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Rock and Roll Will Never Die: Holograms and the Spectrality of Performance

Abstract

In 2012, the rapper Tupac Shakur performed in the top slot at a major music festival — an event only notable because he had died 16 years earlier. The performance was made possible by a 21st-century digital upgrade of a 19th-century stage illusion called Pepper's Ghost, and it ushered in a trend of creating and presenting similar "hologram" performances of posthumous pop stars. This article offers an explanation of what is seen in such a performance, examining the simulation of 3D video imagery designed to veil its mediation in order for its subject to appear unmediated, present, and "real." Ultimately, I claim that these illusions are contemporary séances — a revival of historically spiritualist practices but one in which what is conjured is actually the deceased's previously existing performing persona, as the concept has been extended by Philip Auslander. This cultural entity (distinct from the body and able to outlive it) is offered a new embodiment within a media system that restores the immaterial entity to the material space of the stage — a context previously off limits to the dead performer.

Near the end of my professional career as a pop-music critic, I began encountering concert performances that challenged my hard-won criteria for their evaluation. For nearly two decades, I had worked to learn what constituted a good or bad concert experience, what elements conspired to manufacture meanings in that context, and how each ritual operated to maintain and circulate social discourses. About 10 years ago, however, I began encountering concert performances that demanded I rewrite my rulebook.

The most significant of these spectacles was Tupac Shakur's dramatic return to the concert stage. In 2012, the popular rapper appeared as one of several special guests during the final slot headlined by Snoop Dogg and Dr. Dre. at the Coachella Valley Music & Arts Festival in Indio, Calif. 2Pac made a theatrical entrance, seeming to rise from a trap door in the floor of the stage, head bowed, before raising his eyes to the crowd and stretching out his arms. He greeted Dre and Snoop before addressing the crowd of more than 100,000 people ("What the fuck is up Coachella?!"), then launched into the first of two songs he performed. By and large, it was an average, everyday performance — only truly notable to those spectators who were aware that 2Pac had been shot and killed 16 years earlier.

What the crowd (and the eventual multitudes online) witnessed was a "hologram," or at least a specific digital technology that now goes by that borrowed term. 2.0Pac was a digital projection, basically a video animation of the deceased performer, and a new creation (not pieced together from pre-existing video). That's the technical explanation, anyway. This article explores the seemingly unique system that produced the Tupac spectacle and its historical roots as a 19th-century stage illusion called Pepper's Ghost. But I also offer an expanded explanation of what is seen in a posthumous hologram performance. These simulated 3D projections are video imagery presented within a context in which spectators do not usually encounter video, and they are delivered through a technical apparatus designed specifically to veil its identity as that form of media or, in fact, as media at all. Through this situation of context and method — this crafting of illusion — digital holograms of this type resurrect longstanding spiritualist practices of summoning ghosts. In contrast to the uncanny shock of summoning spirits in the 1800s, however, 21st-century hologram conjurings merely bring back a performer's persona, offering it an embodiment within a media system that restores the performance of that immaterial entity to the material space of the stage — the only context previously off limits to the dead performer.

The Projected Specter

The imagery of the resurrected 2Pac was produced via a specific technical assemblage comprised of digital projection technologies and a unique kind of screen. Rather than projecting its imagery onto a visible, solid surface, as with a movie, this assemblage alters three elements significant to traditional cinema. First, the screen is transparent, thus showing both the projected content on it and a view of the space behind it; this allows the screen and its content to be situated not only at the edge of a viewing space (i.e., on a wall) but potentially among actors and spectators. Second, the frame of this screen is veiled, either hidden from spectator view in the proscenium or, in this case, situated within the stage lighting scheme so that the screen's edges are not illuminated and the lower edge rests on the floor of the stage. Third, projections for this screen are created by limiting the visible content to the animated figure of a body, with its feet always on the "ground" (the lower edge of the screen) and no other scenery or background imagery filling the frame that would give away its edges. In concert, these three elements camouflage the entire technical apparatus in order to foreground and amplify the presence of the digital figure, thus dampening or even eliminating structural cues to a traditional, framed screen experience.

Rather than signifying a separation between the actual space of the spectator and the virtual space of the display — which has been a standard experience for viewing imagery from Renaissance painting through the "virtual window" of digital screens[1] — digital holograms situate themselves differently, as illusory bodies appearing to exist not behind the image surface or screen but within the same space as the spectator. The imagery thus seems to be free from its age-old confinements to 2D forms that only *depict* three dimensions; instead, it appears expanded into three full dimensions, repositioned more like sculpture, as an entity with increased physical presence and a more direct material and spatial relationship to the spectator. I say *more* direct, because the digital hologram as a 3D body remains an illusion. Nonetheless, holograms achieve something clos*er* to person than portrait, at least close *enough* to substitute the imagery within performative social contexts, as in their use in political campaigns[2] to the concerts discussed below. The viewing subjects in these situations are meant to see the content of the projection *as if* it is not a projection, as if it is *not* a screened subject. It's idolatry: we are meant to interact with the image itself rather than its producing apparatus, to take the image to be a real thing or person (or at least moreso than a flat, screened, framed image). This dramatically alters the relationship between the seer and the seen and broadens the scope of potential interactivity with the imagery. A spectator talking to a painting might seem odd, say, but a spectator addressing an interactive hologram within their own space is a situation a bit more within the bounds of a natural, interpersonal encounter.

Speculations about 3D image projections into public spaces frequently deploy the language of paradigm shift and historical rupture. Vilém Flusser's communication philosophy corrals all post-photography imagery (film, TV, video, holograms, etc.) into a category he calls the "technical image," which he claims offers humanity not just a new way of seeing but also "a revolutionary new form of existence,"[3] or at least *co*-existence with mediated imagery. In an extraordinary consideration of media's mingling within public life, Luigi Lentini claims that holograms specifically constitute "a manifestation that is absolutely new in all of history: representation can be superimposed on reality, substituting for it,"[4] and thus participating in social life on a higher order than flat, framed imagery. Just how new digital holograms are is a matter for media-archaeological debate, and I am one of many media-studies scholars whose research theme is a consistent reminder that the experiences and affordances of "new" media are rarely so new. Tupac's image, for instance, is referred to colloquially as a hologram, which borrows the term from 20th-century physics and laser imaging in order to label a 21st-century phenomenon that is denotatively very distinct but shares many connotations of an uncanny and ephemeral quality to all mediated, embodied presence. The system that actualized Tupac in 2012 was an additional century older. Tupac's virtual resurrection — and those of numerous other deceased pop stars since — was a simple and minimal upgrade[5] of a stage illusion that was perfected and quite popular in the 19th century: Pepper's Ghost.

By its 1862 debut, Pepper's Ghost was a particular arrangement of glass, mirrors, light sources, and actors that would manifest on a stage the image of a person who was offstage. Onstage

actors thus could, via some careful blocking, pretend to speak to or even physically interact with this image (which appeared to the audience to be a real body). An actor, for instance, would be positioned below the stage, say, hidden in the orchestra pit, perhaps dressed as a ghost in a white sheet. Above, a large glass panel tilts at a downward angle near the front of the stage. When the ghost actor is brightly illuminated below, their image reflects in the glass, rendering a near-perfect and proportional image of the hidden actor amid the stage setting. Based on the control of the illumination, that image could appear or disappear suddenly, communicating its identity as a ghost. A spooky special effect, and an early, analog version of a common one today — using actual light and reflective surfaces to insert an absent actor into a dramatic scene, much in the way that today's omnipresent CGI and motion-capture techniques insert actors into digital scenery and narratives.

The illusion was perfected by its eventual namesake, John Henry Pepper, at the Royal Polytechnic Institution, a Victorian museum of science. Pepper performed the illusion not as a spectacle of supernatural magic but as one of natural magic; rather than leaving audiences dazzled by the illusion itself (a mere magic trick), his lectures routinely revealed and explained its technical apparatus. This reveal was done as a means of promoting an ideology of rational technoscience against spiritualism, a popular movement at the time throughout Europe and the United States advocating a belief that spirits could be summoned and communicated with. Indeed, the core terms of media studies — *media* and *communication* — arise from these experiences with *mediums* offering *communion* with the dead.[6] Pepper and the Polytechnic sought to debunk such fraudulent schemes while also denigrating the allegedly irrational, anti-scientific beliefs that supported them.

Among the Victorian era's flux of visual experimentation — a "frenzy of the visible,"[7] one that Tom Gunning refers to as "the cinema of attractions"[8] — Pepper's Ghost at the Polytechnic was a highly popular London attraction, fizzling out (Gunning says it "goes underground"[9]) by the end of the century as cinema came to dominate animated representations. The principles of Pepper's Ghost later returned in disparate uses — among the phantasmagoria of Disneyland's

Haunted Mansion and as the basis for the technology of the TelePrompTer. More than a century later, however, Pepper's Ghost has been revived repeatedly in the context of posthumous concerts such as Tupac. The same basic system has revived numerous dead singers to haunt stages, including pop legend Michael Jackson (brought back to life for a televised award show in 2014), rock and roll pioneers Roy Orbison and Buddy Holly (whose digital holograms have toured separately and together since 2018), hard rocker Ronnie James Dio (toured as a hologram in 2019), and pop diva Whitney Houston, who began playing a Las Vegas residency as a hologram in 2021 after a pandemic delay. Posthumous hologram performance is an emerging niche in pop music.

At their core, these performances are nakedly spiritualist rituals in which dead idols are technically conjured to communicate once again to faithful flocks. But in 2012 or more recently (as opposed to the mid-1800s), the drama and spectacle of such an event is markedly tempered by the intervening decades in which everyday life has been widely mediatized. Scholars such as Jeffrey Sconce have argued that most iterations of modern electronic media — from the disembodied voices of radio to the shifting phantoms of film and video — deliver inherently uncanny experiences already similar in many ways to ghost hauntings and spirit visitations.[10] Because of such conditioning, none of the media-savvy moderns in the Coachella field ran screaming from the Tupac hologram for fear of a zombie uprising. Per my own findings in a study of immediate reactions to the Tupac hologram, even if spectators didn't immediately understand the specific projection technology, most not only recognized the entity as technological but often equated that identification with ghosts and spirits.[11] Here, though, I want to extend this recognition of a kind of spectrality beyond mere metaphors for modern mediation. Tupac wasn't a ghost*ly* experience; he was an experience *of* a ghost. That is, rather than having an experience of media that may be *described* as spectral, Tupac's spectators were encouraged to believe that they were experiencing something unmediated — a proportional body, socially recognizable, standing *right there*, back from the dead. But one reason spectators calmly identified this spectral entity as the musical hero they had previously known is that the Tupac they knew had *always* been a

ghost. The hologram simply summons back to the stage the previously existing spectral entity of the performer's media persona — a kind of ghost we're used to seeing and being haunted by every day.

The Mediated Specter

Music artists have long been able to "live on" after death, through the continued circulation of cultural artifacts delivered during their life but also through new, posthumous ones. "A truism in the music business is that death is a 'good career move,'" according to Steve Jones.[12] The loss of a high-profile public figure can return many fans to their body of work, often with a corresponding sales bump; in addition, producers finish unfinished work for posthumous release. Since his own death, eight albums of new, unreleased, and archived material by Tupac have been issued. His videos and films continue showing on television and online. Photos of Tupac still circulate and — partly due to conspiracy theories claiming that the rapper faked his death — Tupac's life and legacy are discussed and critiqued widely even now. Tupac's data body has enjoyed a much slower rate of decay than his material body. The Coachella hologram performance boosted this afterlife: the following week, Tupac's 1998 *Greatest Hits* album returned to the Billboard 200 albums chart for the first time since 2000, making a sales gain of 571 percent over the previous week,[13] and the official YouTube video of the hologram has been viewed more than 57 million times as of this writing.[14]

What, then, is actually revived by the Tupac hologram? Not the actual body, certainly, but this other, more distributed body: the assemblage of previously existing, historically mediated technical imagery (the magazine photographs, album covers, television interviews, music videos, and such) that is already known by the public and recognized as, say, Tupac. Most spectators, for instance, did not know Tupac Amaru Shakur as a person at all; they only knew this managed and variously presented mediated identity of 2Pac. So while the Tupac hologram did not resuscitate material flesh, it did revive, situate, and temporarily fix this aggregate data body, which fans themselves could recognize from previous encounters with it via modern media's other means of inherently intangible conjuring and projecting. The digital hologram simply makes a bid to return the live

concert stage — the one context thus far largely off-limits to the deceased performer — to the list of culturally mediated encounters. Contemporary pop concerts are already often heavily mediatized experiences. Microphones turn the body into a "sounding cyborg,"[15] video screens allow imagery to compete with the body for attention, computers control music sequencing, lights, and more, making the performing body already an agent of significant digital direction. Switching an additional element of the experience from atoms to bits is thus less phenomenologically jarring than may be expected, thus establishing that the "live" concert stage is not exclusively a domain for present, living bodies — but that it is welcoming to the hologram's embodiment of the persona's immaterial but still identifiable figure.

A relevant distinction between person and persona in modern mediated experience is at the core of Philip Auslander's theory of performance, specifically within his focus on the "visual aspects of musical performance, by which I mean its physical and gestural dimensions,"[16] which are foregrounded in the hologram's reach toward embodied imagery. Auslander's work attempts to settle common concerns within performance studies about the "confusion of realms" between live and mediated events[17] and to map the spaces between "lively" performance and "petrified" visual media[18] (or even more recent attempts to delineate between "corporeal liveness" and "virtual liveness"[19]). For Auslander, the presentation of a mediated image not *of* performance but *as* performance retains many novel and immediate aspects of liveness. Less concerned with the ontology of any related imagery, Auslander focuses on the phenomenology of the situated event — that mediated performance may be experienced or *seen* as live[20] and that media and bodies now coexist within a hybrid circumstance he calls "intermedial performance."[21]

The persona, for Auslander, is a particular role inhabited by the performer — "a liminal phenomenon" and a transmedia public image (in accordance with Henry Jenkins' proposed fluidity of "transmedia" culture[22]), co-produced by the person, the audience, and the professional producers and media contributors surrounding the performer. He says that "performers are not the sole authors of the personae they perform in these many contexts"[23]; indeed, beyond the performers themselves, diverse figures from managers,

producers, audio engineers, publicists, journalists, and even fans contribute to the social construction of a pop star's persona. This does not necessarily imply that a persona is merely an image constructed by marketers for capitalist control; Auslander not only includes fans in the production of personae but stresses the *artistic* aspect of its creation and projection, as well. Persona is an image, less in the strict visual sense and honing more to the idea of a general and ephemeral public impression; Auslander even calls it "an impression," but, again, a *public* one — concepts of persons that are "created both aurally and visually and imply a social narrative"; indeed, they present "the performer as social being."[24] The persona is different from the actual person's presentation of self in everyday life. It's a distinct social being that is turned on during — or *projected into* — specific situations. The persona is the constructed, not-quite-fictional "performed identity"[25] that the public sees and has access to, regardless of what material medium might be summoning and channeling it.

When used in this way, a technology like Pepper's Ghost — the entire point of which is to hide its apparatus — allows for the immaterial data body to possess the space formerly inhabited by the material person. Holograms like Tupac, then, operate as intermediaries between not just states of *being* but contexts of public mediation and social identity. Audiences recognize the mediated image of Tupac as mediated and afford it entry into the sanctioned space of the stage. In fact, holograms of non-living performers underscore the concept of liveness in performance as an experience of the spectator rather than an ontological quality of the performer. These coordinated digital artifacts are made to conform to existing parameters of live concerts, and rather than returning the performer's body to the stage, they conjure that performer's immaterial persona into that same space, in which that persona was previously represented by the material body. A posthumous hologram concert becomes a fresh séance specifically for this practice, actualizing the haunting of a live concert by a dead performer.

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Notes

1 Anne Friedberg, *The Virtual Window: From Alberti to Microsoft* (Cambridge, Mass.: MIT Press, 2006).

2 "A Virtual Narenda Modi," BBC News, Aug. 7, 2014, https://www.bbc.com/news/av/business-27939865.

3 Vilém Flusser, *Into the Universe of Technical Images*, ed. N. Katherine Hayles, Mark Poster, and Samuel Weber, trans. Nancy Ann Roth, *Electronic Mediations* (Minneapolis & London: Univ. of Minnesota Press, 2011), 45.

4 Luigi Lentini, "Private Worlds and the Technology of the Imaginary: Effects of Science and Technology on Human Representations and Self-Conceptions," *Leonardo* 24, no. 3 (1991): 336.

5 . Whereas the 19th-century version of Pepper's Ghost illuminated an actual person and reflected that light onto an angled piece of glass to produce the illusion of onstage presence, the 21st-century version uses the exact same arrangement of elements, but simply replaces two of them. In place of the heavy mirrors and pieces of glass are now contemporary reflective surfaces and light, ultra-thin pieces of transparent Mylar, and in place of the hidden actors and lanterns is now a digital projector hung above the stage.

6 John Durham Peters, *Speaking into the Air: A History of the Idea of Communication* (Chicago: Univ. of Chicago, 1999).

7 Jean-Louis Comolli, "Machines of the Visible," in *The Cinematic Apparatus*, ed. Teresa de Laueretis and Stephen Heath (London: Macmillan, 1980), 122.

8 Tom Gunning, "The Cinema of Attractions: Early Film, Its Spectator, and the Avant-Garde," *Wide Angle* 3, no. 4, 1986.

9 Ibid., 64.

10 Jeffrey Sconce, *Haunted Media: Electronic Presence from Telegraphy to Television* (Durham & London: Duke Univ. Press, 2000).

11 Thomas H. Conner, "Learning to Live with Ghosts: Holopresence and the Historical Emergence of Real Virtuality Technologies" (UC San Diego, 2021).

12 Steve Jones, "Better Off Dead: Or, Making It the Hard Way," in *Afterlife as Afterimage: Understanding Posthumous Fame*, ed. Steve Jones and Joli Jensen (New York: Peter Lang, 2005), 3.

13 Keith Caulfield, "Tupac's Virtual Coachella Appearance Spurs Huge Sales Bump," *Billboard*, April 26, 2012.

14 SnoopDoggTV, "Tupac Hologram Snoop Dogg and Dr. Dre Perform Coachella Live 2012," (YouTube, 2012).

15 Paul Sanden, "Virtual Liveness and Sounding Cyborgs: John Oswald's 'Vane'," *Popular Music* 31, no. 01 (2012).

16 Philip Auslander, "Musical Persona: The Physical Performance of Popular Music," in *The Ashgate Research Companion to Popular Musicology*, ed. Derek B. Scott (Farnham & Burlington: Ashgate, 2009), 303.

17 Herbert Blau, *Blooded Thought: Occasions of Theatre* (New York: PAJ Press, 1982), 113.

18 Herbert Molderings, "'Life Is No Performance': Performance by Jochen Gerz," in *The Art of Performance: A Critical Anthology*, ed. G. Battcock and R. Nickas (New York: E.P. Dutton, 1984).

19 Sanden.

20 Philip Auslander, "Against Ontology: Making Distinctions between the Live and the Mediatized," *Performance Research* 2, no. 3 (1997).

21 Philip Auslander, "Liveness, Mediatization, and Intermedial Performance," *Degrés: Revue de Synthèse à Orientation Sémiologique*, no. 101 (2000).

22 Henry Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York: New York Univ. Press, 2006).

23 Auslander, "Musical Persona: The Physical Performance of Popular Music," 308.

24 Ibid., 305.

25 Philip Auslander, "On the Concept of Persona in Performance," *Kunstlicht* 36, no. 3 (2015): 76.