

Telepresence in Everyday Life

An Introduction

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The goal of this book is to highlight the growth and importance of the concept of telepresence in everyday media use. Telepresence (or presence) is commonly defined as the "perceptual illusion of nonmediation" (Lombard & Ditton, 1997). The extent to which media users feel "in" a media environment or "with" mediated others has significant implications. Since various researchers introduced telepresence to the discipline of Communication, most notably Frank Biocca and Matthew Lombard (e.g., Biocca & Delaney, 1995; Lombard & Ditton, 1997; Biocca, 1997), attention to the concept has grown tremendously. Researchers investigating telepresence now herald from diverse disciplines (e.g., communication, psychology, computer science, philosophy, etc.), resulting in a large and diverse body of scholarly work. In 2007, Lombard and Jones identified more than 1,400 articles that addressed the concept. Even more impressive, the vast majority of this work came out in only the last 12 years.

How did we get to this point? During the 1980s, there was growing interest in perceptual realism and sensations of "being there" among media scholars. Marvin Minsky coined the term "telepresence" in 1980 to refer to the manipulation of remote objects through technology, and Sheridan (1992) broadened this definition (as "presence") to include the feelings people have while immersed in virtual environments such as those created through Virtual Reality (VR) technology. VR became a popular subject in the early 1990s and captured the attention researchers even outside of Computer Science. In the field of Communication, for example, Steuer (1992) conceptualized virtual reality in terms of vividness and interactivity. VR is a highly immersive technology and can elicit high levels of telepresence, making it the ultimate form of "being there" through media. It seemed for awhile that VR would take off as a technology and widely diffuse into homes. However, VR has still not successfully converted into an everyday form of media, nor does it show any signs of doing so. Although VR was viewed as an emerging technology

in the 1990s (Ebersole, 1997).
 But a technological revolution has taken place since the 1990s, due to the rise of the digital age, and this has led to changes in everyday media like film, television, and video games. These technologies are rapidly expanding their potential to create sensations of telepresence. At the same time, the emergence of the Internet has revolutionized the use of computers, transforming them into a popular medium that converges features of all preceding media forms. Worldwide, people are now using media more than ever in history, as the following examples illustrate:

- There have been increases in box office sales at cinemas in the United States, the United Kingdom, and the Republic of Ireland (Barnes, 2008) resulting in \$1.7 billion U.S.D. (1.2 billion Euros) in sales for the first two months of 2009 in the United States alone (Cieply & Barnes, 2009).
- Television viewing has increased to 5 hours per day in the United States (Gandossy, 2009). In the Europe, television viewing varies by country but has recently been at an average of 11.5 hours per week (Sandison, 2009).
- The United Kingdom averages 4.7 television sets per home (O'Neill, 2008). In the United States the average home has more TVs ($M = 2.73$) than people ($M = 2.25$) (Average Home, 2006).
- High definition television now exceeds 23% penetration in the United States (Penetration of High Definition, 2008).
- The number of individuals who use the Internet has increased from 16 million people (representing 0.4% of the world's population) in December 1994 to 1,574 million people (representing 23.5% of the world's population) in December 2008 (Internet World Stats, 2009).
- Video game sales reached \$21.33 billion U.S.D. (14.6 billion Euros) in the United States in 2008 according to the NPD Group, up from \$18 billion U.S.D. (12.3 billion Euros) the previous year (Sinclair, 2009). The industry experienced the most growth in the U.K., where software sales increased 26% in 2008 (NPD Group, 2009).
- The Middletown Media Studies report that Americans spend 11.7 hours a day, on average, with media (Papper, Holmes, & Popovich, 2004). This makes media use the number one life activity, even accounting for more time than sleeping (Finberg, 2005).

These figures demonstrate the enormous scale of media use around the world, in which telepresence undoubtedly plays a role.

This book highlights the importance of telepresence in considerations of popular media and their effects on users. While there are a limited number of books on telepresence, most deal with virtual reality systems and other highly immersive emerging technologies, instead of everyday media. Although there are various journal outlets publishing work on telepresence, the primary presence journal, *Presence: Teleoperators and Virtual Environments*, predominantly publishes articles focusing on applications of presence in computer science and virtual reality rather than work on the popular forms of media discussed in this text. Informed largely by traditions in the Communication, Media Psychology, and Media Studies disciplines, this book focuses on everyday electronic media technologies (e.g., film, TV, computers/the Internet, and video games) and commonly studied media effects (e.g., entertainment/enjoyment, persuasion, and effects of violent/sexual/frightening content, to name a few).

The unique contribution of this text, therefore, is that its chapters detail the impact of telepresence on popular media technologies and effects. The volume is intended to serve as a handbook on telepresence and popular media. It contains chapters by the most notable researchers on telepresence in their respective areas and will capture what we know about popular media and telepresence at the beginning of the 21st century.

One nagging issue we faced as editors of this book was, do we call the central concept "telepresence" or "presence"? While this may seem like a trivial or easy decision, it proved to be somewhat difficult due to discoveries during the course of this project. On one hand, seminal works such as Lombard and Ditton (1997) and Sheridan (1992) call the concept "presence," and this label has been dominant in the Communication literature. The primary organization of researchers studying the concept is also called the International Society for Presence Research (ISPR). On the other hand, the president of the organization, Marthew Lombard, has recently expressed some concerns about the term "presence" (Lombard, 2008). One major problem is that the word has been adopted by individuals and organizations who are not studying what the ISPR community is interested in, such as those who talk about religious "presence" with deities and spiritual forces. Adding "tele" suggests mediated presence, and for this reason we have decided to make "telepresence" our dominant term throughout this book (and in the other related terms, since telepresence (or presence) is a complicated area of study that also includes subdimensions like immersion, involvement, realism, spatial presence, and social presence. The varying terms used to describe what we are interested in highlights the complexity of telepres-

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ence as an area of study, but the goal of telepresence researchers remains consistent—to capture an important and particular psychological experience of media technology users, whether it be their sense of feeling “in” a mediated environment or “with” mediated others, etc. The chapters in this book represent varying perspectives on the concept, offering a broad but rich take on the concept.

This book is divided into three parts. In the first section, the chapters address the role of telepresence in the experience of several popular media technologies, illustrated under “Popular Electronic Media” in Figure 1.1. The second section of the book addresses outcomes of experiencing telepresence, as represented in the column under “Common Media Effects” (see Figure 1.1). In the third section, the future of telepresence and popular media is discussed.

Specifically, on the technology side, Neundorff and Lieberman discuss the history of film and the role telepresence has played throughout its history in chapter 2. The impact of television form and content is examined in chapter 3 by Bracken and Botta. In chapter 4, Westerman and Skalski discuss the ways in which computers can lead to telepresence in two main domains of study: Human-Computer Interaction (HCI) and Computer-Mediated Communication (CMC). The integral relationship between telepresence and video games is discussed in chapter 5 by Tamborini and Bowman, with a focus on how telepresence mediates the ongoing entertainment experience of gamers and an eye toward explaining processes that might moderate the personal and social outcomes associated with game play.

On the effects side, the impact of telepresence on the process of persuasion is discussed in chapter 6 by Daugherty, Gangadharbala, and Bright. In chapter 7 Hartmann, Klimmt, and Vorderer discuss the impact telepresence has on the experience of media enjoyment. Skalski, Denny, and Shelton discuss a range of media theories and effects and

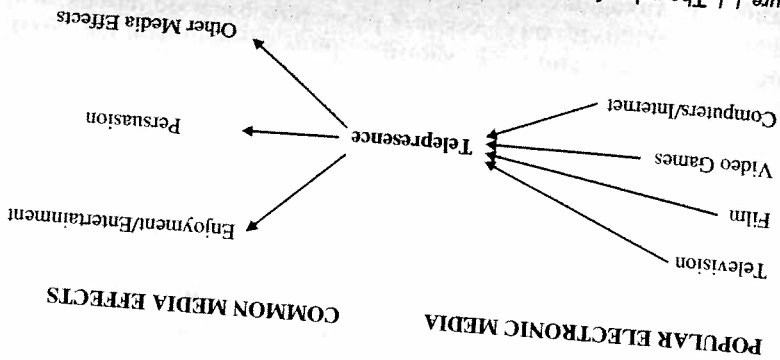


Figure 1.1 The role of telepresence in popular media

the influence of telepresence on such processes in chapter 8. Waterworth and Waterworth offer some theoretical possibilities about sensations of telepresence in the future in chapter 9. Lombard discusses the promise and perils of telepresence in the ever changing world of popular media in chapter 10. Lastly, in chapter 11, Bracken and Skalski present a conclusion that ties the chapters together and offers directions for future research. Ultimately, this text will establish the necessity of telepresence in gaining a complete understanding of the uses and effects of popular media technologies of the past, present, and future.

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