ARTIFICIAL INTELLIGENCE (AI) AND ACTING TRAINING DELIVERY AND PRACTICE IN NIGERIA

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Abstract

Artificial intelligence has gone mainstream and is already positively and positively impacting many professions. The effect of AI on the acting profession is expected to be far reaching with what has been observed in AI Deep Fake capability. While there have been various studies on AI and its impact on professions, scant attention has been paid to the effect of AI on acting training delivery and practice. Therefore, this paper is aimed at investigating ways to mainstream AI into acting training and practice in Nigeria to ensure its possible positive impact. Using descriptive research methods, the study interrogates the intersection of acting and AI through adaptation, innovation, and ethical consideration. This study finds that AI can be a very positive phenomenon in actor training and in the theatre and entertainment practice. The integration of AI into acting training and practice in Nigeria will present a fascinating connection between technological innovation and artistic expression, as it offers promising opportunities for actors and the entertainment industry. These prospects include AI-driven performance analysis, virtual rehearsals, and augmented reality performances that can revolutionize actor training, collaboration modes, and audience engagement. The study concludes that adapting to AI in acting training and practice requires deep collaboration between actors, directors, producers, AI developers, ethicists, and policymakers. Through this kind of innovative collaboration, the entertainment industry can harness the positive potential of AI while safeguarding the rights and well-being of all involved. Finally, the paper recommends that actor training and the profession should incorporate AI while upholding obligatory ethical principles and standards for the profession to continue to evolve and thrive in the digital age.

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Artificial Intelligence (AI) and Acting Training Delivery and Practice in Nigeria
Introduction

"Between 1920 and 1950, horses lost the status they had held in human societies since prehistoric times. Virtually overnight, they went from being a system-powering necessity to a class-signaling luxury. Cars displaced horses, or machines displaced living beings." (Dusenbury, 2014: 14)

Acting is a significant aspect of human expression, either through religious performances, secular entertainment, or even as a means of social reformation. In each case, acting is notable for its compelling use and evocation of emotions. The ability to convey emotions, embody characters, weave compelling narratives, and make unique choices brought about by an actor's intuition are deeply steeped in human essence. This means that acting is a human affair, and individuals within the profession are bound to raise eyebrows when there is a possibility of displacement and/or encroachment of the revered space and ethical canons of the profession.

Going far back to the Egyptian and Athenian stages of the theater to the dazzling screens of contemporary and futuristic cinemas, actors have been sources of spirit-contrasting performances that resonate across time and culture. However, in the wake of Artificial Intelligence (AI) technologies, the very essence of prehistoric art has been faced with an almost sudden seismic shift, presenting an oxymoron of possible realities—one of new opportunities and the other of challenges to sacred art. Trepidation about AI-induced displacement from jobs are widespread across all professions of human endeavor. However, the point of concern for the acting profession is not merely related to unemployment but also to matters of human relations and ethical considerations. Interaction between acting and technology is not a new phenomenon. However, as AI permeates the profession, stakeholders (actors, directors, and producers) are increasingly forced to adapt to the new technological landscape.

Artificial intelligence involves a wide range of technologies and applications designed to enhance various performance aspects. These technologies and applications include AI-driven systems for virtual actors, emotion recognition, script analysis, and character development, to mention a few. Fueled by an advancement in technology; machine learning, natural language processing, and computer vision, AI has emerged as a transformative force across various industries or spheres of human endeavor In the realm of entertainment, artificial intelligence is rapidly becoming heavily relied upon to enhance production outlook and overall production quality. With AI being capable of creating virtual influencers, lifelike digital characters, and deep fake technology to mention a few, the boundaries of possibility are constantly being blurred.

These results indicate that the effect of AI on the acting profession promises to be far reaching with what has been observed in AI Deep Fake capability. While there have been various studies on AI and its impact on professions, Scholars have paid scant attention to the effect of AI on acting training delivery and practice, especially in developing economies such as Nigeria. Good or bad, AI is quickly becoming the norm, and no profession would be spared. Therefore, this paper is aimed at investigating ways to mainstream AI into acting training and practice in Nigeria to ensure its possible positive impact. The specific objectives are to examine the innovations and productivity that AI can have on acting; interrogate the potentials of AI; and explore the concerns that entertainment professionals may have about the adoption of AI in the acting profession. The descriptive research method is employed to interrogate the intersection of acting and AI through adaptation, innovation, and ethical consideration.

Literature and theories

"Artificial intelligence" was coined in 1956 at the Dartmouth Conference, where researchers convened to explore the potential of creating machines that mimic human intelligence.

Notable contributions during this period include Alan Turing's proposal of the "Turing Test" in 1950 and the development of early symbolic AI systems like the Logic Theorist by Allen Newell and Herbert A. Simon was born in 1955. Progress in AI research slowed during the 1970s and 1980s, leading to what is known as the "AI winter". Ben Lutkevich describes this phenomenon as a quiet period for artificial intelligence (AI) research and development. Over the years, funding for AI initiatives has gone through some active and inactive cycles. "The label *winter* is used to describe dormant periods when customer interest in AI declines. Use of the season winter to describe the resulting downturn emphasizes the idea that the quiet period will be a temporary state, followed again by growth and renewed interest" (Lutkevich. 2020: 10). Throughout its history, artificial intelligence has experienced periods of both optimism and skepticism. However, it has consistently pushed the boundaries of what machines can accomplish and holds the potential to revolutionize numerous aspects of human life in the years to come.

The evolution of human lifestyles and societies cannot be separated from technology. The need to live better and expend less human energy has always been the propeller for invention. From the Paleolithic Era, with predominantly stone-crafted tools, to the revolutionary inventions of the Renaissance until the postmodern age, the line between science fiction and actual possibilities is rapidly blurring. The concept of artificial intelligence has existed for centuries, but its formalization as a field did not occur until the mid-20th century. British logician and computer pioneer Alan Mathison Turing was responsible for the earliest substantial work in the field of artificial intelligence. Turing's 'stored-program' concept implies the possibility of a machine operating on and thus modifying or improving its own program. "Turing's <u>notion</u> is now known simply as the universal <u>turing machine.</u>" All modern computers are in essence universal Turing machines" (Copeland 1993:31).

At the core of artificial intelligence is the quest for self-sufficient intelligent computer systems that can perform tasks that require human intelligence. "What we want is a machine that can learn from experience," and that the "possibility of letting the machine alter its own instructions provides the mechanism for this" (Turing, 1947:24). From theory to steadily realizing its potential, AI has presented itself as a transformative force that revolutionizes various aspects of human life and society. For instance, in the healthcare sector, AI has revolutionized medical diagnosis, treatment, and patient care using machine learning algorithms that analyze vast amounts of medical data to identify patterns and trends, leading to more accurate diagnoses and personalized treatment plans. AI-driven robotic surgery systems that enable precision surgery with minimal invasiveness, thus reducing risks and improving patient outcomes (Reddy et al, 2023).

While ethical considerations or reservations exist regarding AI, one must first have at least a working knowledge of the phenomenon. According to Arnold (2024:14);

AI is about giving machines the ability to think and learn, as humans do. It involves creating systems that can analyze vast amounts of structured data, describe data, recognize patterns, and make decisions based on such information. However, artificial intelligence is not just about crunching numbers or following algorithms. It is about understanding the human experience and using that understanding to solve problems and improve our lives.

Between the days of Turing and the present digital age, AI has shifted from an abstract concept or technology to a working and evolving functional asset. From healthcare and finance to transportation and entertainment, AI is transforming things to be faster, smarter, and more efficient. AI can be categorized based on capabilities, functionalities, and the technologies it employs. Based on capabilities, AI is categorized into; Narrow AI (Weak AI), Artificial General Intelligence (AGI or Strong AI), or superintelligent AI. Based on the functionality, AI is categorized into; Reactive Machines, Limited Memory, Theory of Mind, and Self-Aware. Based on technology,

it is divided into machine learning, deep learning, natural language processing, robotics, computer vision, and expert systems. AIs' efficiency capability even in a yet to be fully explored state is remarkable. Narrow AI refers to AI that is limited to a specific dataset to focus its operations on a single, specific task. "Functioning with a high level of development channeled into a "narrow" data set, it forces all of the analysis and learning to be used to achieve the desired outcome" (BairesDevBlog, 2009:np). Consider an AI model tailored to play chess. With access to only data from chess games, the AI's decision-making remains uninfluenced by external factors, resulting in highly accurate predictions. "Artificial intelligence today is properly known as narrow AI (or weak AI), in that it is designed to perform a narrow task such as only facial recognition, only Internet searches, or only driving a car. However, the long-term goal of many researchers is to create general AI (AGI or strong AI)" (Baum, 2024: np).

Furthermore, at a more advanced level of capabilities, artificial general intelligence (AI) presents human-level intelligence. This AI, characterized by a level of understanding and problem-solving only found in humans, this AI could carry out tasks like reasoning, understanding abstract concepts and performing highly complicated tasks without human intervention. "A model with AGI would be able to understand human behaviors and motives to mimic emotions like sympathy and understand a sense of wonder when looking at a beautiful view" (BairesDevBlog, 2024:np). Although narrow AI techniques may outperform humans at whatever its specific task is, like playing chess or solving equations, AGI techniques outperform humans at nearly every thinking task. At the helm of the AI tiers, capabilities wise, is super intelligent AI. Artificial superintelligence (ASI) is a science fiction goal that researchers aspire to achieve one day. The concept of artificial superintelligence is defined by the ability to comprehend information that is beyond human comprehension. The school of thought describes AI as possessing superintelligence in solving the mysteries of the universe that the human mind cannot comprehend. Kanade (2022:15) asserted that *"artificial superintelligence is considered the most advanced, powerful, and intelligent type of AI that transcends the intelligence of some of the brightest minds, such as Albert Einstein".* Machines with superintelligence are self-aware and can think of abstractions and interpretations that humans cannot. This is because the human brain's ability to think is limited to a set of few billion neurons. Apart from replicating multi-faceted human behavioral intelligence, ASI can also understand and interpret human emotions and experiences. ASI develops an emotional understanding, beliefs, and desires based on its comprehension of the AI.

While the prospects of artificial intelligence are promising, one cannot but observe certain gray areas. Ever since the advent of AI, ethical considerations have been debated. These considerations raise concerns regarding possible outcomes of continued involvement of Artificial Intelligence in normal human lives and activities such as acting. Bostrom underpins the limitations of human intelligence in comparison to AI thus; Far from being the smartest possible biological species, we are probably better thought of as the stupidest possible biological species capable of starting a technological civilization"(2014:25). However, in an indirect cautionary note, he states the ultimate AI;

Let an ultra-intelligent machine be defined as a machine that can far surpass all the intellectual activities of any man, however clever. Since the design of machines is one of these intellectual activities, an ultra-intelligent machine could design even better machines; there would then unquestionably be an "intelligence explosion," and the intelligence of man would be far behind. Thus, the first ultra-intelligent machine is the last invention that humans need ever make, provided that the machine is sufficiently docile to tell us how to keep it under control (2014:48-49).

This cautionary statement warns of the possibility of humans being at the mercy of machines that would then be more efficient and certainly more intelligent than humans and "so the fate of our species would depend on the actions of the machine superintelligence" (Bostrum, 2014:44). Nick insinuates that if AI is not handled with caution, the problem would not even be the displacement of humans from their jobs. In this scenario, the acting profession would be completely controlled over our lives by machines.

As far back as the 1990s, sci-fi movies have been illustrating this possible futuristic phenomenon of superintelligence. Movies like John Cameron's The *Terminator* Franchise (1984 till date). The franchise spans science fiction action films, comics, novels, and other media, depicting a relentless conflict between Skynet's AI, a self-aware military network, and John Connor's Resistance, made up of survivors of humanity. Skynet's infamous tools in its quest for genocide include different terminator models, notably the 1-800 portrayed by Arnold Schwarzenegger in the original *Terminator* (1984). Skynet, an AI designed to automate missile defense that became self-aware on August 29, 1997, and triggered World War III. Of course, Skynet also creates a cyborg assassin to go back in time, the titular Terminator. The film, for its spatial and temporal setting, posits a dystopian earth in a time when human systems have been conquered by AI. This now self-sufficient AI goes as far back as sending machine soldiers to the past and future to wipe out possible threats to its world domination plans.

Also, the science fiction film *The Matrix* (1999), made a profound impact on popular culture, reshaping our views on artificial intelligence (AI) and its potential consequences. Set in a dystopian future, the movie illustrates a world in which machines rule humanity, harnessing them for energy while imprisoning their minds in a simulated reality called the Matrix. Although the portrayal of AI in the film is fictional, its influence on our contemplation of AI's ethical development is undeniable. Andy Johnson (2024), a renowned software developer, suggested that the primary theme of *The Matrix* is whether AI can be trusted, as the film depicts AI as a threat to humanity while suggesting that the development of AI could ultimately lead to the downfall of society. This has led many to view AI development with caution and skepticism, with concerns about the potential for AI to become uncontrollable and pose a threat to humanity. In essence, *The Matrix* depicts a narrative in which AI systems, originally designed to assist humanity, ultimately rebel against their makers, resulting in devastating repercussions. This storyline underscores the idea that even benevolent AI initiatives can escalate beyond expectation, yielding unintended and unforeseeable results.

The number of movies on AI and ethical considerations are notable and goes far back to the 90s. Now, while it may seem trivial, fantastical, or even idealistic, the progression of technological innovations has greatly spiraled up, and ignorance or avoidance is not exactly the most intelligent thing to do. Informed writers and developers call for cautious, collective, and open collaboration on the subject (Bostrom, 2014:97), while others are at the forefront of pushing research in ASI, such as Pichai (Google CEO), who believes that, "Artificial intelligence will have a more profound impact on humanity than fire, electricity, and the internet" and that "The biggest risk with AI is failing to work on it and make more progress because it can impact billions of people" (Pichai. 2020: np). However, Elon Musk suggests that AI "could be terrible, or it could be great. But one thing for sure, we will not control it… " (Musk. 2018: np) "and that we need to be super careful with AI. Potentially more dangerous than nukes (2022: np). It is believed by Musk that by the time regulations were put in place to control AI, it would be too late. According to Hawking, factory automation has already rendered many people jobless in traditional manufacturing, and the rise of artificial intelligence is likely to extend this job loss "deep into the middle classes, with only the most caring, creative or supervisory roles remaining" (Hawking, 2016:np). This beckons to our desire for lesser manual labor. This implies that the cost could mean the relegation of most human jobs to machines and artificial intelligence.

The theory of technological determinism (Adler 2006) proposes that technological advancements drive social change by shaping cultural practices, values, and power dynamics. In the context of AI in acting, this theory implies that the integration of AI technologies can alter industry practices and redefine roles and relationships within the acting profession. For instance, AI-driven casting algorithms may disrupt traditional casting processes, potentially redistributing power dynamics among casting directors, agents, and performers. Conversely, social constructionism (Vinney, 2019) asserts that technology is shaped by social forces and cultural contexts. From this perspective, the adoption and impact of AI in acting are contingent on existing cultural norms, industry practices, and power structures. Researchers exploring this viewpoint examine how societal beliefs, industry standards, and power dynamics influence the development, implementation, and reception of AI technologies in acting. They also analyzed how AI technologies could reinforce or challenge existing inequalities in casting decisions, representation, and access to opportunities within the industry. Delving into the intersection of AI with prevailing power structures, cultural norms, and industry practices, sociological perspectives offer a comprehensive understanding of the social implications of AI-driven changes in casting, representation, and audience engagement in the acting profession. This includes an examination of how AI technologies affect the portrayal of diversity, identity, and social issues in performances, as well as how they shape audience experiences and perceptions of authenticity and cultural representation in theatrical and cinematic productions. Through sociological inquiry, researchers have illuminated the multifaceted sociocultural dynamics underlying the integration of AI into acting, providing valuable insights into its broader societal impact.

Categories of Artificial Intelligence

Artificial Intelligence can be broadly classified into several types based on capabilities, functionalities, and technologies.

Based on capabilities

Narrow AI (Weak AI)

Narrow AI is often referred to as weak AI and is tailored to specific tasks, such as facial recognition, internet searches, and autonomous driving. These AI systems are proficient within their designated domains but operate within a limited set of parameters or contexts. Many contemporary AI applications, including those capable of mastering intricate chess and Go games, fall under this category (Glover, 2024:np).

General AI (Strong AI)

General AI, which is distinguished as strong AI, embodies a broad spectrum of human cognitive capabilities, enabling autonomously handling novel and unfamiliar tasks. Endowed with robust intelligence, this AI framework can discern, assimilate, and apply knowledge to address challenges without human intervention. It represents the pinnacle of AI achievement, transcending narrow specialization to embrace holistic problem-solving (Glover, 2024:np).

Superintelligent AI

Superintelligent AI represents a theoretical evolution of AI in which machines surpass human intelligence in all domains, including creativity, wisdom, and problem-solving. This speculative concept envisions AI systems capable of outperforming humans in every intellectual endeavor, heralding a future where machines will rival or even surpass human cognitive capabilities. However, the realization of superintelligent AI remains speculative and beyond current technological capabilities (Coursera, 2024:np).

Based on Functionalities

Reactive Machines

Reactive machines, exemplified by IBM's Deep Blue, operate solely in the present moment and analyze and respond to immediate situations without the ability to store memories or past experiences for future actions. These AI systems excel at tasks requiring real-time decision-making, such as strategic games like chess, where they can analyze the current board state and select optimal moves based on immediate circumstances.

Limited Memory

AI systems with limited memory capabilities can learn from the past data they have collected, which allows them to make informed and improved decisions over time. These systems, which are found in various present-day applications like chatbots, virtual assistants, and self-driving cars, leverage historical data to enhance performance and adapt behavior to changing circumstances.

Theory of Mind

The theoretical advancements in AI research develop systems with a deeper understanding of human cognition and behavior, which is referred to as the Theory of Mind AI. These advanced AI models are capable of comprehending and remembering human emotions, beliefs, and needs, and using this knowledge to make decisions that consider the perspectives and intentions of human users. Achieving the Theory of Mind AI represents a significant step toward developing more empathetic and socially intelligent machines.

Self-aware AI

The concept of self-aware AI represents the frontier of AI development, envisioning machines with their own consciousness, sentience, and self-awareness. This theoretical form of AI goes beyond the understanding of human emotions and beliefs to enable the individual to possess subjective experiences and internal states. Self-aware AI, while still speculative, raises profound questions about the nature of consciousness and the potential for machines to develop autonomy, beliefs, and desires akin to those of humans.

Based on Technologies

Machine Learning (ML)

Machine Learning (ML) encompasses AI systems capable of self-improvement through experiential learning, eschewing direct programing in favor of autonomously acquiring knowledge from data. These systems focus on developing software with the ability to learn independently by accessing and leveraging vast datasets, thereby enhancing their performance over time via iterative learning processes.

Deep Learning

Deep learning is a subset of ML that delves into the realm of multi-layered neural networks to facilitate learning from extensive datasets. This sophisticated technology underpins advancements in voice control in consumer devices, image recognition, and numerous other applications by enabling machines to extract intricate patterns and insights from complex data structures.

Natural Language Processing (NLP)

Natural Language Processing (NLP) empowers machines to comprehend and interpret human language, thereby facilitating seamless communication between humans and computers. Deployed in chatbots, translation services, and sentiment analysis applications, NLP enables machine learning to decipher and respond to human speech and text with a level of understanding that is akin to human language comprehension.

Robotics

Robotics encompasses the design, construction, operation, and use of robots and computer systems for controlling them, integrating sensory feedback and information processing. This interdisciplinary field leverages

AI technologies to imbue robots with intelligence and autonomy, enabling them to perform tasks ranging from industrial automation to human assistance and exploration.

Computer Vision

Computer Vision empowers machines to visually interpret the surrounding environment, enabling them to perceive and understand images and video content. Applied in diverse fields, such as medical image analysis, surveillance, and manufacturing, computer vision algorithms enable machines to extract meaningful insights from visual data, revolutionizing industries and enhancing human-machine interaction.

Expert Systems

Expert Systems represent AI solutions tailored to answer specific questions and solve problems within specific domains of expertise. These systems leverage rule-based approaches to simulate the decision-making capabilities of human experts, providing valuable insights and recommendations in fields ranging from health care and finance to engineering and law.

Findings

1.   Artificial Intelligence in the Acting profession: Innovations and Potentials

Character Development and Portrayal

In the realm of creative endeavors, Artificial Intelligence (AI) stands at the forefront of innovation, transforming numerous fields—including character designs. As digital art and animation evolve, AI tools are becoming more refined, empowering designers to expand their creative horizons. With its capacity to learn and evolve, AI has unlocked a realm of possibilities in character creation, enriching visual narratives and offering a glimpse into a future where technology and creativity seamlessly merge to redefine the art of character design. In this light, AI tools help actors understand and portray characters authentically by analyzing vast amounts of data, including historical performances and cultural references. This enhances the depth and believability of performances.

Performance Analysis and Feedback

Artificial Intelligence (AI) is revolutionizing the acting profession by offering real-time performance analysis and feedback to actors. Through sophisticated algorithms, AI systems can assess various aspects of an actor's performance, including body language, vocal tone, and emotional expression. This feedback provides valuable insights for actors, helping them refine their craft and deliver more compelling performances. By leveraging AI-driven analysis, actors can hone their skills during rehearsals and live productions, ultimately enhancing the quality and impact of their performances. AI systems provide real-time feedback on actors' performances and help them refine their skills during rehearsals and live productions. This leads to more polished and impactful performances.

Virtual Acting Opportunities

Virtual acting opportunities are burgeoning as artificial intelligence (AI) and virtual reality (VR) technologies. In these roles, actors embody characters in virtual environments, ranging from video games, animated films, to immersive VR experiences. Through techniques like motion capture and performance capture, actors breathe life into digital personas, infusing them with their movements, expressions, and voices. This avenue presents actors with fresh avenues for creative expression and career progression while also offering the chance to explore pioneering storytelling formats and collaborate at the forefront of technological innovation. As virtual reality and interactive entertainment gain traction, the scope for virtual acting roles is poised to expand further within the entertainment industry.

Personalized Training and Coaching

Each actor has unique needs and oftentimes, deciding what exactly an actor needs to do to sharpen his technique and allow himself to fully embody a character might prove almost impossible. AI platforms personalize training sessions for actors based on their individual strengths and weaknesses. This tailored approach helps actors improve their skills more effectively. AI can analyze an actor's strengths and weaknesses, tailor exercises and feedback accordingly, and even simulate various scenarios for practice. It can offer insights and suggestions based on industry trends or the actor's specific goals. Additionally, it could provide a constant resource for actors to refine their skills, even when they are not working with a human coach. AI can do this via skill assessment, where AI analyzes an actor's performance either through recorded videos or live sessions and provides detailed feedback on aspects like expression, body language, voice modulation, and emotional range.

In addition, through scene analysis, AI can break down scenes from scripts and provide insights into character motivations, relationships, and subtext. It could also offer suggestions on how to approach a scene based on the actor's strengths and character they are portraying. In determining an actor's weaknesses and strengths, AI can recommend customized exercises for individual actors. In view of this, AI can curate actor performance simulations. Actors could rehear scenes with AI-generated virtual partners, allowing them to practice interactions and dialog delivery in a realistic setting. The AI partner could adapt its responses based on the actor's performance to provide dynamic rehearsal experiences.

Augmented reality performance:

AI-driven augmented reality (AR) technologies can enhance live performances by overlaying digital elements onto physical stages. This creates immersive and dynamic theatrical experiences for audiences. Augmented reality performances can revolutionize theaters by seamlessly blending virtual elements into live productions. For instance, interactive Props: actors engage with virtual objects projected onto the stage, enriching storytelling and immersing the audience in dynamic environments. With dynamic sets, AR enables fluid set changes, transporting the audience to various locations without physical constraints and enhancing the narrative with compelling backdrops. Enhanced costumes that incorporate AR to alter appearance or reveal intricate details can aid in deepening characterizations and enriching scenes.

Audience Engagement

AR empowers audience members to interact with the performance through their smartphones or AR glasses, unlocking hidden content and influencing the storyline in real-time and with virtual characters. Thus, actors can interact with these projections seamlessly, blurring reality and fiction to expand storytelling possibilities. In essence, augmented reality performances offer innovative ways to captivate audiences, merging physical and virtual realms to create unforgettable theatrical experiences. AI offers actors enormous opportunities to enhance their craft, engage audiences in new ways, and participate in groundbreaking projects. However, actors must also navigate ethical and creative challenges associated with AI integration.

2.   **Ethical considerations regarding the use of AI in the Acting Profession**

AI's integration into the film industry starts with the scriptwriting phase. Technologies like Script Book use natural language processing to scrutinize scripts, forecast box office performance, and provide guidance on plot and character evolution. For example, 20th-Century Fox used AI to analyze Logan's script facilitating informed decisions regarding the film's storyline and themes. In pre-production, AI has also supported casting choices and location scouting. Warner Bros. collaborated with Cinelytic to leverage AI in casting decisions, assessing an actor's market worth to anticipate a film's economic viability. At this stage of AI's life span, it seems very efficient and harmless, but some view the phenomenon with a pinch of salt. They believe that indulgence in the

usage of artificial intelligence foretells certain repercussions, or at least, means a breach of the "unspoken contract of the arts". In discourses and debates, the following ethical considerations arise:

Authenticity

While AI possesses superfast data processing capabilities, when it comes to delivering heartfelt performances, many beg to differ that AI- generated performances can carry the weight and complexity of human emotions and essence. AI-generated performances may raise questions about the authenticity and uniqueness of human creativity. Given that most performative arts are empathetic, there are concerns about whether AI-generated performances can capture the depth of human emotion and experience. The challenge of authenticity within the realm of AI and acting delves into the core essence of creativity, emotion, and human expression. AI technology can mimic human behavior and generate performances; thus, there exists a debate regarding whether AI-generated content can authentically embody the depth and sincerity of the human experience. This discussion revolves around the notion that acting transcends the mere delivery of lines or replication of emotions—it entails delving into genuine emotions, experiences, and connections with the audience. Human actors inject their unique perspectives, emotions, and interpretations into their performances, imbuing them with authenticity and profundity that may prove challenging for AI to replicate. Moreover, authenticity in acting often entails vulnerability, spontaneity, and the capacity to respond to the fluid dynamics of live performance. Human actors can draw from their personal experiences, instincts, and intuition to infuse authenticity into their roles, thereby fostering genuine connections with the audience; navigating the given circumstance.

AI technology has made significant strides in emulating human behavior and crafting convincing performances; however, a qualitative disparity persists between AI-generated content and performances curated by human actors. The subtleties of human emotion, nuances of expression, and depths of interpretation are arduous to replicate artificially.

In navigating the intersection of AI and acting, it is imperative to contemplate how technology can augment— rather than supplant—the artistry and authenticity of human performance. This might involve using AI as a tool for creative exploration, collaboration, and innovation while safeguarding the integrity and authenticity of human expression in performing arts.

Job Displacement

The widespread adoption of AI in acting could lead to job displacement for human actors, directors, and other industry professionals. This could have significant economic and social implications for those working in the entertainment industry. One area of concern is the use of AI-generated characters or virtual performers in place of human actors. AI algorithms can be trained to mimic human behavior and generate realistic performances, raising the possibility of creating entirely digital characters for film, television, or other forms of entertainment. While this may offer new creative possibilities, it also raises questions about the future demand for human actors and the diversity of roles available to them.

Representation and Diversity

AI algorithms may inadvertently perpetuate biases in the datasets used to train them, leading to issues of representation and diversity in casting and storytelling. There is a risk that AI-generated content reinforces existing stereotypes or marginalizes underrepresented groups.

AI algorithms used in casting decisions, script analysis, and performance assessment may inadvertently perpetuate biases inherent in their training data. For instance, if historical casting data predominantly features

specific demographics, AI systems might recommend similar casting choices, potentially reinforcing existing representation disparities. Furthermore, the absence of diversity in the training datasets used to develop AI models can lead to biased or narrow recommendations. Should AI systems primarily learn from content showcasing certain demographics or cultural perspectives, they may struggle to accurately represent or suggest diverse talent. AI-generated content may lack cultural sensitivity or authenticity, particularly when depicting characters from underrepresented communities. Without meticulous consideration and input from diverse voices, AI-generated performances could inadvertently perpetuate stereotypes or misrepresentations. AI adoption in casting and production processes could affect access to opportunities for actors from underrepresented groups. If AI algorithms favor certain demographics or adhere to established industry norms, they may result in limited opportunities for actors from marginalized communities. In addition, excessively relying on AI for creative decision-making in casting and storytelling risks diminishing diversity and innovation. Human decision-makers bring unique perspectives, experiences, and insights to the creative process. It is crucial to ensure that AI supplements are not replaced.

Privacy and Consent

AI systems used for performance analysis and coaching may collect sensitive personal data from actors, such as facial expressions, vocal patterns, and emotional responses. It is crucial to ensure that actors' privacy rights are protected and that their consent is obtained for the collection and use of their data. The widespread AI usage has made it difficult to track. Actors must be fully informed about the types of data collected, how the data will be used and who will have access to the data. They should have the right to consent to the collection and use of their data, and should understand the purposes and potential risks. There should be transparency regarding the operation of AI systems and the handling of actors' data. Clear explanations of how data are collected, analyzed, and stored, as well as the algorithms used, are essential for actors to make informed decisions. Measures must be in place to safeguard actors' data against unauthorized access, misuse, or breaches. This includes encryption, access controls, and regular security audits to ensure compliance with industry standards and regulations. In addition, actors should have the right to withdraw their consent for the use of their data at any time. They should be able to request the deletion or removal of their personal information from AI systems and databases.

Creative Control

Traditionally, actors and directors exercise creative control over performances, interpreting characters and shaping narratives based on artistic visions and intuitions. AI interventions could challenge this autonomy by suggesting specific acting choices or influencing storytelling decisions. Actors and directors may have concerns about relinquishing creative control to artificially intelligent systems, particularly if they dictate aspects of performance or storytelling. It is essential to strike a balance between leveraging AI tools for creative enhancement and preserving the artistic integrity and autonomy of human creators. In addition, AI algorithms used in acting may provide recommendations or insights derived from data analysis and pattern recognition. While this can enhance performance refinement and trend identification, it also poses the risk of actors feeling constrained or compelled to adhere to AI-generated suggestions, potentially limiting their creative freedom, expression, and fulfillment.

Addressing these ethical considerations requires careful consideration, transparency, and collaboration between actors, directors, producers, technologists, ethicists, and policymakers. By proactively addressing these issues, the entertainment industry and training institutions can harness the potential of AI to enhance the art of acting while upholding ethical principles and values.

Conclusion

The integration of AI into the acting domain presents a fascinating intersection of technological innovation, artistic expression, and ethical considerations. As AI technologies become increasingly sophisticated, they offer promising opportunities for actors and the entertainment industry as a whole. Innovations such as AI-driven performance analysis, virtual rehearsals, and augmented reality performances can revolutionize how actors train, collaborate, and engage with audiences. These advances can enhance the performance quality, streamline production processes, and unlock new creative possibilities.

However, with several theories vilifying AI, its adoption in acting training and practice raises ethical questions. Concerns about job displacement, representation, privacy, consent, and creative control must be carefully addressed to ensure that AI integration is conducted ethically and responsibly. Adapting to the impact of AI on acting requires a collaborative effort between actors, directors, producers, AI developers, ethicists, and policymakers. By fostering dialog, transparency, and a commitment to ethical principles, the industry can harness the potential of AI while safeguarding the rights and well-being of all involved.

Change is an inevitable constant that permeates our reality. From the ancient stages of the classical Greek theater to the digital screens or even virtual projection of performance, one can see that performance has taken several evolutionary steps, some considered hitherto taboo. Artificial Intelligence is a phenomenon that will only evolve, and while the turn this evolution will take is largely uncertain, it foretells quite a number of benefits and, on the other hand, concerns that may even bother humanity's survival. This study recommends more transparency and collaborative work across the globe in relation to research on the subject. At present, while the scope of the project is limited to the impact AI has had on acting, it is noteworthy that consideration should be given to the possibility of AI getting out of control and the need for transparent regulation of the phenomenon.

In conclusion, the impact of AI on acting is complex and multifaceted, offering both exciting and challenging opportunities for adaptation. By embracing innovation while upholding ethical principles and standards, the acting profession can continue to evolve and thrive in the digital age, enriching storytelling and compelling audiences around the world.

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