



CASE STUDY

How can GenAI be used when authentic archival is lacking?



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All images provided by Zac Manuel.

KEY INSIGHTS

- Utilizing generative AI can often be a black box process, where the user only sees the input and the output, but not what happens in between. Documentary filmmakers have an opportunity to explicate the process of using generative AI, not just as an act of transparency or education, but also as part of their own storytelling.
- While synthetic voice tools can create powerful representations of people's voices, as of press time (April 2026), they require ideally as much as three hours of high-quality source data in order to be trained effectively. Additionally, not all archival materials may be of sufficient quality for commercial-grade training.
- Generative AI does not always need to have a literal representational function in documentary filmmaking. It can also be used to figuratively illustrate ideas, concepts, and processes that are part of the story.

MY GRANDFATHER'S VOICE

Director Zac Manuel's grandfather had an incredible singing voice, but Zac had never heard it himself. His father, Phillip Manuel, is a New Orleans jazz singer and musician, and he would tell Zac stories of his grandfather, who would sing gospel, R&B, and soul for leisure while living a quiet life as a custodian and house painter. According to Phillip, grandfather Vernon Manuel sang as a tenor, closer in pitch to Zac, and the first song he ever taught his son was "My Mother's Eyes," the 1929 ballad written by Abel Baer and L. Wolfe Gilbert.

The refrain remains a classic today:

“ God's gift sent from above
A real unselfish love
I've found in my mother's eyes



Zac's grandfather's rendition of "My Mother's Eyes" makes up a core memory and core narrative element in *The Instrument*, a feature-length documentary currently in production. In the film, Zac explores his relationship with his father, an aging jazz singer grappling with the deterioration of his voice and seeking to reconcile his family's musical history. Phillip joins Zac on a journey to use artificial intelligence to resurrect the voice of his late father — a mesmerizing vocalist he regrets never recording.



While recording devices are ubiquitous today in our smartphones and computers, making a recording in the early 1900s was significantly more challenging. Early recording devices, like the phonograph, required a lot of technical know-how and were costly. And as Zac observed in his research, there were significant racial disparities in how frequently Black singers were recorded at all.

MY GRANDFATHER'S VOICE

As luck would have it, Zac did have one recording of his grandfather's voice. In 2011, he documented six minutes of dialogue during a deposition in New Orleans. His grandfather was living as a double amputee in a nursing home when Hurricane Katrina struck, and his testimony addressed that experience. The nursing home and the surrounding neighborhood flooded badly during the storm. He and other high-need residents were left behind as many of the staff and more mobile residents fled or were evacuated. In the deposition, he talks about the water rising to the height of his bed, and eventually being moved to the second floor by a member of the staff who laid him on the concrete floor. He stayed there for about 4-5 days with no food and little water until he was airlifted to Seguin, Texas.

It was compelling testimony, but this was his grandfather in a later stage in life, and certainly not his singing voice. "I put it aside," Zac reflected, "in order to do due diligence and go through family records and try to find footage of him singing. Maybe I could find a record, or maybe footage of him speaking." His efforts yielded a few more seconds of audio, this time of his grandfather on an old mini-DV tape from Christmas in the late 90's, wishing happy birthday to a family member. The recording quality was poor, and, once again, it was only a speaking voice.

At the time (2024), generative AI technology was very new to the documentary industry. Zac had already been spending time studying grief science and was fascinated by the practice of post-mortem preservations, which had long predated AI. This included, he noted, "preserving deceased loved ones' likenesses, stories, and histories," and as he explored this topic, he felt it was important to turn the lens on himself and his own family.



And he landed on a question: what would it be like to use AI to recreate his grandfather's rendition of "My Mother's Eyes"? He had a few minutes of data, and, importantly, he had higher-quality recordings of his own voice and that of his father. "Could I take the three of our voices and try to create something that captures my father's memory?" he reflected. "At the very least, maybe we could connect our voices through time, generations and technology."

TRIAL AND ERROR

Zac reached out to some of the leading synthetic voice companies in the film industry, specializing in generating human-sounding voices using AI models that are trained on actual human voices. In APA's previous case studies, companies like ElevenLabs and Respeecher were used to consentfully recreate voices of participants for whom voiceover was important — in one case, the protagonist's voice changed due to starting gender-affirming hormones, and in another, the protagonist lost their voice due to the onset of ALS.



Zac spoke with multiple companies large and small, and he was told by all of them that he didn't have enough high-quality source audio for the engineers to work with. Another company generated a sample voice as a proof of concept, and what he received sounded more like a British man than his grandfather's Southern Creole accent. According to each company's website, the optimal amount of audio for professional-grade synthesis of speech is anywhere from 2 to 30 minutes¹, and ideally up to 3 hours². Synthetic singing, which requires nuances of tone and rhythm, is even more complex to train and create than straightforward talking.

¹ <https://www.respeecher.com/news/ethics-in-ai-making-voice-cloning-safe>

² <https://elevenlabs.io/docs/product-guides/voices/voice-cloning/professional-voice-cloning>

All the samples he received back came with the caveat that he could not use them without permission from the company. "My father and I are in this space where we're less concerned with results and more about the process of making it." For many documentary filmmakers, the process is the point, and in this case, the process of trying to generate his grandfather's voice through AI has become a focal point in his documentary as a critique of how these technologies operate.

Indeed, as Zac pointed out, voice cloning is often an invisible process. The industry term here is black box AI, in which the underlying process is invisible to the user. Zac sent the files, the companies he worked with made the samples, and they sent them back. In other cases, Zac uploaded the voice files to a website, which automatically returned a voice clone. One organization quoted him five figures to do a few months of experimental work—a prohibitive amount for a documentarian working in any funding environment, let alone in 2025.

"Logistically, I'm trying to identify the right person to spin their wheels with us," Zac noted. As the film is still in production, he has begun using AI as part of his creative and narrative process. "I put off the labor of trying to create this voice clone because I thought it was going to be easy and just happen like that, with no dramatic tension to it," he continued. He focused first on documenting his relationship with his father and building the narrative, with the intention of his grandfather's generated vocals serving as a "capstone" to his process. Instead, it's become intertwined with his process.

AI REPRESENTATION AS PROCESS

Zac's use of AI in *The Instrument* continues a long relationship he's had with his father's singing. In his short film "Today I Sang To The River," for example, he and his partner, artist marta rodriguez maleck, recorded the audio, and maleck did all of the mixing, using ProTools to transform his father's voice into disembodied water from the Mississippi River. Generative AI offers additional avenues to continue this creative exploration.

Having not yet found the right technologist to work with, Zac has moved into the realm of the visual by using Runway, an AI image and video generator tool popular in the industry and famously utilized in *Everything Everywhere All at Once*. It was the same tool utilized by Director Byron Hurt for his film *Men of Courage*, featured in a previous APA Case Study.

He prompted the tool with images of what his grandfather's voice sounded like, based on his father's own self-descriptions. He started with a simple one: "A voice like a ball of wind and air."



And then a little more detail: "A voice like a ball of wind and air pushed up."



And yet more detail: "A voice like a ball of wind and air pushed upwards into the head of a man with no distinct identity."



While in his prose prompts, Zac only added a few words, each iteration from Runway produced entirely new images. Also functioning like a black box, the technology generated related but conceptually quite different imagery. The first prompt yielded a bubble in a verdant landscape, and the second looked closer to a tornado in a desert. The third showed a figure with more European features, despite having no distinct identity.

"I began thinking about my process as a way to describe the intangible of my grandfather's voice and how AI is this machine or tool that can take that description. Ultimately, I think I am interested in the gray area and the idea of the 'untruth' as a means of reaching a conclusion or an emotional catharsis. It's more about allowing narrative imagination — informed by research and theory and history — to fill the gaps."

Once he finds the right technologist, Zac expects he'll soon enter his father's world of music, by singing and recording his own voice as part of the process of recreating his grandfather's voice. The generative tools will themselves be instruments, alongside Zac's voice and that of his father. It's unclear if he'll ever be able to truly recreate his grandfather's voice, but that's not the point — the point is to illustrate the use of these tools as part of an archival process.

In one key scene in *The Instrument*, Zac spends time with a collector in California with a variety of wax cylinder recordings from the 1890s. Because of disparities in technology access, Zac found only a small percentage of Black artists represented. And of those who were recorded, they had limited means to distribute the music and create their own labels. As technology researchers like Joy Buolamwini remind us, the biases and absences we see in generative AI today often reflect the current and past biases of society at large.



"Part of my ambition," Zac explained of his large project, "is to do something with AI that inserts Blackness and Black Southern identity into some sort of AI algorithm." He waxed philosophical about the challenges of building a truly equitable AI system, given the inequitable labor often involved in creating tools and the high levels of energy consumption required. "These companies are in the business of creating voice clones for major motion pictures or people or companies or services and doing it well. If you wanted to create an AI system, you'd kinda have to undo the entire system. You could put more Black voices, more marginalized voices into large scale algorithms and platforms, but then to a certain extent, what are we getting out of it? You don't get paid to put information into an algorithm."

APA EXPERTS RESPOND

How can Zac Manuel and other documentary filmmakers use AI as a lens through which to explore biases in a biased world?

In *The Instrument*, Zac takes the process of creating the AI elements and uses it as a lens through which to explore bias; the journey becomes part of the story itself. This reflective/reflexive use of the technology is an innovative way to work with the tools currently available to filmmakers - and really push the non-fiction form into the future.

As archival producers, we are acutely aware of the limitations of historical archives – the lack of representation of people of color and minoritized groups – and that much of what does exist was created by people whose biases shaped their portrayals. There is a clear need for new and creative ways to represent the lives and experiences of marginalized peoples in the past. AI offers some promising potential; but the dangers it presents are commensurate with its great possibilities.

Given that GenAI is derivative of the material that it is trained on, large language models, as well as voice and image generation models, are likely to amplify the underlying biases already present in the media datasets, unless the outputs are carefully controlled, checked, and revised. As a result, the technology should be understood as a tool of a human author and not as an author itself.

Zac's use of the technology exemplifies this kind of intentionality. He relies on his own deep understanding of history, race, and power dynamics to identify the most salient inputs, and then again to interrogate the outputs. What happens in between as the black box of AI transforms the former to the latter is entirely unknowable. But as long as human discernment remains central to the process, as it does in Zac's case, the potential harms of AI's algorithmic bias can be mitigated.