

# How do we talk about embodiment in virtual reality?

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virtual reality, embodiment, empathy, mirror stage, user, avatar

## INTRODUCTION

This paper explores the legacy that VR-empathy experiences have on how we have come to think about the relationship between user and avatar in VR. VR-empathy experiences refer to a suite of VR experiences that are designed to elicit empathy in the VR user, generally for a minority group. The relationship between VR and empathy has been much celebrated by industry (Blascovich and Bailenson 2011; Hasler et al 2017; Project Empathy, 2022, Milk 2016) and has received much negative attention from academics and critics (Bollmer 2017; Ramirez 2018). The aim of this paper is not to critique VR-empathy experiences per se, but to demonstrate how the construction of the user-avatar relationship in VR-empathy experiences has implications on how we often speak about presence and embodiment in VR more generally, as evidenced by Mark Zuckerberg’s unveiling of the metaverse as allow us to do things that are only available virtually, where avatars will be “living 3D representations of you” (2021). This takes the same point of departure as VR-empathy experiences – that of complete and uncomplicated identification with the avatar.

Therefore, this paper asks: how do we understand the assemblage of user-avatar subjectivity when we reject the idea that VR allows you to ‘become someone else’? This paper will utilise a phenomenological account of Jacques Lacan’s mirror stage (2014) to explore a key moment in many VR-empathy experiences: the moment where the user looks into the mirror and realises that the avatar identity is different from their own in an attempt to give a more complete account of the user-avatar relationship in VR-empathy experiences, and how it might be otherwise.

For Lacan, the mirror stage is a moment rife with tension. Lacan suggests that subjectivity is an impossibility, and when we look into the mirror, we mistakenly take the reflection we see to be our ego, or self. In the psychoanalytic mirror stage, this is the central paradox of subjectivity that causes anxiety, joy, and self-alienation (2014). However, Maurice Merleau-Ponty’s reinterpretation of the mirror stage (1964) gives a much richer account of the VR-mirror stage that allows for both a more nuanced critique of VR-empathy experiences as well as a more comprehensive understanding of the user-avatar relationship in general. Taking a phenomenological perspective, Merleau-Ponty agrees with Lacan that the subject is contained by the mirror image, but that the recognition of the mirror image as the self does not produce the same anxiety in Merleau-Ponty’s account (1964). Rather, the interest that we have with our own reflection as children comes from the pleasure that we get when we see our reflection copy the movements of our own body (1964). A playful moment that we see replicated when a user catches the reflection of their avatar in VR.

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Through this playful experience that the user has with their avatar, they transform the picture that they have of their own bodies to also include the avatar. The user's movements begin to be shaped by their understanding of their avatar "even in its perceptual absence ... the visible image incorporates the felt body, shapes it; and the felt body incorporates the visible image" (Whitney 2018, p. 147). This demonstrates how, as is found in many experiments about empathy in VR, participants change how they move their bodies without making the tenuous leap to assuming that user becomes their avatar.

The phenomenological mirror stage posits that the act of seeing your own body in a mirror produces a moment of realisation that your body is simultaneously both a perceiving subject, and perceived object. However, this is complicated in the VR-mirror stage by the fact that the perceiving subject (the user) is divorced from the perceived object (the avatar) – they inhabit difference bodies and different spaces. This reduces the avatar to an object, which is antithetical to the goals of VR-empathy experiences. As a result, even when users change their bodily movements based on the visible image of the avatar (see Kilteni et al 2013), they are basing these changes on their stereotypical assumptions of the avatar-object, rather than a nuanced, complicated, and fully-fledged subject. Furthermore, if the user's assumptions are based on stereotypes or negative opinions, then these experiences can actually *increase* bias (Blascovich and Bailenson 2011). This paper seeks to take the claims made of VR-empathy experiences seriously in its critique, a starting point to develop a more nuanced understanding of how embodiment works in VR.

## BIO

Kate is a researcher in the field of virtual reality and video games. Her research focuses on how we understand immersion in virtual reality. She is passionate about how virtual reality reconceptualises our understanding of space, and the affective experiences that virtual reality provides.

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