specific premise for the conversation about empathy in a specific geopolitical context, as emphasised above. The mere access to such equipment and videos and topics is also subject to such geopolitical boundaries and dynamics; engaging with virtual technology is only possible for the privileged few. In the field of humanitarian aid, the underlying premises are furthermore clear – such videos have an intended audience and purpose. The question remains however, whether humanitarian aid in the wrapping of VR technology, and the perceived role that empathy is thought to play, also carries with it underlying parallel processes of reinforced virtual Othering, as emphasised above.

Rather than posing other people’s pain and suffering as what should be ‘eliminated’ through empathy (Pedwell, 2016), conceiving empathy as translation carries conflict and contradiction, considered necessary for political transformation. By seeing empathy as translation, we open our understanding of the potential empathy has for making actual change (Pedwell, 2016). Evoking sympathy (or feelings of pity) is not enough to bring about self-transformational and social change. Such aspects were also emphasised by one of the participants who had a cultural background from outside the European context:

Like if you feel comfortable with you know, just in your comfort... and imagine you were yourself in that situation [...] I think you might ...like, develop *wrong* feelings, or... You know, you're not *there*, but you want to *feel* like you are there. [...] I mean, of course it's a good thing to see people's situations, and maybe how you would react to that and what it can spur you to ..maybe, to.. it can spur you to want to maybe help them, maybe want to contribute in a way, maybe by helping, volunteering oron the ground or in any other way you can. So. But if it's just *seeing* that, like, you know - without any actions to that... then I think it's, in a way it's... not insulting, I mean not insulting but....maybe...

M: not helpful...? kind of...?

Yeah.. Just feeling that - and then what? ... So, going back to what I was thinking like, okay, if it was an asylum camp here, rather than us sitting here and viewing it - Why not go, overcome these obstacles maybe to get permission and all that, make a small effort to go (participant, Uni1).

This participant emphasises how viewing poverty and despair from a distance through VR equipment, might be more unfortunate than helpful in that ‘wrong feelings’ might develop. “So what?”, she asks, “if seeing does not lead to anything”. There is no effort being made on the ‘viewer’s’ part. If the reasons for appealing to the notion of empathy are social justice and ideological change through self-transformational empathy, aiming to face one’s privileges and readjust unequal global power dynamics, what kind of

experience is needed? Whether it is enough to 'see' and 'feel sad' through 'viewing' the pain and suffering of another through VR can be questioned, as such a one-way encounter does not involve explicit negotiation, compromise, or relational confrontation (Pedwell, 2016) on the part of the viewer.

In addressing the link between self-transformation, empathy, neoliberalism, and international development, Pedwell (2012) speaks of immersion programs where development aid professionals visit impoverished populations, aiming to engage with the latter's voices and perspectives to produce new policy approaches that speak more directly to the needs and experiences of people living in poverty. Such immersive experiences are used for example by institutions such as the World Bank and ActionAid and are increasingly institutionalised as 'good practice' (Pedwell, 2012). The belief is that through such experiences and immersions, professionals will interact affectively with those they aim to help (e.g., poor populations in developing countries) thought to provide affective trajectories that go from empathy "to self-transformation, to recognition of responsibility or obligation, to action with the potential to contribute to wider social change" (Pedwell, 2012, p. 169). This affective experience is thought to enable the possibility of not only seeing or knowing but also *feeling* other people's experiences. However, it was only when respondents had experiences that put them on the spot, that were uncomfortable and forced them to address and actively relate to unequal power dynamics, that these experiences could have the potential to create actual change (Pedwell, 2012).

In virtual humanitarianism, the 'empathiser' never physically meets the 'receiver' of empathy, even if the potential of empathy is to spur feelings of embodied understanding. Our research participants might not have had virtual experiences that radically changed their perceptions about the world and their privileged position in it, but some offered interesting and relevant reflections for such discussions. As mentioned above, some participants talked about feelings of discomfort, for example feeling like an intruder 'inside the film' and not feeling like they should 'be there'. Another participant reflected on how watching the 360 video from a refugee camp had changed her perspective:

Yeah, I think for me, maybe before I wanted to go to one of these camps, but now I definitely don't want to. Cause for me, it [watching the film] was just too strong. I don't think that I would be able to help someone else, I think I would be more focusing on surviving. I could help them, I would like to help them, but then perhaps in a different setting... where I'm not actually in the field. Because for me... I'm not sure if I'd be able to... do much (participant, Uni1).

For this participant, the VR experience had led to a change of an initial desire to visit refugee camps, stating that they could probably not deal with the emotional stress of such an experience. In a similar vein, students at University 2 who watched the 360 video about racism, had discussions about how to handle a similar episode, were it to happen in front of them:

But then I think, you know, how would I have reacted in a situation like that, if I saw it from the outside. Would I have had the courage to interrupt [racist abuse]? Because you don't know how mentally stable or unstable that person behaving that way is, you know. So, you think about your own safety as well, and that is maybe why you become passive (participant, Uni2).

As illustrated, empathy is complicated and being exposed to issues and episodes that are challenging (through VR) may lead to empathetic self-transformation, but not necessarily. Such experiences might not lead to greater understanding and a desire to engage more deeply to work against injustice but could also lead to avoidance. The students take their own situation and previous experiences as a starting point for the discussion: feeling sad and stating that the situation is unjust but simultaneously feeling that they cannot cope with it. Rather than experiencing transformational change through embodied and emotional perspective-taking in VR, such experiences may to some degree, make participants face – and keep – their privileges, thereby maintaining the status quo.

You can Wear the Shoes of Another, but You can Not Walk in them

Through our analysis of interviews with students we have shown that the concept empathy is complicated and contextual. The reactions of students varied widely according to their personal trajectories and experiences, underlining that empathy is interpreted differently by the various participants. Our participants emphasised that they had a sense of immersion when watching the videos and that they had emotional responses to the content, but whether this experience led to a greater understanding of what it was like to 'walk in the shoes of another' was more complicated. As one participant said:

I think you can wear it [shoes of another], but not completely. Or wear, but not *go* in these shoes, kind of. [...] so you...until you are there, until you have a real conversation with people, and live there at least for one day of your life... But really, you will not never, kind of ...completely wear the shoes of people who... experience such a life circumstances. So just, for me it's more like creating an understanding, an image, to be aware of some particular situations... that happen in the world (participant, Uni 1).

We have taken a critical approach to how empathy is nurtured through VR media, not only stressing that the idea of empathy deserves more attention in this area of research, but also that contextual matters need focus. We need to take seriously the significance of positionality and contextuality of those involved in empathic relations and encounters, rather than assume universality in the way we use such terminology, both in terms of actors involved (who the empathiser is) and what such concepts might mean (what empathy is). A related discussion, regarding the taken-for-granted inherent Western subject as author and protagonist in knowledge production (Comaroff & Comaroff, 2012), is about the complicated aspects involved in such theorisation. In many ways, we are following such inherent polarised categorisations through our usage of phrases such as 'virtual privilege' and 'virtual Othering' in this article. While our intention is to scrutinize power dimensions and lift taken-for-granted notions of virtual humanitarianism,

we still use terminology that clearly distinguishes between the actors involved, creating certain premises for the discussion. Hopefully our conviction shines through: that questioning the meaning of empathy in virtual awareness raising can contribute to a more nuanced approach to how empathy can be used in educational contexts.

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