

ABSTRACT OF THE DISSERTATION

Learning to Live With Ghosts:
Holopresence and the Historical Emergence of Real Virtuality Technologies

by

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This dissertation is a media-archaeological inquiry into emergences of holograms, broadly defined, in order to demonstrate how human interaction with a specific style of technical imagery may be seen as a social negotiation of inherent contradictions that haunt ideologies of modernity — tensions between presence and absence, body and spirit, life and death. Throughout this work, I discuss what I have identified as visual forms of technically mediated mortality in order to situate these forms within relevant fields — namely, science and technology studies, media archaeology and media studies, and visual culture studies — and their varied but

networked examinations of human-machine social relations that have taken shape since the European Enlightenment.

My analysis is organized around the historical figures of the hologram and the “hologram,” a bifurcated term with differing denotations but similar connotations. By following the transportation of the label from an object of science imagery to one of digital projection, this study traces emergences of dimensional, spectral imagery within situated contexts in which spectators not only wrestle with existential concerns but struggle to negotiate the immateriality of mediated experience. I examine four cases that may appear to be (and are often discussed as) apparatuses that are technically and phenomenologically distinct: the Pepper’s Ghost stage illusion as developed by the Royal Polytechnic Institute in London in the mid-19th century, optical holograms displayed at the Museum of Holography in New York City during the 1970s, the imaginary of science-fiction “holograms” (as depicted mainly in *Star Wars* and *Star Trek*), and a posthumous performance by the rapper Tupac Shakur as a “hologram” at a live music festival in 2012. Each example demonstrates the emergence of a specific code of visual communication, which I refer to as the *technical image*, following from the work of communication philosopher Vilém Flusser. The hologram, in fact, projects forward the essence of Flusser’s category by hailing a different kind of spectator (a holosubject), a mobile viewing body who might “read” imagery from a variety of subjective perspectives. By interacting with 3D image-bodies (reaching out to touch, and failing) the holosubject is hailed by the hologram as a fellow specter within a comingling of the virtual and the visceral — a novel mediated experience I call holopresence, the direct experience of a mixed space that includes the virtual space of the image. Rather than “entering” a separate virtual-reality space, holopresence is an encounter with virtuality amid the real — an interaction with real virtuality.