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FACE-TO-FACE, OR FACE-TO-VISOR
IS CINEMATIC VIRTUAL REALITY THE "ULTIMATE EMPATHY MACHINE"?

Abstract:

My paper makes a comparison between one possible definition of empathy and the spectator's experience in VR with the aim of assessing whether these two structures are compatible in a more rigorous way. Following the phenomenological works of Maurice Merleau-Ponty and Vittorio Gallese's writings on embodied simulation, I will define empathy in the VR context as the result of four different conditions: 1) the VR user and the VR character must share the same ontological structure, for the other is a "second self", therefore 2) the character must be directly accessible in an intersubjective and reversible relation. Furthermore, 3) it is necessary for the VR user to understand the object of the character's emotion to strengthen the empathetic response provided by the embodied simulation, but 4) this does not ever mean that empathy leads to a total correspondence of state of minds, as the character's suffering is always different from what the spectator feels while seeing that suffering. Taking these four conditions in mind, I then apply them to the analysis of the VR documentary *Clouds over Sidra* (Milk, Arora, 2017), which follows the story of Sidra, a refugee child displaced in the Za'atari refugee camp. My conclusion is that VR engenders an occasion of emotional contagion, which is the quite literal infection of the character's feeling to the VR user.

Keywords: Embodied Simulation, Emotional Contagion, Intersubjective Relation, Phenomenology, Virtual Reality

1. A Premature Consensus

Since cinematic Virtual Reality (VR) – that is, the production of immersive film experiences through the technology of VR – has increasingly engaged with sensitive themes through documentary storytelling, VR scholars have been confronted with new ethical problems. A growing number of VR films prompt the user to personally experience the horrors of war, poverty, or refugees' desperation. Titles such as *CNN: An Ordinary Day in North Korea* (CNN, 2019), *Women Fighting Terrorism in Nowshera* (Sharmeen Obaid-Chinoy, 2017), or *Saving Children's Lives in Karachi* (Sharmeen Obaid-Chinoy, 2017) shed light on the increasing overlap of these entertainment products with forms of immersive journalism and politics. In fact, VR ensures that, by feeling immersed in the virtual world, the VR user will have the impression of cohabiting the space and time of the suffering other, consequently developing a strong empathetic bond with the represented characters. Hence, empathy has acquired a crucial role in the discussion of VR experiences, so that scholars now question whether VR can be accurately described as the «ultimate empathy machine». Such a definition is proposed by Chris Milk, an American VR documentary director, who, for the first time, recognises VR's emotional potential and political implications. In a viral TED Talk, he states:

> We can change minds with this machine. […] It connects humans to other humans in a profound way that I've never seen before in any other form of media, and it can change people's perception of each other. And that's why I think Virtual Reality has the potential to actually change the world. So, it's a machine, but through this machine we become more compassionate, we become more empathetic, and we become more connected. And, ultimately, we become more human[1].

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Undoubtedly, Milk's words captivatingly call for a revolutionary wave of solidarity, but they fail at explaining why VR elicits such a strong empathetic response in the users. While, as Robert Hassan argues, «in mainstream tech discourse such claims have surface validity»[2] since they corroborate and justify the Silicon Valley's investments in these technologies (e.g. Facebook's acquisition of the Oculus VR company for $2 billion), it is harder to understand why scholars tend to uncritically support Milk's statement as well. Indeed, both theoretical studies and experimental ones defend VR's capacity of eliciting empathy without questioning its definition, treating it «as an unproblematic and uncontested quality that [this] technology generates»[3], as Hassan argues. To name a few examples, Ben Herson rashly concludes that VR provokes empathy and represents a potential means for educative purposes without mentioning what empathy is; Donghee Shin uncritically equates «more emotional stories» to more empathetic stories; and, similarly, Nicola Schutte and Emma Stilinović argue that a stronger engagement provokes a stronger empathic response[4]. Considering this premature consensus, it is pivotal not to fall into an acritical reception of VR as the «ultimate empathy machine»: therefore, in this paper, I will question this underlying assumption.

2. Unpacking Empathy: A Phenomenological Reading

At the beginning of the 20th century, the term empathy first appeared in the English language as the result of Edward Titchener's translation from the German term *Einfühlung* – literally, «feeling into» – which was used by Theodor Lipps to designate the capability to understand others as minded alterities[5]. Probably influenced by David Hume's work on sympathy, Lipps was the first to attribute such a broad psychological and philosophical connotation to empathy – hitherto treated as the possibility of being emotionally engaged with the observed object[6]. However, as Dan Zahavi argues, «there is still no clear consensus about what precisely [empathy] is»[7]; hence, I will draw a succinct schema to locate the contemporary debate.

On the one hand, the cognitivist account tries to justify the affective and epistemic accord between alien minds by postulating the need for an external means to put them into relation. Two distinct cognitivist theories must be recalled: the theory-theory, for which «mental states are theoretical entities that we attribute to others» in a semantic way; and the simulation theory, for which we infer that others are minded bodies because «we use our own mind as a model» to understand their behaviours[8]. On the other hand, the phenomenological account rejects this cognitive understanding of empathy because it falls into the Cartesian aporia for which the only undoubtable phenomenon is my own doubt, whereas all the other external entities – all the other minded bodies – are to be justified *a posteriori*. Indeed, phenomenology assumes that the structure of alterity is already embedded into the structure of the subject, who is always somehow directly connected to the other, without the need of any external *a posteriori* mediation.

Related to this account, the phenomenologist Maurice Merleau-Ponty asks:

> How can the word "I" be put into the plural, […] how can I speak of an *I* other than my own, how can I know that there are other *I*'s, how can consciousness which, by its nature,

[1] Chris Milk, "How Virtual Reality Can Create the Ultimate Empathy Machine", https://www.ted.com/talks/chris_milk_how_virtual_reality_can_create_the_ultimate_empathy_machine.

[2] Hassan (2020), p. 206.

[3] Ivi, p. 197.

[4] Herson (2016), pp. 853-862; Shin (2018), pp. 64-73; Schutte, Stilinović (2017), pp. 708-712.

[5] Coplan, Goldie (2011), pp. ix-xlvii.

[6] Zahavi (2014), p. 103.

[7] Ivi, p. 101.

[8] Ivi, p. 100.

> and as self-knowledge, is in the mode of the *I*, be grasped in the mode of Thou, and through this, in the world of the "One"?[9]

The answer Merleau-Ponty gives to such a question is convincing: the fact that humans are unable to see their bodily appearance in a complete image (since the face and the back, for example, remain invisible to them), the fact that «I am not transparent for myself»[10], makes me a stranger to myself. A matrix of otherness is inscribed into my own subjectivity, thus already giving me access to the encounter with the alterity[11]. This is to say not only that the bodily structure already legitimizes the accord with the other without the need of any external *a posteriori* justification, but also that the other is not a mere object, distinct from me. The other and I are posited in continuity, without any clear-cut distinction: our bodies, Merleau-Ponty suggests, are «inter-woven in a single fabric»[12], that of carnality, which encompasses the world. Indeed, the other shares «the same structure as mine»[13]: the other experiences the same double-faced ontological structure for which my inner proprioceptive body, the one that I know from the inside, is counterposed but inseparable from the other side of my body, the one which is seen from the outside. For this reason, Merleau-Ponty continues, the other is «a second self», another subject whom I encounter in an intersubjective and reversible relation, in which «we are collaborators for each other in consummate reciprocity»[14].

When adapting this Merleau-Pontian reading to the realm of Film Studies, Vittorio Gallese's phenomenological contribution to the debate on empathy and cinema offers an insightful perspective. Mostly known as one of the first neuroscientists to detail the importance of mirror neurons, Gallese nonetheless attempts to avoid rigid demarcations between sciences and humanities, thus dedicating his research to aesthetics as well. In his co-authored book *The Empathic Screen*, he analyses how the spectator is empathetically affected by the characters' actions on the cinematic screen, and he precisely refers to Merleau-Ponty's philosophy as a fundamental source[15]. Gallese posits that, since «the discovery of […] mirroring mechanisms in the human brain […] has shown that there is a neurobiological foundation for a direct modality of access to the meaning of the behaviour and experiences of others» [16], there is no need to externally justify intersubjectivity. In other words, the subject's body already establishes an automatic, unconscious, and pre-morphologic access to others, because when we see others' actions or emotional expressions «we also simulate the action with our motor system, in our motor system»[17]. This process, called embodied simulation, implies an inter-corporeal relation very similar to what Merleau-Ponty suggested.

More importantly, neuroscientific experiments have found that not only does embodied simulation dictate encounters between humans, but it also affects how the spectator emotionally reacts to characters' actions represented in films. According to Gallese, the spectator's empathic response may be instantiated because we directly understand the character's emotion by «re-using the same neural circuits on which our first-hand experience of that emotion is based»[18]. Gallese is nonetheless firm in stressing that further clarifications are to be made when dissecting the spectator's empathic response to filmic representations. First, the character's emotion and the spectator's embodied simulation of that emotion are not the same: seeing someone suffering and suffering are two distinct affective experiences. Furthermore, he adds that, to better develop empathy, the spectator

[9] Merleau-Ponty (2005), p. 406.
[10] Ivi, p. 410.
[11] On this, see also Zahavi (2001), pp. 151-67.
[12] Merleau-Ponty (2005), p. 413.
[13] Ivi, p. 412.
[14] Ivi, p. 413.
[15] Gallese, Guerra (2020).
[16] Ivi, p. 3.
[17] Ivi, p. 29.
[18] Ivi, p. 34.

needs to see the actor from a third-person perspective, to be clear about his spatial location in the movie, to understand his relations with the other characters, his expressions and movements. He needs these elements in order to be better able to evaluate not only the character's behaviours, but also his thoughts and emotions[19].

Therefore, in films, an element of rationality must be added to the automatic embodied simulation, which is not sufficient to provoke empathy in itself: the spectator must know and understand what the character's goal is, together with the object of their emotion.

To summarize, four elements emerge as pivotal to elicit an empathetic response: 1) following Merleau-Ponty, the ontological structure of the other's body must be the same as mine, a "second self", therefore 2) the other must be directly accessible in an intersubjective and reversible relation. Furthermore, in the realm of two-dimensional cinema, 3) it is necessary for the spectator to understand the object of the character's emotion to strengthen the empathetic response provided by the embodied simulation, but 4) this does not ever mean that empathy leads to a total correspondence of state of minds, as the character's suffering is always different from what the spectator feels while seeing that suffering. Now, after defining the conditions for empathy, I will apply them to the VR documentary *Clouds Over Sidra*: only if the VR experience proves to be compatible with them will it be possible to assess that VR provokes empathy.

3. Empathy and VR: Incompatible Structures

Milk and Arora's documentary was the first to be supported by the United Nations, and the film was shown at various events to support the UN's advocacy for the Syrian refugee crisis and fund-raising appeals[20]. This VR experience follows Sidra, a 12-year-old Syrian girl displaced to the Za'atari refugee camp in Jordan, escaping war and famine. Her life is portrayed through the daily spaces she lives in, as her voice guides the user to visit the camp: there is Sidra's tent, a small space covered by carpets where all her family stays; the local bakery, where bread is "making kids crazy on their walk home"; the school; the gym; the Internet point; the football pitch. All these fragmented spaces are tied together by a metaphor of the travel. In the very first section, the participant finds herself in the middle of a desert. "We walked for days crossing the desert to Jordan", says Sidra: the desert is the point of departure not just for the refugees, but also for the spectator's travel into VR. The use of the personal pronoun "we" as the very first word of the VR documentary enhances the sense of *our* sharing the experience with Sidra. Then, the film ends with the user in the middle of the Za'atari camp, all the refugees' tents visible at the horizon: this is the point of arrival for Sidra, and for the user as well. Before the final section of *Clouds Over Sidra*, a group of children runs towards the VR user, shouting, smiling, jostling each other: they surround her, coming from all directions, so that she feels like being in the middle of a hug.

Fig. 1: Kids encircling the user.

[19] Ivi, p. 60.

[20] http://unvr.sdgactioncampaign.org/cloudsoversidra/#.YNMKHegzY2w.

Gabo Arora, who directed the documentary with Chris Milk, declares: «Of all the scenes, I staged one. The one with the kids running at you and encircling you in slow motion? I herded about 200 kids»[21]. Hence, the participant cannot help but feel moved by these vulnerable kids all around her; however, while this is undoubtedly an emotional response, it is still unclear whether it is an empathetic one.

Firstly, do the VR user and the VR characters share the same ontological structure as per point (1)? To properly address this question, it is necessary to take a step back, noticing the upsetting lack of interaction that emerges when the children encircle the VR user. While the user directs her gaze to the kids, naturally smiling at them and aiming for eye contact, the children systemically avoid the user's gaze, as if she was invisible to them. Suddenly, the participant feels to have assumed the form of a hologram – its transparent skin pierced through by the empty gazes of the virtual figures. The carnal ontology that rules her physical body seems not to apply to the virtual body that she takes into the virtual world. Indeed, as Merleau-Ponty posits, while in the physical world, «I feel myself looked at by things» because «my activity [of seeing] is equally passivity [of being seen]»[22], here I feel the absence of gazes directed to me. The user is unseen by the characters who share the space in which she is immersed, while the characters are seen but cannot see the one who looks at them. Such a rupture of the optical reciprocity between user and character prompts me to treat the VR participant as a spectral apparition, following Jacques Derrida's observations that it is the specter who «interrupts all specularities»[23].

Derrida's work on specters represents the richest philosophical investigation on this issue. Karl Marx's definition of Communism as a specter haunting Europe in his *incipit* to *The Communist Manifesto* constitutes Derrida's point of departure: his research goal is that of investigating how Communism is spectral[24]. To do so, Derrida needs a general definition of the specter, for which he employs Shakespeare's Hamlet as an eminent example. In the tragedy, which revolves around Hamlet's ethical conundrum of whether to avenge his dead father the King of Denmark, the character of the ghost plays a decisive role. Similar to a *deus ex machina*, it appears on scene in its ambiguity, visible to the audience but invisible to the characters, and reveals to Hamlet that his father was murdered by his uncle Claudius, now crowned as the new King[25].

It is important to notice that the spectral apparition is covered by an armour, as revealed by the exchange between Marcellus and Horatio. When the spirit briefly appears, Marcellus interrogates his friend: «Mar. Is it not like the king? / Hor. As thou art to thyself: / Such was the very armour he had on / When the ambitious Norway combated»[26]. «Armed at points exactly, cap-a-pe»[27], continues Horatio when reporting the apparition to Hamlet, and Derrida builds on this detail to introduce what he calls the «visor effect». The philosopher notices that, thanks to the ghost's «carapace», his armour and helmet, «one see[s] nothing of the spectral body, but at the level of the visor and beneath the visor, [this armour] permits the so-called father to see»[28]. The visor effect, then, establishes a unilateral direction of the gaze, for which the one who is looking (here, the ghost), remains nonetheless invisible (here, hidden by the armour). Elsewhere, in a conversation with Bernard Stiegler, Derrida comes back to the concept: «[t]he "visor effect" in Hamlet, or what

[21] Quoted in Hollis (2016), p. 8.

[22] Merleau-Ponty (1968), p. 139.

[23] Derrida (1994), p. 6. I am using the American term "specter" instead of the English "spectre" in accordance with Derrida's terminology in *Specters of Marx*.

[24] Quoted in ivi, p. 2.

[25] These points come from Freddie Rokem's key-note paper "From Virtue to Virtuosity: Telling Hamlet's Story to an Unknown World", which he presented at the Lake Como Summer School "Aesthetics, Technique, and Emotion" on 7 June 2021. See also Rokem (2010), pp. 59-86.

[26] Shakespeare (1996), p. 871.

[27] Ivi, p. 874.

[28] Derrida (1994), p. 7.

in any case I have called this, is that, up or down, the king's helmet, Hamlet's father's helmet, reminds us that his gaze can see without being seen»[29].

A clear analogy emerges here, as one cannot help but notice that the same unilaterality constitutes the fundamental trait of the VR user's sight, who finds herself invisible to the other characters, while able to see them. Furthermore, and even more tantalizing, the visor effect finds a consonance in the Head Mounted Device (HMD) – the visor that the user wears in VR experiences: this helmet or carapace envelops the participant's eyes, masking the physical body as the armour does with the ghost's body, and allowing the user to see the virtual world, while remaining unseen. Mirroring what Tim Fisken emphasises about the Derridean visor effect, that «[i]t is, paradoxically, the corporeality of this armour which renders the specter spectral, because by wrapping and concealing the ghost, the armour allows it to appear without revealing itself»[30]; the same can be said about the HMD: it is this technical exoskeleton that renders the VR user a virtual apparition that sees without being seen. Therefore, if the VR user can be defined as a spectral figure, I argue that the VR participant and the VR characters do not share the same ontological structure, as per point (1).

Furthermore, considering the dissonance of visibility between them, it is possible to understand why those who claim that VR documentaries offer users the possibility to witness the suffering other overlook this optical discrepancy[31]. Witnessing is the act of seeing with a responsibility: as John Durham Peters claims, it is both «the passive act of *seeing* and the active act of *saying*»[32], and this responsibility is directly linked to the visibility of the witness' body. When Sidra guides the participant into the familiar spaces of her camp, a clear separation emerges between the spaces open to everyone, and those accessible only by men. Indeed, we do not see Sidra in every section, but only in those where she can physically stay – in her tent, at the football pitch, or at her school. On the contrary, when the section is shot in all-male spaces – the bakery, the gym, or the Internet point – Sidra accompanies the user with her voice, but she is not present. Personally, as a woman, if I were physically present in the Za'atari camp, witnessing Sidra's daily life, I could not access those spaces: the visibility of my female fleshy body would have been acknowledged, with restricting consequences. Instead, using Bimbisar Irom's words, VR «carries no physical risk»[33]: it is not a matter of witnessing; rather, an advanced form of *voyeurism* – to see the prohibited spectacle without being seen.

Clearly, this uneven relation reveals a fundamental structure of (gendered) power, for the (female) user obtains what normally would be out of her reach by circumventing the ontological rule of visibility. The user's spectral gaze becomes a political means, invested of a certain power (to see without being seen), which recalls the Panopticon, the ideal prison designed by Jeremy Bentham and discussed by Michel Foucault. As Nick Crossley summarizes, «the Panopticon consists of a circular arrangement of cells, all of which open onto a central watchtower. From this watchtower it is possible to observe any prisoner, at any time»[34], constituting a form of surveillance and obedience that merely relies on the gaze's power of subjectification. Foucault poignantly notices that the prisoner of the Panopticon «is seen, but he does not see [the guards who look at him]; he is the object of information, never a subject in communication»[35]; for the prison «dissociat[es] the see/being seen dyad»[36], thus constituting a structure of power very similar to that between the invisible user and the visible character in VR. Therefore, in light of this hierarchical

[29] Derrida, Stiegler (2013), p. 42.
[30] Fisken (2011), p. 20.
[31] For a discussion on witnessing in VR, see Nash (2018), pp. 119-131; Nyre, Vindenes (2020), pp. 176-187.
[32] Peters (2001), p. 709.
[33] Irom (2018), p. 4274.
[34] Crossley (1993), p. 402.
[35] Foucault (1995), p. 200.
[36] Ivi, p. 202.

distance between them, I argue that the user/character relationship is not intersubjective and dynamically reversible, as per point (2). Sidra is not a «second self» in respect to the user; rather, she is a spectacularized virtual object.

Thirdly, as per point (3), does the user understand and know the object of the characters' emotions? According to Gallese, understanding others' emotions implies a two-fold movement: not only does it require seeing others' behaviours and expressions in a face-to-face relation, but it also demands to map this information by inserting it within a larger narrative framework[37]. As a result, the film spectator comprehends where and when the characters are moving, what the relationships between them are, and, ultimately, what the objects of their emotions are. However, in the case of VR documentaries, locating the virtual figures in time and space is unachievable: since the user is within the documentary, it is impossible for her to clearly establish the semantic positions of the characters, nor their relations. In *Clouds Over Sidra* this is easily noticeable. Since the user's virtual body is located where the camera is positioned, no establishing view could be taken of the Za'atari camp, otherwise the participant would have had the unrealistic impression of being located in the sky, flying. The result, however, is that there is no way to conceive the vastness of the refugee camp, nor to precisely map where Sidra is.

Chris Milk comments that, thanks to VR, the participants are «as informed as if they were actually there»[38], emphasizing the supposed privilege of participating in the event while the event happens to better understand it. However, Milk overlooks the need for a certain epistemic distance to appreciate things in their entirety. To unpack such a problem, it is possible to consider the debate on the POV shot as a point of departure. When analysing the classic noir *Dark Passage* (Delmer Daves, 1947), Vivian Sobchack dwells on the «first-person camera» sequence in which Vincent, the main character, escapes from prison[39]. Sobchack stresses that this sequence conveys a sense of «oppressiveness» as Vincent's body is «reduced to its immanence», and the result is that «the world visibly shrinks, 'folding in' rather than extending outward at the perimeter of vision»[40]. In other words, although the use of the POV shot aims at adding a new perspective to the film, by seeing the world from the inside something is not gained but lost: the portion of the world viewed is narrowly reduced. Similarly, Murray Smith claims that «POV shots typically work in a two-part structure involving not only a POV shot but a reaction shot»[41], and this is to say that «imagining from the inside»[42] is not sufficient to understand the narrative: a complementary third-person shot is needed to provide a complete context of the story to the spectator. In a parallel manner, being within a VR documentary limits the user's knowledge, since she finds herself transported into another space, but without being aware of where, nor with whom, exactly she is.

This is what happens in *Clouds Over Sidra.* Although the VR documentary orbits around the issue of war and refugees, Milk and Arora do not contextualize the historical and political background of the Syrian conflict: the war is represented in an unspecific manner, so that it could be any war in any part of the world. The same ambiguity concerns the story of Sidra herself. Even if she accompanies the user through the entire film, we know little about her: she has a «big family» with many siblings whom we do not meet; she goes to school and plays with the other girls in the camp, but the narration does not focus on any particular aspect of her life. This lack of detail risks not providing the user with enough information to understand the object of Sidra's emotions. In one of the most intimate sections of the documentary, Sidra is sitting in her tent, her face hidden by her hands, crying and saying «I think that being here for a year and a half has been long enough».

[37] Gallese, Guerra (2020), p. 60.
[38] Quoted in Kool (2016), pp. 4-5.
[39] Sobchack (2011), pp. 69-83.
[40] Ivi, p. 74.
[41] Smith (1997), p. 417. See also, Choi (2005), pp.17-25.
[42] *Ibidem.*

Fig. 2: Sidra crying in her tent.

However, the participant, sitting in front of her, struggles to really connect with her pain, because the portrayed emotion is so vaguely described that it risks becoming ungraspable. Hollis Kool analyses this section and comments: «As I observed Sidra sitting in her room at eye level, her sulking posture and her sober tone carry implicit information about her sense of demoralization and hopelessness in Za'atari»[43]. The user does not distinctly (explicitly) understand the object of Sidra's emotions (as per point 3), even if she is somehow (implicitly) emotionally affected by Sidra's tears.

This last claim not only sheds light on the difficulty of understanding the character's objects of emotions (3), but it also implies that, without a proper insight into them, the self-other distancing needed to develop empathy (4) – that is, the ability to recognize the other's feeling while attributing such a feeling to the other and not to the self – is likewise impossible in VR. The user catches Sidra's sense of demoralization and hopelessness, but this emotional response is not engendered by the user's capability of understanding Sidra's emotions; rather, the user is personally affected by the atmosphere of VR, and Sidra's demoralization and hopelessness become the user's own feelings. There is no difference between suffering and seeing the other suffering anymore, since, as Grant Bollmer claims, «the user of these technologies, instead of acknowledging another's experience, hastily *absorbs* the other's experience into their own experience»[44]. In other words, the core result of experiencing a VR documentary is not so much that of understanding the others' own experience of suffering, but that of temporarily sharing their same situation (even if from the protected and privileged position of invisibility and therefore of power), catching their emotions and personally feeling them as my own. The focus is not the other but myself.

4. VR and Emotional Contagion

If 1) the user can be ontologically defined as a spectral apparition, with the effect that 2) the relationship between user and character, regulated by an uneven power dynamic, eludes reversibility; if 3) the user, looking from the inside, is unable to understand the object of the character's emotion; and if 4) the self-other distancing is not respected since the user feels the character's emotions as her own, then it is possible to claim that VR does not elicit empathy. And yet, it is undoubtable that a certain form of emotional response sparks in the user: what is it, then, if not empathy?

My conclusion is that VR engenders an occasion of emotional contagion, a rather overlooked emotional response. Amy Coplan suggests that this lack of interest is due to the fact that emotional contagion is less sophisticated than empathy or sympathy; but, she adds, it is a central topic to be studied in the realm of aesthetics, as it is a way of developing emotions typical of direct sensory media[45]. Max Scheler wrote about it in its 1923 phenomenological compendium of emotions: emotional contagion (*Gefühlsantsteckung*) is the quite literal «infection» of others' feeling to you, as it «occurs only as a transference of the *state* of feeling, and does *not* presuppose any sort of *knowledge*

[43] Kool (2016), p. 5.
[44] Bollmer (2017), p. 64.
[45] Coplan (2006), pp. 26-38.

of the [emotion] which others feel»[46]. To visualize this «infection», it is possible to recall the canonical example that Peter Goldie proposes following Scheler's text: «Something very like contagion can arise when, for example, we pick up the cheerful atmosphere in a pub or in someone's living room»[47]. This example clarifies that one fundamental condition to develop emotional contagion is to enter another space, as the VR user does when immersed in the virtual world: there, the emotional atmosphere is caught without any further mediation.

Zahavi recalls how one can be «infected» by others' emotion «without knowing anything about the other individuals»[48], which is precisely what happens to the user in *Clouds over Sidra*. Even without a proper intersubjective exchange with Sidra, and without knowing what exactly she is thinking or feeling, the user is immersed in the Za'atari camp, where she catches the contagious atmosphere of despair. Scholars have particularly pointed out that «contagion is not sufficient for understanding or explaining others' emotions»[49]: the emotion can be caught even if we are ignorant of the other's object of emotion. Therefore, differently from empathy, emotional contagion does not provide any insightful information about the other's state of mind; rather, since the caught feeling becomes my own feeling, the focal point becomes my personal experience. In this respect, Gallese underlines that emotional contagion implies the abolition of the self-other distance, as the feeling is now mine[50].

In the realm of Film Studies, little work can be found on how film is linked to emotional contagion: Amy Coplan's essay *Catching Characters* stands out as the major voice in this respect. The author brilliantly exemplifies the topic by recalling the first scene of Quentin Tarantino's 2003 *Kill Bill Vol. I*, in which Uma Thurman is covered in blood and can hardly breathe. The spectator is completely new to the story and there is no context to understand what The Bride is going through; however, her fear and anxiety are caught by the spectator, who now feels them as well[51]. Building on the lack of distancing and of understanding that scholars associate with emotional contagion, Coplan adds a relevant point: «emotional contagion is better understood as solely experiential rather than as instructive in any way»[52]. With this last claim, Coplan invites a reflection on the effect that emotional contagion has on the spectator, and, in this case, on the VR user. If not instructive or educative, what is the repercussion of emotional contagion? Or, to say it otherwise, what is the ethical contribution of VR?

Hassan, following Guy Debord, argues that VR should be dismissed as a mere «commodity-spectacle, […] a sophisticated camera apparatus that produces an integrated spectacle»[53] that simply prompts the user to experience something new without any ethical outcomes. This reading, however, fails to recognize the complexity of emotional contagion, and the positive results that could emerge from the encounter between user and character, even if solely experiential and not linked to any further rational understanding of the other. Indeed, emotional contagion could be analysed employing Gilles Deleuze's distinction between recognition and encounter. Recognition is the ability to observe that an object is «identical to another», precisely as empathy does, by recognizing the other as «another self» and the other's emotions as something that belongs to me as well, that I already know. On the other hand, the encounter implies meeting with something unknown and can thus be related to emotional contagion, since emotional contagion is the encounter with an alien emotion caught without any understanding of it[54]. Deleuze adds that the encounter is distinct from recognition because «its primary characteristic is that it can only be sensed»,

[46] Scheler (2008), p. 15.
[47] Goldie (2000), p. 191.
[48] Zahavi (2014), p. 117.
[49] Goldie (2000), p. 191.
[50] Gallese (2006), p. 11.
[51] Coplan (2006), pp. 29-30.
[52] Ivi, p. 35.
[53] Hassan (2020), p. 209.
[54] Deleuze (2001), p. 133.

once again like emotional contagion. This distinction, conceived by Deleuze to illustrate what originates thoughts, praises the sensible encounter since it is this meeting with alterity that «forces us to think», while recognition does not, as it is the meeting with something already known[55]. Then, in light of these considerations and following the metaphor of emotional contagion as an encounter, it can be concluded that VR's ethical outcome is likewise that of forcing the user to think, to question this new medium and the depth of her own experience as a virtual specter in a virtual world.

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