Dead Stars and 'Live' Singers: Posthumous 'Holographic' Performances in the US and Japan

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This essay examines the recent controversy concerning the modelling of performing 'holograms' (a concept I will qualify shortly) on deceased singers in the USA and in Japan. Since the 2012 digital recreation of hip-hop artist Tupac Shakur, who died in 1996, 'live' concerts starring the holographic doubles of late, well-known singers such as Michael Jackson (2014) and Whitney Houston (2020) have been organised in the USA. In Japan, the public broadcaster NHK collaborated with Yamaha to produce a concert in 2019 that featured 'AI Misora Hibari', a synthetic double of the late Japanese singer Misora Hibari. Misora, who rose to fame in the period following World War II, is regarded as one of Japan's greatest singers of the 20th century.[1] In this essay, I examine how the reception of AI Misora Hibari's performance paralleled and diverged from the reception of some of its Western counterparts, referring to the debates that sprang from live performances featuring the digital double of Tupac Shakur.

Existing discussions on holographic performances of deceased musicians who were famous in Western popular music generally focus on ethical concerns and the 'inauthenticity' of such performances, and attend to a visual paradigm. Debates around these performances have tended to focus on the visual representations of artists. As well, such performances' critics in the Western context have seemed preoccupied with the question of future holographic technologies, and have raised concerns for technological encroachment on artists' rights, and emerging commercial interests. In contrast, I will discuss the positive reception in Japan for AI Misora Hibari by the people who were closest to the late singer and her fans, highlighting culturally-specific, yet potentially hidden, characteristics of the posthumous holographic performance of the song *'Arekara* (Ever Since Then)' (2019). *'Arekara'* is an *enka* song, a type of popular ballad that emphasises emotion and, importantly, nostalgic sentiment. I will explain in what ways I see AI Misora Hibari as a metonymical sign for Japan's post-war recovery, rapid economic growth in the mid-1950s to the early '70s, and its relative economic decline since the 1990s. I will argue how such sentiment meshes with a Japanese quasi-spirituality that characterises custom and tradition.

This essay contributes to *Sound and Robotics* by highlighting the significance of voice, and the implications of culturally specific contexts for robotics research.

Before I examine AI Misora Hibrari, I will first consider some 'live' concerts of the holographic doubles of deceased pop singers in the USA in order to set the context and the basis for my comparative discussion.

Posthumous 'holographic' performances of deceased singers

In the mainstream popular music scene of the global new millennium, 'live' music performances through the use of the 'holographic' image are presented as an entertainment spectacle. These spectacular shows deploy a modern version of 'Pepper's Ghost', the 19th century optical trick in which an image of an actor below the stage is projected onto a pane of glass that is placed between the stage and the audience. With clever lighting effects, the glass becomes invisible, allowing a projected image to appear 3D-like (Stout 2021). It is not a true hologram, as there is no recording of 3D images that is played back for the audience, but the Pepper's Ghost visual trick creates a startlingly believable 3D image through what we might

call 'holographic effects' (Nick Smith, president of AV Concepts, audio-visual solutions provider, quoted in Dodson 2017). (In the rest of this essay, I will refer to these effects as holograms.) Contemporary holographic music performances have reinvigorated this technique with high-definition CGI projection and advanced AV systems.

Iconic singer Madonna's collaborative performance with Gorillaz, a UK virtual band who presented themselves as animated characters in the 2006 Grammy Awards ceremony would be one notable example of the contemporary utilisation of this holographic technique. Madonna performed through a human-sized holographic image of herself with the virtual band. The moving image of Madonna sang and moved between the animated images of Gorillaz members, successfully presenting this display as a 'live' performance, which was followed by a performance by the 'real' Madonna, who wore the same costume as her image (Kiwi 2017). The most recent example of a holographic 'live' show appeared in ABBA's comeback concert *Voyage* in 2022. On stage, images of ABBA's members are turned into 'eerily de-aged digital avatars' through CGI, or what have been dubbed 'Abbatars' (Petridis 2022). For producer Ludvig Andersson, *Voyage* presented these avatars as real, 'young' ABBA members rather than 'four people pretending to be ABBA' because they had clearly aged (Stout 2021).

Significantly, instead of presenting holographic doubles of living artists, there have also been 'live' concerts starring the digital doubles of *deceased* singers and musicians, an approach that quickly became highly controversial. Such concerts include those featuring holograms of well-known singers and musicians from diverse genres of American popular music: hip-hop artists, such as Tupac Shakur (2012), Eazy-E (2013), and Ol' Dirty Bastard (2013); pop singers, including Michael Jackson (2014) and Whitney Houston (2020); the heavy metal singer Ronnie James Dio (2017); rock'n'roll musicians of the 1950s Roy Orbison and Buddy Holly (2019); jazz rock musician Frank Zappa (2019); and opera singer Maria Callas (2018).

The very first case of such holographic performances was a duet by the rapper and media personality Snoop Dogg and a digitally recreated, animation of the late Tupac Shakur in the 2012 Coachella Valley Music and Arts Festival. This event gave rise to critical debates highlighting ethical concerns. Critics saw it as an abuse of the dead artist's legacy. The digital performance of Tupac Shakur is worth discussing in further detail.

At the end of Dr. Dre and Snoop Dogg's set at the Coachella festival, the very realistic, shirtless figure of Tupac Shakur appeared to rise from the stage. The digital double shouted 'What the f— is up, Coachellaaaaa!' in front of the crowd of 80,000 (Dodson 2017). The digital Tupac Shakur then performed *Hail Mary* (1997), one of his posthumously released singles. The second song was *2 Of Amerikaz Most Wanted* (1996) with Snoop Dogg, a re-enactment of a hit duo performance that the two had earlier sung in concert at the House of Blues in Los Angeles in July, 1996. Notably, this was Shakur's last live performance before he was murdered in September of the same year (Dodson 2017). At the end of the second song, the digital Shakur stood in the centre stage with his head down, then disappeared with a lighting burst that splintered into fragments. A stunned audience was re-energised by the appearance of Eminem, who began his act at Coachella.

The creation of a holographic double of the late Tupac Shakur for the Coachella event was an entrepreneurial idea that was conceived by rapper, producer, entrepreneur Dr. Dre, who organised the show along with Snoop Dogg for performance on two consecutive Sunday nights in April 2012. Tupac Shakur, along with Dr. Dre and Snoop Dogg, was a key artist

produced by the American record label Death Row Records in the 1990s. Dr. Dre was also the co-founder of Death Row Records. Leaving Death Row Records in 1996, he started his own record label, Aftermath Entertainment, and later signed prominent rappers such as Eminem and 50 Cent to the label. According to journalist Aaron Dodson, by creating the AI double, Dr. Dre appropriated Tupac Shakur's view that Machiavelli had faked his own death, such and that 'Tupac Shakur faked his death and is still alive' (2017). Fans and music journalists also speculated that Dr. Dre would organise a tour with the virtual Tupac Shakur (Dykes 2012b). The rumour was denied by Dr. Dre during the Coachella festival (Dodson 2017).

From a business point of view, Coachella was a highly successful event, and the holographic participation of Shakur contributed significantly, resulting in 15 million views on YouTube, 50 million Google search for the digital Tupac Shakur, a '500%' increase in sales of Shakur's album, 1,500% increase in downloads of Shakur's song *Hail Mary* (Wolfe 2012). Fans were commenting on Twitter that, to see the virtual performance of Tupac Shakur, they would make sure to attend the Coachella festival in the following year, and would attend a tour of it if there ever were one (Dykes 2012a). As an indication of the success of the holographic Shakur within the industry, Digital Domain, a Hollywood visual effects and digital production firm that created the CGI images of Tupac Shakur, won a prestigious Cannes Lions Titanium Award at the 59th annual Cannes Lions International Festival of Creativity in 2012 (Wolfe 2012).

However, the performance of digital Tupac Shakur received a mixed reception from his fans. There was a great degree of confusion: i.e., 'many people didn't know what to make of it' (Dodson 2017). The holographic effects that created the figure of Tupac Shakur were so effective that they may have generated 'something authentic and visceral about the projection of Tupac that Coachella attendees experienced' (Dodson 2017). While fans were amazed to see the holographic performance, many of them expressed mixed feelings, using terms such as '"freaky," "weird," "scary," and "troubling."' (Jones, Bennett, and Cross 2015, 130). This kind of feeling toward non-human entities and representations is often described as uncanny, related to the well-known concept of 'the uncanny valley' coined by Masahiko Mori in a landmark 1970 paper. Mori is a pioneering figure in the history of Japanese robotics. In this paper, Mori sets forth a hypothesis that 'as robots appear more humanlike, our sense of their familiarity increases until we come to a valley', at which point robots become eerie (Mori 2012, 98). Digital Tupac Shakur fell into the 'uncanny valley', as it was presented not only as a resurrection of a deceased star, but one who died violently, as signalled by the inclusion of *Hail Mary*.

Significantly, the event was also seen as an exploitation of the dead. Journalist Tony Wong described the event as '[c]reepy maybe, but profitable': a succinct characterisation that captures the ambivalence of fans and critics concerning the digital recreation of Shakur (Wong 2012). The ethical issues around 'the resurrection of Tupac "from the grave,"' are more precisely to do with appropriateness and legitimacy (Jones, Bennett, and Cross 2015, 129). According to Nick Smith of AV Concepts, the visual technologies company that projected and staged the digital performance, Dr. Dre had a vision to '"bring [the digital image of Shakur] back to life"' and '"to utilize the technology to make it come to life"' (Kaufman 2012). For journalist Jason Lipshutz, however, the re-creation of Shakur's stage performance was felt as 'incorrect' in some way, and it looked like an 'imitation' (Lipshutz 2012). The digital performance was also seen as an act of 'profiting off of live re-creations of dead artists' music' (Lipshutz 2012). While Dr. Dre had the approval of Tupac Shakur's

estate and his mother Afeni Shakur (Ugwu 2012), it is impossible to determine if the performer himself would have agreed to perform forever in digital form. The religious tone of the 'resurrection' image of Shakur in the performance - his emergence from the bottom of the stage, the gold crucifix necklace, and the song 'Hail Mary'- sent the audience the clear message that they were invited 'to accept the presence on stage "as Tupac," not a holographic tribute to him' (Jones, Bennett, and Cross 2015, 129). Under the influence of drugs and alcohol, some audience members were 'confused and thought [Tupac Shakur] might be alive now', and they questioned 'why are [Dr Dre and Snoop Dogg] doing this [?]' (Dykes 2012a). The digital performance of Tupac Shakur triggered mixed reactions from the producers, the audience, and the critics, dividing opinions.[2]

The ambivalence felt by Tupac Shakur's fans in 2012 regarding his digital double did not deter music promoters, record labels, technology-driven creative entrepreneurs, and the estates of deceased singers to create 'holographic' doubles of other late pop music stars. The business opportunities arising through this new technologically enhanced representation sought to take advantage of 'people's desire for reliving an experience with their favorite artists from the past' (Marinkovic 2021). In 2013, Rock the Bells, an annual hip-hop festival, included holographic performances of Eazy-E and Ol' Dirty Bastard. The 2014 Billboard music awards presented Michael Jackson's holographic double. As concerts generate 'the most profitable revenue' (Marinkovic 2021), music producers also organised touring concerts involving holographic performances, such as those featuring the late heavy metal rock vocalist Ronnie James Dio in 2017 and, in 2019, rock musician Frank Zappa. To avoid the expensive and complex staging requirements for the Pepper's Ghost method, advanced computer rendering and high-resolution projection were used for the digital performances in the 2018 tours of opera singer Maria Callas and singer and songwriter Roy Orbison (with Buddy Holly in 2019). The touring performances of 'Holographic' Roy Orbison (2018) and Frank Zappa (2019) were highly successful at the box office, re-emphasising the demand for such shows (Binelli 2020). A show featuring Whitney Houston's digital double was organised in the UK in 2020, and in Las Vegas in 2022, with a plan for it to tour in the USA in 2023 (Zeitchik 2021).

There is a tacit acknowledgement in the music industry that there is (and will continue to be) a market for holographic performances of deceased music celebrities. Demand will continue because the current music touring market is dominated by 'artists who [are] at least 60 years old, among them Cher, Kiss, Fleetwood Mac, Paul McCartney, Dead & Company and Billy Joel' and the top three musicians are 'The Rolling Stones, Elton John and Bob Seger' (Binelli 2020). Understanding the commercial opportunities of this situation, promoters like Ahmet Zappa, the son of Frank Zappa, representative of the Zappa estate, and the Executive Vice President of Eyellusion, the hologram company that created the digital doubles of Ronnie James Dio and Frank Zappa, argue for technological intervention. As Kory Grow indicates, Ahmet Zappa has stated that '"Other artists are going to pass away, and if we want to keep having these magical experiences, technology is going to be the way to keep people engaged and hearing the music"' (2019).

The technological extension of deceased superstars' musical careers raises serious concerns for some, not least because the practice reflects the music industry's insatiable appetite for monetisation. As well, established stars could continue 'their market domination after death', potentially limiting opportunities for younger artists (Myers 2019). Critics describe these digital performances with phrases such as 'morbid cash grab' (Moran 2019) and '"ghost slavery"' (Myers 2019). There is no consent, as such, from the deceased artists (Moran 2019;

Marinkovic 2021). In relation to such ethical concerns, some critics point out that there are emotional risks for fans. Because the technologies have not yet been perfected, performances can become flat and repetitive, as they cannot include spontaneous improvisation, and so they cannot sustain excitement for long (Moran 2019; Grow 2019; Marinkovic 2021). While some fans may feel that their memories of the original performances of a pop icon become tarnished when the market is made up of holographic performances, but on the other hand 'the novelty factor and affordability will be a worthwhile tradeoff' for others (Myers 2019). As long as the fans in the second category do not mind the potentially repetitive spectacles of holographic doubles of their beloved musical icons, the business of holographic concert production is likely to continue.

It is therefore not surprising that some critics in the Japanese and US contexts refer to Hatsune Miku as evidencing an acceptable style of holographic performance. Hatsune Miku is a commercial software product that synthesizes a female singing voice. It was released in 2007 by Japanese company Crypton Future Media, a media company founded by Itō Hiroyuki (Crypton Future Media 2007). Essentially, a user inputs lyrics and a melody to create a song that is sung by this synthesised female voice. The voice can suggest that there is a human being 'inside' the vocal synthesiser. The product uses Yamaha's computer music software engine called VOCALOID. Crypton Future Media launched Hatsune Miku with the animated image of a slender teenaged girl with long, turquoise ponytails. Hatsune Miku has a typical anime face that features large eyes. The use of this kind of a cartoon image was a promotional strategy to make the character more appealing.

Itō is an advocate of 'consumer generated media', a phrase that refers to media products that consumers themselves create (Kubo 2011). Itō allows the generation of music pieces and images featuring Hatsune Miku by non-commercial users. Hatsune Miku became a popular image and video meme proliferating on the Internet. The staging of a 'live' concert with projected holographic animation of the character was organised by Crypton Future Media in collaboration with SEGA in 2009. 'Live' concerts of Hatsune Miku became annual events. These concerts have attracted thousands of Hatsune Miku fans online. Lady GaGa used a singing animation of Hatsune Miku to open her concert tour ArtRave: The Artpop Ball in 2014 (Baseel 2014). More recently, Hatsune Miku was due to appear at the 2020 Coachella Valley Music and Arts Festival, which was cancelled due to the global Covid pandemic (Cirone 2020).

The popularity of Hatsune Miku can be attributed to its openness to fans' engagement. Jones, Bennett, and Cross observe that 'Hatsune Miku fans are able to participate generatively in the writing of the hologram's "personality"' (Jones, Bennett, and Cross 2015, 129). Fans' own creation of Hatsune Miku songs, images, and video footage is 'the virtual embodiment of a collective idea, a meme in human form' (McLeod 2016, 505). Critics of the use of holographic singing avatars argue that people consuming such products may feel comfortable with Hatsune Miku because they are more accepting of animated images that 'are *brought to life*, rather than actual human bodies that are brought *back* to life' (Jones, Bennett, and Cross 2015, 129, original emphasis). The artificial existence of Hatsune Miku is understood as such, and is appreciated by fans (Michaud 2022). It is a very different aim to 'resurrect' a deceased artist for business reasons.

It is therefore useful to consider an alternate conceptual framework for a holographic performance of a dead singer, one that, I suggest, is concerned with communality, a context that partly explains Hatsune Miku's popularity.

As a case study that also emerges from the Japanese cultural context, I will now discuss AI Misora Hibari. AI Misora Hibari did not escape from criticism that was very similar to the criticism that holographic performances by Western singers were subject to. However, it is my contention that AI Misora Hibari presents a unique instance of the melding of the fan community and culturally specific nostalgia that gave rise to a context in which AI Misora Hibari would be appreciated and accepted.

'Resurrection' of Misora Hibari
Japan's public broadcasting station NHK (Nippon Hōsō Kyōkai, meaning the Japan Broadcasting Corporation), collaborating with Yamaha Corporation, organised the 'AI (artificial intelligence) Misora Hibari' project in 2019, which aimed to reproduce the singing voice of the late Misora Hibari. Misora was a legendary, highly popular singer of the post-war era in Japan. AI Misora Hibari used Yamaha's VOCALOID AI singing synthesis technology, which was a more developed version of the VOLCALOID technology that was deployed for Hatsune Miku, combined with artificial intelligence and 4K 3D video projection.

Unlike the Western counterparts of holographic performances, in which existing recordings of the deceased singers were used, VOCALOID AI analysed Misora's voice and was able to 'sing' '*Arekara*', a song that was written for the project, by putting the singer's phonemes together. '*Arekara*' was written by Akimoto Yasushi, a well-known lyricist and record producer who wrote the lyrics for '*Kawa no nagare no yō ni* (Like The Flow of The River)' (1989), Misora's last song, released as a single, before her death in 1989. In September 2019, AI Misora Hibari was presented to a live audience, including a family member of Misora's, people who had had close professional relationships with her, and the singer's devoted fans. A film documentary of the project titled *AI de Yomigaeru Misora Hibari (The resurrection of Misora Hibari by AI)* (2019) was aired on television in the same month. AI Misora Hibari was also presented in Kōhaku Uta Gassen, an annual New Year's Eve television special broadcast by NHK.

AI Misora Hibari was well received at its first showing by its assembled audience members, who were closely involved in the production, as well as a group of long-term fans who provided feedback during the process of creating AI Misora Hibari. However, the public's views on AI Misora Hibari have been divided. As may have been anticipated, the main criticism concerning AI Misora Hibari was whether it was appropriate to create a digital double of Misora Hibari at all. Singer-songwriter Yamashita Tatsurō criticised AI Misora Hibari as a 'blasphemy' in January 2020 (Kimura 2020, my translation). Yamashita's underlying message that was communicated by the use of the term is that the essential qualities of Misora's singing should not and cannot be reproduced by artificial intelligence (Kimura 2020). A similar point is also raised by actor Nakamura Meiko, who was a close friend of Misora's: 'I want the actual person [Misora Hibari] to be here and sing again for us' (quoted in Nishioka 2019, my translation). For Yamashita and Nakamura, the uniqueness of Misora's live presence simply cannot be replaced or synthesised. It is also possible to speculate that perhaps Yamashita would not wish his *own* singing voice to be similarly turned into a synthetic voice through the use of artificial intelligence (Suzukake 2020). Even if Japanese fans felt that a synthesisation of her voice would be acceptable, there is also the question of what visual representation (or avatar) would truly reflect who the famous person really is (Koyama 2020). The 'wrong' representation could taint the appropriately reflective individuality of a dead celebrity.

These criticisms express an anxiety that the uniqueness of an individual is being violated in order to be commodified, as for their Western counterparts. Fukui Kensaku, a lawyer specialising in copyright law in Japan, warns of the perils of the commodification of AI doubles of celebrities, given the lack of clarity in Japanese copyright law concerning the rights over such products. He refers to 'deepfake' media technologies that can, for example, replace a person's face with that of another person on video (quoted in Nishioka 2019). The creation of AI digital doubles would be legal in Japan as long as it does not violate the 'honour' and 'privacy' of a dead celebrity (Fukui in Nishioka 2019).

On a technical level, the appearance and gestural movement of the projected image of Misora Hibari seemed somewhat crude in contrast to the level of sophistication of the holographic image's vocal component. The holographic image did not match the high standards for sound quality generated by Yamaha's VOCALOID AI. AI Misora Hibari was criticised for being 'too mechanical' or 'creepy' (Harada 2020, my translation). Some audience members expressed the view that, as Misora passed away 30 years ago, people still remember her singing, and therefore differences between the actual and the copy may be noticeable (Suzukake 2020). In contrast to the strong visual presence of Tupac Shakur's digital double, AI Misora Hibari's visual representation was mediocre, which seemed to degrade or demean Misora Hibari, according to critics, who dismissed it as 'a gimmick' (Michel 2020).

Despite such concerns, for the audience attending AI Misora Hibari's first performance, the AI double created a special occasion that transcended ethical questions and technological weaknesses. I would like to discuss this transformative moment, as I see it as a culturally specific instance in which, paradoxically, it would not have been appropriate for a human, that is, a live Misora Hibari impersonator, to perform. For reasons that I will now discuss, only a *non-human performer,* like a holographic double of the dead singer, could have succeeded as thoroughly as AI Misora Hibari did. The success of the digital performer can be almost entirely attributed to its particular voice performance.

Misora Hibari was famous for her unusually talented singing abilities. She was able to shift gracefully from 'natural voice (*jigoe*)' to 'falsetto voice (*uragoe*)' and 'dramatic melismas and throbbing vibratos (*yuri*)' (Tansman 1996, 127). Yamaha's team of sound engineers and audio scientists stored recordings of Hibari Misora's singing and speech in VOCALOID AI, using the audio synthesis technology to carry out 'machine learning' (automated learning) and 'deep learning' (replicating a learning capability that mimics the human brain) to duplicate the singer's voice at the level of phonemes, as I mentioned earlier. The feedback the team received from the deceased singer's longtime fans was critical. Interestingly, they advised that the singing of the vocal double produced in VOCALOID AI did not entirely sound like the real Misora. It sounded flat to them (NHK 2019). The Yamaha sound design team later discovered that Misora Hibari's very unique vocalisations included 'overtone singing' and 'derivate misalignment of singing timing and interval'. VOCALOID AI was reprogrammed to replicate this vocal styling in its singing of the newly composed song '*Arekara*' (NHK 2019).

The performance coupled the replication of such subtleties with effects described by voice theorist Steven Connor as 'the embodying power of the voice' in his study of ventriloquism. Significantly, ventriloquism is highly successful at generating what Connor calls 'the vocalic body' (Connor 2000, 35–36). This means that a dummy or even a non-anthropomorphic object can become a speaking 'body', as it is animated by the ventriloquist's voice. For AI Misora Hibari, the vocalic body that can be said to have emerged from its 'dummy', that is,

the avatar of the visual representation, however simplistic, was supported to a great extent by some registers of cultural meaning that are particularly Japanese: i.e., the use of *enka* music, which is a type of ballad in Japanese popular music, and Japanese cultural traditions in dealing with the dead. I will now discuss each of these in turn, and how they may have influenced the positive reception of the voice of AI Misora Hibari.

Enka singer Misora Hibari

Misora Hibari is regarded as a quintessential *enka* singer. Lyrics in *Enka* are sentimental and melodramatic, and full of pathos concerning lost love, loneliness, and pain (Martin 2008); yearning for 'a lost past' or 'an unattained future' (Tansman 1996, 116); and longing for one's place, one's home town (Yano 2002, 18). Sharing similarities with Blues melodies and often utilising a vibrato vocal technique, *Enka* songs actively reflect the hardships of ordinary people, and especially those whom the Blues might refer to as 'down and out'. The 'hard luck' narratives of *enka* express the nostalgia of such people for an idealised past situation or life circumstance (Martin 2008). *Enka* became very popular in the late 1960s, corresponding with the anti-establishment movements of Japan's disenfranchised youth and the working class during that decade (Yano 2002; Wajima 2010). *Enka* was seen as 'an alternative to imported [Western] musical styles', and it was meant to provide '"authentic" Japanese experience' to a wide audience (Tansman 1996, 111).

Misora was seen as the embodiment of the Japanese spirit of 'postwar forbearance' and 'stoicism and endurance' who could bind people together with the 'honesty and sincerity' she projected in her stage persona (Tansman 1996, 105 and 107). While the late singer has been described as the '"Queen of *Enka*"', she has also been labelled the '"Queen of Showa"', as her death in 1989 occurred at the same time as, and, for many Japanese people, has signified the symbolic closure of, the Showa period (Martin 2008). There is an important correlation, therefore, between *enka* and the Showa era. *Enka* represents songs that deeply symbolise the Shōwa-era, the period of the 20th century between 1926-1986, corresponding with the reign of Emperor Shōwa (Hirohito), during which Japan experienced significant cultural and economic change. Misora is further described as the '"queen of tears"' because the singer's performance style demonstrated crying that is 'profuse, unchecked and unwiped' (Yano 2002, 121). Misora expressed 'emotion and pain' that reflected the central concerns of *enka*. *Enka* singer Misora Hibari became an idealised image of the 'Showa woman', which has been mythologised since the deaths of the singer and the emperor (Tansman 1996, 107). Misora emblematised the Showa woman's traditional sensibilities and presentation of herself as a unifying figure of diligence through adversity.

The *enka* song that AI Misora Hibari performed in its first public show, '*Arekara*', also moved the audience. It was written by Akimoto Yasushi, a well-known television producer and lyricist, and accompanied by a highly emotive *enka* melody written by Yoshinori Satō especially for this event, as I have mentioned. Akimoto had written *Kawa no nagare no yō ni* (*Like the Flow of the River*), the last single produced by Hibari Misora in the same year as her death in 1989. These choices were selected carefully, and would have clearly associated this *enka* performance with those of the real Misora Hibari.

'*Arekara*' fully embodies the nostalgic ethos of *enka*. Its lyrics first describe a sunset as a metaphor signalling farewell to a loved one, leaving behind a sense of regret. The second part of the song describes a night illuminated by stars that cleanse any negative feelings and offer hope for tomorrow. Songwriter Akimoto's lyrics are written as if the singer, the voice of Hibari Misora, were talking to the audience, addressing them directly. There are two key set

lines that repeat. The first is: 'How have you been since then? I too have become old. I'm still humming an old song without realising it. If I look back, it was a happy time, don't you agree'. The second reprises these themes of aging, memory, and yearning: 'How have you been since then? The long time has passed. I want to sing an old song, which I had sung many times. Yes, memory is precious to one's life' (NHK 2019, my translation). The lyrics are written in the first person singular, as if Misora is gently talking to the audience in a caring and familiar way. The song also includes *serifu*, an oral address to the audience without singing. The Misora double states: 'It has been a long time since I saw you last. I have been watching you. You've been working hard. Please keep up the hard work for my sake' (NHK 2019, my translation). It is easy to imagine that these comments must have been delivered as comforting messages for devoted Misora fans, reflecting Misora's perceived persona as a 'giver of succour', as Tansman indicates (1996, 117).

Indeed, as shown in the documentary *The Resurrection of Misora Hibari by AI*, the first performance of AI Misora Hibari in 2019 moved the audience members, including those who had had close relationships with the late singer or were devoted to her memory for decades, to tears (NHK 2019). These fans, many of whom were in their 70s, had lived through the Showa era, which, in effect, Misora Hibari had emotively narrated for them. Fans expressed their excitement when they entered the venue to observe the first public live performance (NHK 2019). Kazuya Kato, the son of Misora, commented that of course he was aware that his mother would not literally be brought back to life, but he appreciated that the most advanced AI technologies would be able to fill the 'time gap' for him since her death (NHK 2019). I suggest that the emotional responses by Misora's son, close colleagues, and fans are testimonies to the effectiveness of AI Misora Hibari in terms of its framing with regard to the real Misora's emblematising of both the deep emotion typical of *enka* and of sentiments tied to a nostalgic view of the Showa era. Significantly, these factors also resonated with longstanding Japanese cultural traditions regarding the dead, i.e., the *kuyō* (commemoration service) and the involvement of *Itako* (blind female shamans). In these cultural practices, which persist in present-day Japan, people are allowed to be demonstrably emotional, and are even expected to be so.

Japanese cultural traditions and the dead
At an event involving the Buddhist practice of *kuyō*, family members come to a temple for what is essentially a memorial service for a deceased person, laying flowers and incense at the altar. In Japan's indigenous belief system, when a person dies, the spirit leaves the human body and flies off to another world. The spirits of the dead return at these events. It is therefore not an uncommon practice for family members to 'talk' to the dead at the altar as if they are listening. The theatrical precondition of 'as if', coupled with the particular backdrop of temple and graveyard, is essential to the emotive part of *kuyō*. I suggest that the first performance of AI Misora Hibari sought to facilitate a flow of emotion in relation to the dead in ways that are very similar to the tradition of *kuyō*.

I'd also like to suggest that cultural knowledge regarding *Itako*, blind female shamans, is also relevant here. *Itako* are traditionally understood to act as mediums who call upon the spirits of the dead, allowing relatives to communicate with them. Religion scholar Omichi Haruka indicates that although the actual *Itako* practice was originally site-specific, localised to a northern region of Japan, the history of the *Itako* in the 20th and in the 21st centuries has demonstrated a process of simplification and delocalisation (Oomichi 2017, 246). According to Omichi, in the 1960s in Japan, the notion of the *Itako* became popularised along with the concept of a 'rediscovered' older Japan, which was regarded as the antithesis of the

Westernised, modern Japan (2017, 90–91). The *enka* received renewed attention in the same period, the 1960s. While AI Misora Hibari was not explicitly referenced in relation to *Itako*, I suggest that the same cultural logic is apparent, that is, AI Misora Hibari can conjure up past relationships, and even the sensibility of a past era, by essentially channelling the dead for its audience.

Views regarding the dead, as expressed in the practices of *kuyō* and *Itako,* are cultural knowledge or internalized, customary thinking that Japanese people are not conscious of in everyday life. In this sense, *kuyō* and *Itako* can be discussed in terms of religion scholar Inaba Keishin's notion of 'unconscious religiosity' that describes a vague sense of connection beyond the boundaries of the self to ancestors, gods, Buddha, and the community (2011, 15). These ideas become meaningful for Japanese individuals through recitation and other forms of repetition at cultural events such as *kuyō* and *Itako.* In other words, the cultural practices of *kuyō* and *Itako* permits a 'feeling' for and a 'performance' of dialogue with the dead. I argue that AI Misora Hibari's performance capitalised on this same logic, even to the extent of emotionally signifying a past era that would have complex, loaded meanings for an audience that lived through it, and may desire to view it nostalgically.

The Showa era was indirectly referenced in *'Arekara'*. The song's lyrics 'If I look back, it was a happy time' could be taken to refer to Misora's career from the 1950s until her death in 1989, which was also a prosperous period for Japan, until the economic crash of the late 1980s/early 1990s. For anthropologist Christine Yano, *enka* is simultaneously 'a technology for creating national and cultural memory and it is an archive of the nation's collective past' (Yano 2002, 17). Because the audience for the first performance of AI Misora Hibari consisted primarily of the generations that lived through the Showa period, the song conveys a nostalgia for this idealised, shared past. Essentially, remembrance of the Showa era has been conflated with remembrance of Misora Hibari. The audience's longing for Misora is integrally associated with memories of this past period, as both describe a 'better' past that would have seemed, in the 1960s and 1970s, out of reach. The unsurmountable distance of the complicated present from a mythologised past fuels a yearning desire for a 'lost' object, as literary scholar Susan Stewart discusses as 'the desire for desire' (1993, 23), which she sees as a fundamental principle for nostalgic feeling to flourish.

Significantly, *enka*'s calling up of nostalgic feeling, the desire for a simplified past that never actually existed, is *instrumentalised* in relation to AI Misora Hibari. I will explain this point further after discussing the particular ways that *enka* codifies emotion and memory.

Codes of *enka*

Enka generates nostalgic feeling effectively through the Japanese concept of '*kata*', meaning a repertoire of patterned forms. In his book *Empire of Signs,* Roland Barthes (1983) examines Japanese life as composed of social rules and manners embodied in multiple modes of performance (corporeal, verbal, visual, aural, kinetic, and spatial) in the forms of writing, gestures, architecture, or theatrical forms such as Kabuki. For example, as Barthes explains it, Japanese traditional arts function through abstracted expressions that are specific to each genre: i.e., the '*kata*' for that genre. These are passed on and repeated from one generation to another by the masters of each genre. This tradition of *kata* explains, for instance, why the audience for Kabuki can enjoy and take seriously an old, male *onnagata* actor playing a young female role without his performance seeming grotesque or comical. It is the legibility of the *kata* in Kabuki for an audience that understands its codes as icons of distilled gestures that allows the expressions of the *onnagata* actor to be understood and appreciated. In

Barthes's words, famously interpreting Japanese culture as a system of signs, 'Femininity is presented to read, not to see' (Barthes 1983, 53). The audience for Kabuki appreciates the skilled delivery of this unique arrangement of referents within a familiar framework – that is, the expert audience can enjoy this particular pattern. Importantly, the emphasis here is on internalisation and embodiment, rather than superficial imitation. Literal visual resemblance is not important for this traditional art. What is important is establishing a mutual understanding between the actor and the audience through a kind of abstraction that requires an audience that understands the its culturally encoded viewing perspective.

Enka is appreciated through a similar cultural, and *historical*, codification. As Yano pints out, *enka* exhibits 'varying degrees of "patternedness" that can include the smallest nuance of breathiness, the lifting of a heel, and the streaming of tears, as well as the sounds, sights, and situations that evoke those tears' (Yano 2002, 25). In the sign system of *enka*, emotion and pain are presented to be read in terms of a repertoire of codified expressions that signal gender as well as Showa-era attitudes. As customary responses that are typical in Japanese traditional performing arts, such as Kabuki, fans respond to well executed singing by *enka* performers with applause or shouts at appropriate moments in the performance.

My contention is that AI Misora Hibari, seen as enacting the particular interplay of signs for the genre of *enka*, worked reflexively for the audience at the first showing. AI Misora Hibari was built as an assemblage of signs that were drawn from the late popular singer's signature gesture in terms of voice, singing, image, and movement. The vocal signs of the deceased singer seem to have been extremely convincing. As such, at its inaugural performance, AI Misora Hibari became a medium to trigger the memory of the singer for each audience member, as well as catalysing collective memory for the attendees. A 'collective memory' can recreate 'an image of the past' through 'certain instruments', and this image takes shape in terms of 'collective frameworks of memory', as French philosopher and sociologist Maurice Halbwachs puts it (1992, 40). As I have discussed above, *enka* is such an instrument, giving rise to vivid images (for a knowledgeable audience) of the lives of ordinary people, especially those living at the edges of Japanese society. These are precisely the people who were forgotten and disenfranchised during the late postwar period under a lengthy, and still ongoing, Americanisation of the country in which entrepreneurialism, capitalism, and class mobility became more important than perceived community.

Japanese studies scholar Alan Tansman stated: 'To her fans, Misora Hibari remains a vibration from the past [the 1960s and the 1970s] that echoes into the future' (Tansman 1996, 129). These remarks suggest that this kind of 'reliving' can be a positive and forward-thinking event for Japanese society, not merely a closed loop of cultural and historical regression. Tia DeNora, a sociologist specialising in music, argues that 'as an identification with or of "the past"', is part of the work of producing one's self as a coherent being over time, part of producing a retrospection that is in turn a resource for projection into the future' (DeNora 2000, 66). In other words, the past evoked through music can provide 'a resource for the reflexive movement from present to future' (DeNora 2000, 66). Such deep recollections, which link the past to one's self in the present to a 'projected' common future that draws upon the past and present, can help a society to move forward in a stable and coherent way.

Just like the Phoenix Concert, symbolising the rebirth of the mythical, immortal phoenix, the performance of AI Misora Hibari recalled her 'comeback' concert in 1988 after her illness in 1985, and was a major event before her death in 1989: it was as if Misora Hibari had returned

again. The singer's message of support and empathy for the audience, as emblematised in the song *'Arekara'*, encouraged the audience to look the future, just as the real Misora Hibari had done before.

Conclusion:

In this essay, I have examined posthumous holographic performances of deceased singers in the American context and in the Japanese context. The 2012 performance of the late Tupac Shakur's holographic double was the earliest show that was presented in a 'live' setting, which is to say with a live audience and other highly effective, which brought the troubling idea of 'resurrection' to the fore for its critics, triggering debates on whether or not such a performance was ethically and morally acceptable. Since then, many similar holographic performance events featuring the voice and appearance of deceased pop singers have been organised, although there is no agreement within the industry on fundamental ethical issues concerning these projects. However, in addition to raising similar concerns in the Japanese context, this approach *also* appears to be valued rather differently. This essay has examined the culturally different perspective on these debates that is illustrated by the case of AI Misora Hibari.

It is my contention that the meaning of 'resurrection' concerning AI Misora Hibari was deployed inaccurately by some Japanese critics when they discussed the project. Unlike the performance featuring a holographic Tupac Shakur, the 'resurrection' of Misora Hibari for the audience at the first show was not the 'reincarnation' of the singer. While the holographic image of Tupac Shakur produced a strangely visceral sense of presence for its audience, as is evident in the comments of audience members, the digital image of Misora Hibari was visually imperfect. Instead, it was the highly successful recreation of Misora Hibari's voice by VOCALOID AI that the audience paid the most attention to: it strongly generated the vocalic body of the singer.

The song *'Arekara'* was a newly written *enka* song for VOCALOID AI, not a remastering of an existing recorded song by Misora Hibari. As the audience members were involved in the process of making AI Misora Hibari, their collective frameworks for cultural and historical memory were deliberately activated. This cultural-historical memory was triggered by the enacting of the cultural practices of *enka*, *kuyō* (commemoration service), and *Itako* (the historical, place-specific practice of divination led by female shamans), and, importantly, the positive, nostalgic recalling of the Showa era. These factors were all at play, enhancing the commemorative aspects of this first show in 2019. AI Misora Hibari was, in a strongly symbolic sense, deployed as a 'phoenix' that facilitated a revitalisation of collective memory of the Showa era. It *also* evoked concerning the economically bright outlook of the 1960s and the 1970s in Japan for the audience at the first recital. The evocation of strong feeling was facilitated and even enhanced by these multiple layers of emotive and historical recollection. It was a unique one-off, culturally specific show that could only be performed by non-human performer AI Misora Hibari, untouched by the vagaries of time.

References:

Barthes, Roland. 1983. *Empire of Signs*. Translated by Richard Howard. London: Jonathan Cape.
Baseel, Casey. 2014. 'Lady Gaga Goes Gaga for Hatsune Miku, Makes Virtual Idol Her Opening Act'. *SoraNews24 -Japan News-* (blog). 16 April 2014.

https://soranews24.com/2014/04/17/lady-gaga-goes-gaga-for-hatsune-miku-makes-virtual-idol-her-opening-act/.

Binelli, Mark. 2020. 'Dead Ringers: How Holograms Are Keeping Music Legends Alive'. The Sydney Morning Herald. 17 January 2020. https://www.smh.com.au/culture/music/dead-ringers-how-holograms-are-keeping-music-legends-alive-20200109-p53q0g.html.

Cirone, David. 2020. 'Kyary Pamyu and Pamyu and Hatsune Miku to Turn Coachella "Kawaii" in 2020'. *J-Generation* (blog). 3 January 2020. https://j-generation.com/2020/01/kyary-pamyu-and-pamyu-and-hatsune-miku-to-turn-coachella-kawaii-in-2020/.

Connor, Steven. 2000. *Dumbstruck: A Cultural History of Ventriloquism*. Oxford; New York: Oxford University Press.

Crypton Future Media. 2007. 'Vocaloid 2, Hatsune Miku'. 2007. http://www.crypton.co.jp/mp/pages/prod/vocaloid/cv01.jsp. Accessed on 04-15-2016.

DeNora, Tia. 2000. *Music in Everyday Life*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511489433.

Dodson, Aaron. 2017. 'The Strange Legacy of Tupac's "Hologram" Lives on Five Years after Its Historic Coachella Debut'. *Andscape* (blog). 14 April 2017. https://andscape.com/features/the-strange-legacy-of-tupacs-hologram-after-coachella/.

Dykes, Brett Michael. 2012a. 'A First-Hand Account Of Hologram Tupac's Coachella Performance: "I Was Completely Freaked Out"'. Uproxx. 17 April 2012. https://uproxx.com/music/a-first-hand-account-of-hologram-tupacs-coachella-performance-i-was-completely-freaked-out/.

———. 2012b. 'Hologram Tupac May Be Touring With Dr. Dre Soon'. Uproxx. 17 April 2012. https://uproxx.com/technology/hologram-tupac-may-be-touring-with-dr-dre-soon/.

Freeman, John. 2016. 'Tupac's "Holographic Resurrection": Corporate Takeover or Rage against the Machinic?' *CTHEORY*, Theorizing 21C. https://journals.uvic.ca/index.php/ctheory/article/view/15700.

Grow, Kory. 2019. 'Inside Music's Booming New Hologram Touring Industry'. Rolling Stone. 10 September 2019. https://www.rollingstone.com/music/music-features/hologram-tours-roy-orbison-frank-zappa-whitney-houston-873399/.

Halbwachs, Maurice. 1992. *On Collective Memory*. Translated by Lewis A. Coser. Heritage of Sociology. Chicago: University of Chicago Press.

Harada, Shinya. 2020. '"AI Misora Hibari" Ni Sanpi: Kojin No "Saigen" Giron No Keiki Ni (Pros and Cons on "AI Misora Hibari": Opportunity to Debate on "reviving" the Dead'. *Tokyo Shimbun/Tokyo Web*, 4 February 2020. https://www.tokyo-np.co.jp/article/7226.

Inaba, Keishin. 2011. 'Unconscious Religiosity and Social Capital'. *Religion and Social Contribution* 1 (1): 3–26.

Jones, Angela, Rebecca Bennett, and Samantha Cross. 2015. 'Keepin'it Real? Life, Death, and Holograms on the Live Music Stage'. In *The Digital Evolution of Live Music*, edited by Angela Jones and Rebecca Bennett, O'Reilly Online Learning: Academic/Public Library Edition. UK: Chandos Publishing. https://doi.org/10.1016/B978-0-08-100067-0.00010-5.

Kaufman, Gil. 2012. 'Exclusive: Tupac Coachella Hologram Source Explains How Rapper Resurrected'. MTV News. 16 April 2012. http://www.mtv.com/news/1683173/tupac-hologram-coachella/.

Kimura Shingo. 2020. 'Yamashita Tatsurō, "Bōtoku hatsugen" ni sandō no koe: AI Misora Hibari ni iwakan ga astimatta wake (Support for Tatsurō Yamashita's "blasphemy

comments": The reasons for uneasiness concerning AI Misora Hibari)'. Excite News. 22 January 2020. https://www.excite.co.jp/news/article/Asajo_84512/.

Kiwi, Andy, dir. 2017. *Gorillaz Ft. Madonna - Feel Good Inc & Hung Up Live at Grammy Awards 2006*. https://www.youtube.com/watch?v=CGoSlY2sT04.

Koyama Yasuhiro. 2020. 'Kōhaku de wadai: "AI Misora Hibari" no "naka no hito" no issha ga kataru 'dejotaru hyūman no kanōsei (A topical subject at Kōhaku: A possibility for "digital human" told by an "insider" company who participated in the "AI Misora Hibari" project)'. Business Insider Japan. 3 January 2020. https://www.businessinsider.jp/post-205167.

Kubo, Toshiya. 2011. 'Special Interview'. Inter-x-Cross Creative Center. 2011. http://www.icc-jp.com/special/2011/01/001726.php. Accessed on 04-15-2013.

Lipshutz, Jason. 2012. 'Opinion: The Problem with the Tupac Hologram'. Billboard. 16 April 2012. https://www.billboard.com/music/music-news/opinion-the-problem-with-the-tupac-hologram-494288/.

Marinkovic, Pavle. 2021. 'Hologram Artists — The Future of Live Performance'. *Predict* (blog). 13 December 2021. https://medium.com/predict/hologram-artists-the-future-of-live-performance-9851d2e02ae1.

Martin, Alex. 2008. '"Enka" Still Strikes Nostalgic Nerve Bluesy Ballads Stand the Test of Time, Hold Their Vibrato Own and Enter Japan's DNA'. *The Japan Times Online*, 18 November 2008. https://www.japantimes.co.jp/news/2008/11/18/reference/enka-still-strikes-nostalgic-nerve/.

McLeod, Ken. 2016. 'Living in the Immaterial World: Holograms and Spirituality in Recent Popular Music'. *Popular Music and Society* 39 (5): 501–15. https://doi.org/10.1080/03007766.2015.1065624.

Michaud, Alyssa. 2022. 'Locating Liveness in Holographic Performances: Technological Anxiety and Participatory Fandom at Vocaloid Concerts'. *Popular Music* 41 (1): 1–19. https://doi.org/10.1017/S0261143021000660.

Michel, Patrick St. 2020. 'NHK Raises the Dead for "Kohaku" to Mixed Reviews'. The Japan Times. 10 January 2020. https://www.japantimes.co.jp/culture/2020/01/10/films/nhk-raises-dead-kohaku-mixed-reviews/.

Moran, Padraig. 2019. 'As Frank Zappa Is Resurrected as a Hologram, Expert Warns Wishes of Dead Artists Should Be Considered'. CBC. 3 May 2019. https://www.cbc.ca/radio/thecurrent/the-current-for-may-3-2019-1.5121329/as-frank-zappa-is-resurrected-as-a-hologram-expert-warns-wishes-of-dead-artists-should-be-considered-1.5121464.

Mori, Masahiro. 2012. 'The Uncanny Valley'. Translated by Karl F. MacDorman and Norri Kageki. *IEEE Robotics Automation Magazine* 19 (2): 98–100. https://doi.org/10.1109/MRA.2012.2192811.

Myers, Owen. 2019. '"It's Ghost Slavery": The Troubling World of Pop Holograms'. *The Guardian*, 1 June 2019, sec. Television & radio. https://www.theguardian.com/tv-and-radio/2019/jun/01/pop-holograms-miley-cyrus-black-mirror-identity-crisis.

NHK, dir. 2019. 'AI de Youmigaeru Misora Hibari (Revival of Hibari Misora by AI)'. *NHK Special*. NHK.

Nishioka Yukifumi. 2019. 'Kōhaku shutsujō, AI Misora Hibari, "kimochi warusa" no shōtai: Hō kisei ha hitsuyō ka (Appearance in Kōhaku Uta Gassen, AI Misora Hibari, the sauce of creepiness: Is legal regulation necessary?)'. AERA dot. 31 December 2019. https://dot.asahi.com/dot/2019122900003.html.

Oomichi, Haruka. 2017. *Itako No Tanjō: Masu Media to Shukyō Bunka (The Birth of Itako Shaman: Mass Media and Religious Culture)*. Tokyo: Koubundou.

Petridis, Alexis. 2022. 'Abba Voyage Review: Jaw-Dropping Avatar Act That's Destined to Be Copied'. *The Guardian*, 27 May 2022, sec. Music. https://www.theguardian.com/music/2022/may/26/abba-voyage-review-jaw-dropping-avatar-act-thats-destined-to-be-copied.

Stewart, Susan. 1993. *On Longing : Narratives of the Miniature, the Gigantic, the Souvenir, the Collection*. Durham: Duke University Press.

Stout, Andy. 2021. 'How ABBA's Abbatars Rely on a Victorian Magic Trick'. 2021. https://www.redsharknews.com/how-abbas-abbatars-rely-on-a-victorian-magic-trick.

Suzukake Shin. 2020. 'AI Misora Hibari Kōsatsu: "Shisha heno Bōtoku" no kotoba no omomi wo sitte imasuka? (A thought on AI Misora Hibari: Are you aware of the weight of the phrase "the blasphemy against the dead"?)'. Magazine. FRaU. 26 January 2020. https://gendai.ismedia.jp/articles/-/70013.

Tansman, Alan M. 1996. 'Mournful Tears and Sake: The Postwar Myth of Misora Hibari'. In *Contemporary Japan and Popular Culture*, edited by John Whittier Treat, 103–33. Honolulu: University of Hawai'i Press.

Ugwu, Reggie. 2012. 'Everything You Ever Wanted To Know About The Tupac Hologram | Complex'. Complex. 19 April 2012. https://www.complex.com/pop-culture/2012/04/everything-you-ever-wanted-to-know-about-the-tupac-hologram.

Wajima, Yūsuke. 2010. *Tsukurareta 'Nihon no kokoro' shinwa: 'enka' o meguru sengo taishū ongakushi*. Tokyo: Kōbunsha.

Wolfe, Jennifer. 2012. 'Virtual 2Pac Wins Cannes Lion Award'. Animation World Network. 25 June 2012. https://www.awn.com/news/virtual-2pac-wins-cannes-lion-award.

Wong, Tony. 2012. 'Tupac Hologram Opens up Pandora's Box; Dead Rapper's Performance at Coachella Raises Too Many Ethical Questions'. *The Toronto Star*, 22 April 2012, ONT edition, sec. Entertainment.

Yano, Christine. 2002. *Tears of Longing: Nostalgia and the Nation in Japanese Popular Song*. Harvard East Asian Monographs. Cambridge, MA: Harvard University Asia Center. https://doi.org/10.2307/j.ctt1tfjck1.

Zeitchik, Steven. 2021. 'Nine Years after She Died, Whitney Houston Is Back to Entertain You'. *Washington Post*, 29 October 2021. https://www.washingtonpost.com/technology/2021/10/29/whitney-houston-hologram-concert-innovations/.

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[1] I use Japanese names in this essay in the Japanese manner: family name first, followed by given name. Long vowel sounds are indicated by macrons, unless the word is in common usage in Romanised form.

[2] Literary critic John Freeman discusses Tupac Shakur's holographic image in terms of slavery, the ownership and control of the Black subject in the USA (2016). A deeper investigation of race and ownership in relation to the deployment of representations of Tupac Shakur would be useful, but it falls outside the parameters of this essay.