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#### IMMERSIVE NARRATIVES AS PROSOCIAL AGENTS

#### Las narrativas inmersivas como agentes prosociales

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Alongside the rise of the metaverse, immersive technologies are claiming a place in the media ecosystem. The question of the standardization of extended reality technologies (virtual reality, augmented reality, and mixed reality) as consumer media seems to have become irrelevant in a context characterized by the constant evolution of devices, the development of new content, and the expansion of distribution platforms.

The emergence of the metaverse has led to a rapid expansion in the use of immersive technologies, particularly virtual reality (VR), which has applications in a wide range of areas, such as entertainment, education, psychology, and health sciences. An area of growing interest is the potential of these technologies as prosocial tools, through the creation of and experimentation with immersive VR content aimed at fostering positive social behaviors and interactions among users. Prosociality has become a key concept for community development in an increasingly polarized world. In his definition of prosocial behavior, González Portal (2000) expands on previous conceptions of the term (Chacón, 1986; Amato, 1983; Olivar, 1998) to describe it as "any positive social behavior with or without altruistic motivation" (2000, cited in Auné et al., 2014).

Social cognitive theory (SCT) is a popular method for making sense of how people adopt and assimilate new behaviors. According to SCT, an interaction between individual factors, such as beliefs and attitudes, and environmental factors, such as social norms and behavioral modeling, will affect human behavior. Within the field of prosocial immersive media, technology is considered a means of influencing such environmental factors to facilitate the development of positive social attitudes and values. Due to their immersive nature, these media allow users to experience situations and environments that may be difficult or impossible to reproduce in real life.

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In this way, virtual reality (VR) allows users to participate actively in the narratives in which they are immersed, intensifying the connection between viewer and story, and eliciting emotions and attitudes such as empathy, compassion, and cooperation. Social modeling, whereby people observe and replicate the behaviors of others in a VR environment, or even adopt their perspective through perspective-taking exercises involving the use of an avatar to represent the other's physical reality, can reinforce this experience.

The theory of embodied cognition posits that our mental processes and actions are shaped by our physical experiences, including our interactions with our environment and with other individuals (Barsalou, 2008). In the case of virtual reality (VR), the immersiveness characteristic of this technology can induce a sense of presence that makes the virtual environment seem tangible and immediate. This sensation influences users' thoughts and attitudes, including their behaviors and social interactions. It can therefore be adopted as a theoretical framework to complement social cognitive theory (SCT) in studies of the use of VR as a tool with prosocial potential. Research has shown that embodied experiences can have an impact on a wide variety of cognitive and emotional processes. For example, it has been demonstrated that VR simulations involving walking can improve cognitive function in the elderly, as reported in a study by Riva et al. in 2017. On the question of promoting prosocial behavior, various studies have employed immersive VR experiences that simulate intergroup encounters with the aim of increasing empathy and reducing levels of prejudice and stress in such situations. Studies by Banakou et al. (2016), González-Franco et al. (2016), Stelzmann et al. (2021), and Tassinari et al. (2022) have all supported the value of this practice. In the context of increasing scholarly interest in exploring the prosocial potential of immersive VR technologies, it is imperative for researchers in the field of communication to continue examining this area and consider the potential ethical and moral implications the use of such technologies.

This monograph brings together a series of articles that analyze the creation of immersive narratives and their uses as agents of social change. The object of study is examined from different perspectives, including the creation and production of immersive audiovisual fiction productions through the use of virtual reality technologies, their application in contemporary social contexts to support community development, the impact of immersive experiences, and the level of interactivity of immersive content with a prosocial theme.

The first study provides a magnificent contextualization of the state of the art and future potential of virtual reality in the field of mental health, with special attention to its implementation in rehabilitation programs for violent offenders. "Virtual Reality in Mental Health and Rehabilitation of Violent Behaviors" is authored by Nicolás Barnes and Melody Torao-Angosto, two psychologists associated with the field of correctional research, in collaboration with the VR researchers Mel Slater and María Victoria Sanchez-Vives. As Slater and Sanchez-Vives have presented in previous research, immersive virtual reality creates a digital world that induces the illusion of presence. In this world, despite being in a physically different place and in an artificial environment, users respond to virtual events as if they were real on all physiological, emotional, behavioral, and cognitive levels. In this article, the authors explain how the use of virtual reality can make a positive contribution to the field of mental health by specifically supporting the treatment of phobias, social anxiety, post-traumatic stress disorder, paranoia, schizophrenia, and violent behavior. In the case of the last of these, they offer a detailed discussion of the implementation of VR tools in rehabilitation programs for violent offenders, allowing them to interact with a simulated reality. Taking as an example its application in Catalan prisons, the authors emphasize the benefits of virtual reality as a safe, customizable, and costeffective alternative to conventional therapeutic methods in the rehabilitation of violent offenders.

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The second article is by Illya Szilak, chief medical officer of the Rose M. Singer Center at the Rikers Island Correctional Facility in New York City. Szilak combines her experience as a medical doctor with experimentation and research, devising and creating online multimedia narrative installations. An example of her work is her experimental short film, "Queerskins: Fly Angel Soul" (2024), which is the subject of this article. The film's aim is to elicit empathy for the main character, Sebastian, a gay man diagnosed with AIDS in Mali at the beginning of the epidemic. At the same time, it offers viewers the opportunity to consider their own embodied (and mortal) state. The author initially contextualizes the hypothetical potential of a VR-based cinematic language to promote empathy, while at the same time reviewing key philosophical and neuropsychological bases for the prosocial effects of VR and the neuropsychological bases for empathy in cinema. This is followed by a case study demonstrating how virtual production methods can be used to incorporate something of the power of embodied presence referred to above into the language of cinema, given its status as a more accessible and popular medium. A description is also offered of the artistic process behind the creation of this 2D short film, "Fly Angel Soul", shot entirely with an adaptive virtual set and using three types of virtual cameras, each of which sees and moves differently.

The third article is written by Beatriz del Caz, Javier Moral, and Fernando Canet, professors and researchers at the Universitat Politècnica de València. In "The Impact of Immersive Media Experiences through User Reviews: Qualitative Analysis on 'Traveling while Black," the authors explore whether user reviews of immersive experiences may be of use to understand their potential prosocial effects. To this end, they propose an interesting model for the qualitative analysis of such reviews, assessing the impact of immersive products with social themes through the analysis of both positive and negative comments by users. Through a directed study, the model is tested using user reviews of the virtual reality documentary "Traveling While Black" (Ross Williams, 2019), which addresses systematic racism against Blacks and is available on the VR for Good platform using an Oculus VR headset.

The fourth contribution to this monograph, titled "Interactivity as a Prosocial Driver in the RTVE Lab" is by Saida Santana a professor at Universidad Complutense de Madrid and Universidad Nebrija, and Gustavo Montes and Vicente Sanz, both from Universidad Rey Juan Carlos. These authors analyze the levels of immersion, place illusion, and plausibility illusion (Slater, 2009) that can be generated in interactive content with prosocial themes, and the extent to which such immersion can foster prosocial behaviors. This study offers a review of the literature on prosocial behavior, immersiveness, presence, and interactivity, followed by an analysis of productions made by Radio Televisión Española's Laboratory of Audiovisual Innovation and New Narratives (RTVE Lab), using an interesting analytical framework that considers the technological, narrative, and conceptual characteristics, as well as subject matter and content.

The aim of this monograph is to contribute to the analysis of immersive narratives and their potential. The investigation of this object of study is crucial in the contemporary context with the growth of immersive media and the construction of their discourses, whose languages are still being developed. The research presented here reflects the progress in the study of these media and their impact as agents of social change.

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