Book Review Editor

Russell Kirkscey, Penn State Harrisburg



The Changing Face of VR: Pushing the Boundaries of Experience Across Multiple Industries

Jordan Frith and Michael Saker, Editors

Wilmington, Delaware Vernon Press 2022, 195 pp.

Reviewed by Akshata Balghare

Embry-Riddle Aeronautical University-Prescott

he Changing Face of VR: Pushing the Boundaries of Experience Across Multiple Industries discusses how virtual reality (VR) has been used to improve users' experience with watching performances, news stories, nature, and other genres, and has been written by "practitioners and academics from different disciplines" (p. 8). The book analyzes and theorizes what VR is already doing and pushes readers to think, "what can and will VR do [in the future]? (p. 8)." The 11 chapters of this book distinctly show readers the immense technological growth in VR applications since its incipient stages in the mid-2010s and create hope for VR to become mainstream one day. The book was "written before Meta's massive investment in VR" (p. 2) and before Apple's June 2023 announcement of their Apple Vision Pro. Apple announced that with the Vision Pro you "can spread your work out across an array of large, digital monitors that are invisible to everyone else in the room" and "watch movies and play games on a 100-foot-wide virtual screen, or have FaceTime chats with friends" (Gershgorn, 2023). Such technology only demonstrates the potential

for VR to go mainstream and pushes for the need to research VR applications further. This edited collection keeps readers interested in the technology and its far-reaching implications.

In 2018, technical and professional communication and rhetoric (TPCR) scholars Jason Tham and colleagues demonstrated how VR could be used in pedagogical practices to teach students course content and how student embodiment—their bodily presence—in the VR world can teach them more than what textbooks can. Tham et al, conclude that "technical communication students will find themselves working with VR technologies as these tools proliferate in the workplace" (p. 192), and Jordan Frith and Michael Saker's collection can guide TC students pursuing careers that focus on the user experience of VR technologies. "This book is one of the first to capture the scope of just how differently VR is being used today" (p. 3) and is a timely resource for TC students to orient themselves to such technologies if they want to work in the field of user experience. While the book is interdisciplinary and doesn't use the terminology "user experience," it motivates readers to think about how users' agencies or their presence in the VR world can be enhanced, which ultimately improves user experience. Thus, readings from this book would fit well in a class focused on user experience studies. The book would work well for upper-level undergraduate students and graduate students studying TC as they would have a better understanding of what user agency means and how important it is to consider this agency when designing user-centered products.

The book is divided into four sections that categorize VR applications into the genres of storytelling, nature, performance, and exhibitions. While each chapter explains how VR has been used in a particular genre, the authors also point out the challenges of implementing VR and some issues that users face with a lack of agency with the VR application. These problems can motivate TC scholars and students to think about how to advocate for better experiences for users with VR. Further, in Chapter 6, Mary Le Rouge mentions that VR is used by doctors to simulate medical surgeries, showing that VR is not just used for users' pleasure but also to improve human well-being. Technical communicators can use their humanistic perspective to advocate for the need and improvement of such advanced technologies that benefit users' well-being. Finally, TC curriculum that focuses on building the foundation of user advocacy in students can benefit from incorporating readings from this book, especially since Apple demonstrated the future potential of VR. Below, I describe how the book's content can be valuable to TC curriculum.

Chapter 1 by Jordan Frith introduces readers to the history of VR and brings them to the stage where VR lies in the post-pandemic era and helps them ease into the rest of the book. Chapter 2 by Christopher Maraffi describes how VR can be used as an empathy-generating machine. For example, the chapter explains how VR has been used to teach people social justice by giving them a 360-perspective virtual tour of stories of racial injustice. This chapter can show technical communicators that while users enjoy and learn from such experiences, they feel limited at certain times as they cannot interact fully with the elements in VR.

Further, in Chapter 3, Rafael Leal focuses on generating embodied experiences for users. Leal examines the screenwriting process in film production for VR environments and argues that screenwriters must consciously think about spectators' bodies (p. 35). Chapter 4 by Hannah Greber discusses how VR has been used in journalism to allow viewers to experience news stories by living them. Greber points out the high costs of using VR and the technical challenges of implementing it in journalism. Here, technical communicators can advocate for such technology by thinking about what type of news should really use expensive VR technology so it can be used as an empathy-generating machine leading to changes for the betterment of the world. In Chapter 5, authors Delwyn Jude Remedios, Deepak John Matthew, and Max Schleser, illustrate how users can watch three stories or narratives in parallel, move from one narrative to another and, in a way, perform the role of editors of the three narratives. This section shows technical communicators that VR can create different types of impacts on users within one genre of storytelling. More conversation on the topic of user agency and impact in VR is clearly needed in TC curriculum, and this section neatly establishes the topic for readers. Additionally, this topic would also work in a TC class that discusses how entertainment/ digital media affects the way audiences feel.

In Chapter 6, Mary Le Rouge shifts readers' attention to the genre of nature/environment by advocating the need for VR technologies that can simulate climate conditions, which can demonstrate to researchers and lay audiences how human interaction with the environment can affect climate change. Chapter 7 by Kailan Sindelar describes how VR has been used to give users an immersive experience of nature to help them relieve stress and anxiety and educate them about nature, in addition to how this technology needs to improve design-wise. These two chapters would work well in a TC class that discusses environmental rhetoric and environmental risk communication, motivating students to study the impact of such technology further. Next, in

Chapter 8, Leighton Evans and Michal Rzeszewski introduce the genre of performances by investigating how users have experienced live performances in VR, particularly during the pandemic. In Chapter 9, Alicia Corts shows how users feel about their agency in immersive theatre productions and discusses how users' bodies "become a unique theatrical tool in VR" (p. 128). With growing interest in VR use in entertainment, gaming, and arts, this section can help TC students familiarize themselves with technologies in demand being used to experience pleasure.

Finally, in the last section of exhibitions, authors Julia Salles, Jessie Marchessault, and Bart Simon, in Chapter 10, highlight the challenges curators face in VR exhibits. Using data from interviews, they discuss how attendees at such exhibits feel about individual versus collective viewing and how the role of mediators can affect the user experience of attendees when they are engaged in VR activities. Chapter 10 by Eryn Parker and Michael Saker also draws on interview results and discusses how VR exhibits can give a different experience to users than what a traditional art museum would provide. This last section shows the thoughtfulness behind ensuring that users get the kind of experience they need and that it differs from how they would have experienced it in traditional settings. Such consideration is required when training TC students in user advocacy, and these two chapters can help in this endeavor.

The Changing Face of VR: Pushing the Boundaries of Experience Across Multiple Industries is a valuable resource for the TC curriculum because of the growing trend in VR and is particularly useful for students interested in user experience research associated with such technologies.

References

Gershgorn Dave. (2023, June 6). Apple's Vision Pro AR/VR Headset: Bold, Innovative, and Ridiculously Expensive. *Wirecutter*. https://www.nytimes.com/wirecutter/blog/everything-to-know-apple-vision-pro-vr-headset/

Tham, Jason; Duin, Ann Hill; Gee, Laura; Ernst, Nathan; Abdelqader, Bilal; & McGrath, Megan. (2018). Understanding virtual reality: Presence, embodiment, and professional practice. *IEEE Transactions on Professional Communication*, 61(2), 178-195.

Author Information

Akshata Balghare is an assistant professor of engineering writing at Embry-Riddle Aeronautical University in Prescott, AZ. She received her PhD in technical communication and rhetoric from Texas Tech University, masters in technical and professional communication from Auburn University, and bachelors in electronics engineering from University of Pune, India. Akshata has professional experience working as a technical editor for engineering and scientific documents. Her research interests include user experience design and healthcare communication.