Haunted Aesthetics and Otherworldly Possibilities: Generating (Dis)embodied Performance Videos with AI

BRETT A. HALPERIN, University of Washington, Human Centered Design & Engineering, USA
MIRABELLE JONES, University of Copenhagen, Computer Science, Denmark
DANIELA K. ROSNER, University of Washington, Human Centered Design & Engineering, USA

In this paper, we use GPT-3 to generate a score for an endurance art performance that both a human performance artist and AI text-to-video system “perform.” First, we consider how the artist performs the score. Then, we use Runway AI to generate three different video performances derived from the score. In reflecting upon this process, we diagnose pitfalls and potentials of engaging AI in performance and video generation. On one hand, we see pitfalls of AI’s inability to grasp human bodies, yet ability to render aesthetics haunted by displaced artists and ghost workers. On the other hand, we see creative potentials to generate otherworldly possibilities and augment low-resourced independent video/filmmaking. We hope to join this workshop to contemplate how a critical and creative design research framework for generative AI may or may not support humanistic traditions of video/film and performance.

CCS Concepts:
• Applied computing → Arts and humanities: Media arts.

Additional Key Words and Phrases: Bias, Body, Embodiment, Film, Generative AI, Moving Images, Performance, Video, Visual Art

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1 INTRODUCTION

Amid the rise of generative AI, we see a growing number of tools reach mainstream adoption in ways that are already having consequences for media artists in particular. From artists detesting the theft of their art powering machine learning algorithms to Hollywood worker unions organizing against automating creative labor, generative AI has generated much concern to say the least. At the same time, as history of visual culture might remind us, this resistance to technology is both new and not new. In many ways, it seems reminiscent of how the invention of the camera once threatened to automate, displace, and exploit painters. But that is not to dismiss or diminish the very real consequences that technological “innovation” has in terms of benefiting corporations in particular at the cost of artists. To date, we have seen generative models become increasingly usable and ripe for mass adoption because of all the human creative labor and ghost work that underpins them [3]. Amid little to no AI regulation to date, corporations are free to cannibalize and profit off the work of artists without compensating them or obtaining their consent to use the artworks as training data. In looking toward a design research framework for generative AI, we must confront and grapple with these questions that are at once economical, political, and philosophical in terms of how the tools can exploit humanity.

Generative AI also raises aesthetic questions around its creative intelligence abilities with respect to film, video and performance. Are they even any good? What can they do? How might they automate versus augment storytelling [4]?
As scholars have begun to explore this terrain, we already see that, despite the hype, there are significant limitations to AI capabilities. In the realm of performance art, Jones and colleagues have shown how GPT-3 struggles to generate text-based scores that grasp the nuanced complexities of human bodies [7]. Meanwhile, the “hands problem” is a widely discussed phenomenon around how image generators tend to render human bodies (e.g., hands and fingers) in “fantastical” ways [11], raising a plethora of questions around how AI could possibly know when and how to appropriately personify a depicted plant, for instance [5]. What is more, prior work has well-shown how AI biases can discriminate against certain bodies along axes such as race and gender [1, 2]. Altogether, these are just a few examples of how AI might fall short aesthetically (and morally) by misconstruing how human bodies can appear, perform, and even be represented in non-humans anthropomorphically.

To support moving image arts, a design research framework for generative AI must thus account for these shortcomings.

2 PROCESS

We undertake a creative process to probe and speculate about shortcomings, but also creative possibilities of using AI to generate performance videos. Through a series of early-stage experiments, we endeavor to get a sense of how AI might at once complicate and bolster the domains of film/video and performance. Our process was as follows. First, we used GPT-3 to generate a score as in written instructions for a performance. The prompt provided to GPT-3 was as follows: “Generate an idea for an endurance art performance.” GPT-3 replied with the following score: “A performer takes on the role of a dancer, and performs a dance until it’s no longer possible to perform the dance. The performer will not stop the music to rest, and will not stop the dance to sit down. They will continue until they cannot continue.” One of us who is a performance artist then performed the score and recorded a video of it. We then inputted our initial prompt with the score into Runway AI text-to-video system, which produces four-second videos. We used the first three clips that it generated as various examples of how AI might “perform” the score by interpreting the text and outputting videos. Altogether, we have assembled four exhibits that depict video performances of the same text-based score that GPT-3 generated. Exhibit 1 is a screenshot from the performance video of a human artist. Exhibits 2, 3, and 4 show screenshots from performance videos generated with Runway AI’s text-to-video system (and all of which are derived from the same GPT-3 generated score). To follow, we analyze, problematize, and reflect upon these exhibits.

3 PITFALLS AND POTENTIALS

Based upon our process, we speculate about pitfalls and potentials of using generative AI in the domains of film/video and performance art. While these early-stage experiments are far from conclusive, we have reason to believe that they may be indicative of larger phenomena. Below we share some initial insights that we are just beginning to think through and develop more fully. As part of this workshop, we are hoping to tease out what phenomena AI is reproducing vs. producing anew given its medium specificity. In other words, how is it recreating vs. creating new phenomena in visual culture? Where AI is recreating/reproducing, how might it be reshaping older phenomena (e.g., scaling)? As for where it is creating/producing anew, what are signature aesthetics of the artificial (e.g., [8]) and “AI-ness” that are rendering new visualities? While we do not have answers to these questions yet, we reflect upon the economic, political, philosophical, and aesthetic dimensions that can inform a design research framework for generative AI vis-à-vis moving image arts.
Fig. 1. Four different video performances all derived from the same score generated with GPT-3. Exhibit 1 depicts a screenshot from a video of a human interpreting and performing the score. Exhibits 2, 3, and 4 are screenshots from three different videos that Runway AI’s text-to-video system generated in response to the GPT-3 score. The compiled video reel is online at: https://vimeo.com/840251875

3.1 PITFALLS

3.1.1 Misrepresentation: Distorting and Rendering Bodies for Visual Pleasure. We find that AI not only struggles to understand and visualize human bodies at times, but also renders them for visual pleasure at others. This phenomena appears to be both new and not new. On one hand, it is new in terms of the visual distortion. For instance, Exhibit 2 appears to be two performers fantastically morphed together. While this is not to say that AI should only produce normative bodies, it is to say that such a depiction reflects the algorithm misunderstanding the score, which specifies one person. On another hand, we see that what the video generator is producing is not so new. Exhibit 3 in particular depicts a figure that is no stranger to Hollywood cinema—a white thin woman who appears to be sexualized to please the white heterosexual male gaze (a longstanding phenomenon studied by scholars such as Mulvey and hooks [6, 10]). This raises questions around how to address AI reanimating particular forms of violence (epistemic, discursive, visual) at
scale. It also raises questions around who and what images are behind the training data. While it appears that we are at a
moment in time where these machines are only beginning to learn and a lot of the distortion and misunderstanding may
fade, the biases will likely deepen and further ingrain themselves into the systems. How might AI begin to comprehend
and represent the infinite diversity of bodies without reproducing the age-old harms and violence of visual culture?

3.1.2 Haunted and Disembodied Aesthetics: Exploiting Displaced Artists and Ghost Workers. Another pitfall of generative
AI is how it exploits and materializes the labor of displaced artists and ghost workers. Generative systems today depend
upon the data labeling of low-paid workers, as well as the creative labor of artists as training data obtained without
consent or compensation. Corporations in particular stand to benefit from exploiting and mimicking the work of artists
in this regard; they also stand to profit off attempting to automate creative labor including screenwriters and other film
practitioners. In many ways, this is similar to how the invention of the camera and later the Internet paved way for
exploiting artists such as painters by replicating and disseminating their work at scale. But what is different about AI
this time? What might it mean to automate an actor or a performance artist? Exhibit 1 shows a “real” person, a human
who actually exists and creatively interprets the score. Meanwhile, Exhibits 2, 3, and 4 are not “real” people, but rather
figments of AI’s imagination that are developed from human creative labor and disembodied ghost work. The dim
lighting across these exhibits, and especially the ghostly figure in Exhibit 4, suggest that exploiting ghost work and
displacing artists with these incorporeal, estranged systems may render haunted, immoral, and even soulless aesthetics.

3.2 POTENTIALS

3.2.1 Otherworldly Possibilities: Generating Alternative Futures. While generative AI presents many problems, at the same
time, there is something generative about it indeed, which perhaps may be repurposed for conceiving of otherworldly
possibilities and alternative futures. As the history of visual culture has shown, the camera was initially met with
resistance among painters and the like, but also soon became an apparatus for revolution. Might generative AI hold
similar potentials to visualize and render other ways of thinking, knowing, and representing? In some ways, Exhibits 2,
3, and 4 (all generative AI) seem to deepen our epistemic fantasies of the moving camera [9]—that is, our beliefs that the
camera is like our “eyes” and our desires for it to take us through these worlds that do not exist. Insofar as these tools can
be reappropriated and veered away from (or used to expose) pitfalls, what representations might become possible? What
other worlds might we gain access to? How might AI deepen our understanding of humans and non-humans? While
performers artfully tolerate using their bodies for algorithmic sense-making [7], how might positionality affect who else
can tolerate experimenting with and curating through AI-generated violence? In considering creative possibilities, we
are also concerned with how the critical choices and autonomy of artists will be compromised in corporate environments.

3.2.2 Creativity Support: Augmenting Low-Resourced Independent Film/Videomaking. In more practical terms, based
upon our experiments with these systems, we suspect that generative AI presents opportunities to support low-resourced
independent film/video practitioners who learn to engage its affordances. In some ways, it may allow for practitioners
to produce films and videos without the need for a high-budget film crew. Consider how a trained screenwriter may
be able to bring their screenplay to life by using a text-to-video generator. Or consider how a skilled filmmaker may
be able to produce a screenplay with a text generator. While these same tools can give way to exploitation in the
hands of corporations, they have potential to support practitioners who do not stand to profit off their usage. While
text-to-video generators in particular are still very limited, it is not hard to imagine that in the future they will become
more feasible in this regard. We thus see potential for these tools in the right hands to produce representations, diegeses,
and performances that empower independent video/filmmakers and engender a revolutionary consciousness with AI.
REFERENCES


