



# The Place/Position of Artificial Intelligence on Puppets, Masquerade, Music and Dance in Nigeria

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## Abstract

This research investigates the place/position of artificial intelligence on puppets, masquerade, music and dance in Nigeria. It examines the extent to which digital technology has influenced the traditional process and structure of the music industry. The study gathers its primary data, using an ethnographic approach and the qualitative research methodology. Findings reveal a positive and negative impact of digital innovation on the music industry. It recommends that the government agencies and stakeholders should organize a symposium to fast track proper utilization of the modern innovation in mus. It also recommends that independent artists familiarize themselves with the current digital tools at their disposal and stay updated on the technological advancement of the era.

**Keywords:** Artists, Digitalization, Dance, Puppet, Masquerade and Music.

## INTRODUCTION

Artificial Intelligence (AI) is a wide ranging branch of computer science that arise to build machines capable of performing tasks that typically require human intelligence. While AI is an interdisciplinary science with multiple approaches, advancements in machine learning and deep learning in particular are creating a paradigm shift in virtually every industry.

Artificial Intelligence allows machines to match, or even improve upon the capabilities of the human mind from the development of self-driving cars to the proliferation of generative AI tools, AI is increasingly becoming part of everyday life (Jurkowski, 2013).

### Puppetry

Puppetries have existed for so many years ago as long as about 3000 years BC ago. It takes many forms but all shares the same purpose and process either animating or inanimate first appeared in 5th century in ancient Greece as performing object that tell stories. It is moved by human being, not mechanism or machine. Move by human called puppeteer (Bell, 2014).

### Puppet Masquerade Music and Dance

The place position of Artificial Intelligence on puppet masquerade music and dance.

### Music and Dance

Music is the art of making sweet combination of sounds in a harmonious pattern. Music is an art which requires the combination of sounds (oral and objects echoes) in rhythm and harmony of sounds. Music is also seen as a form of language through which men expresses his feelings, ideas, emotions, beliefs, sense of beauty including impression on events, incidents the world around us. Thus, the organization of sounds through materials and silence as called music (Marinda, 2023).

In Nigeria society, music functions as part of religions, rituals, as an expression of social organization and as recreation in some of the musical concepts which are basic to music are notes, pitch, melody, chords, harmony, semi-tone, natural tones, sharps and flats, octave, keyboard, musical notation. Nigeria music can be grouped into traditional, religious, popular and art music.

Dance is defined as any organized body movement in time and space to express human feelings, ideas, images and beauty in relation to a musical performance before an audience or

spectators. Dance and music are closely related, and everywhere in the world both are seen aspects of culture. One peculiar thing about dance and music is that you require music for the art of dance to be meaningful. The following aspects are usually considered in dance, such as body awareness, space awareness, weight awareness and time awareness. There are six main types of dance namely: pure, study, abstract, comic, dramatic and dance-drama. The body is the main structure element of dance and dance consists of line, mas, coherence and space in structure. Dance could also be symmetrical or asymmetrical.

### **Artificial Intelligence (AI) in Music and Dance**

Artificial Intelligence (AI) is being leveraged to assist in African music writing, music composition a ranging from performance, African instruments, drawing on vast database of Nigerian musical traditions. In composition and writing of African music the purpose must be definite because it controls the entire process, when the purpose is confirmed, other aspects of African musical dance will depend on the purpose of achieving the desired end-product or out-put in the form of a socially acceptable form or pattern of the African music. Thus the purpose of African musical dance composition determines the choice of forms and patterns, the process and the desired and product of the ingredients music and good dance composition of music and dance the theme which is the title of music and dance which refers to the style of music or manner of expression in words, the part and sub-part which are collection of rhythms that divide songs into different steps that connects one part or steps of the music and dance to the other. The epilogue that refers to the end of music and the other part which is the performance between musical play/dance. Therefore, today economy, in composing music, the musician will get ready his resource which includes sounds, medium, the belief systems, events, social themes etc. Through the influence of Artificial Intelligence (AI) in order to gain more advantages.

Machine learning algorithms can be trained to generate many African new music in the style of specific Nigerian genres or to analyze and transcribe traditional African performance and composition.

Artificial Intelligence (AI)-Powered motion capture and generative models are also being used to digitally preserve and recreate Nigeria dance forms, allowing for innovative choreographic experimentation.

Choreography is the structuring of movements in time and space to make statements. The person who carries out this responsibility is a choreographer. He is a creative thinker whose creative thoughts are expressed not verbally but through body movements called dance.

The Artificial Intelligence (AI) with Nigeria's rich performance arts holds the potential to reinvigorate these traditions, making them more accessible, interactive and adaptive to contemporary audiences. However, it also raises important questions about cultural presentation, artistic authenticity, and the role of technology in shaping Nigeria's dynamic performance landscape.

### **Potential Challenges in Artificial Intelligence (AI) With Traditional Nigerian Music and Dance**

The Artificial Intelligence (AI) technology with traditional Nigerian music and dance presents several potential challenges that must be carefully navigated.

#### **Preservation of Cultural Integrity**

There is a risk of traditional performance forms being diluted or distorted through the application of Artificial Intelligence system that may not fully capture the nuances, symbolism, and cultural significance embedded within these practices. Musicologists and cultural custodians must be closely involved in the design and deployment of Artificial Intelligence tools to ensure they authentically reflect the values and aesthetic of the originating communities (Nelson, (2001).

#### **Ownership and Intellectual Property**

The use of Artificial Intelligence to generate new music or choreography inspired by traditional Nigerian forms raises complex questions of ownership, authorship and intellectual property rights. Mechanisms must be put in place to ensure that the creative outputs of these

Artificial Intelligence systems appropriately acknowledge and compensate the original cultural heritage source.

### **Accessibility and Inclusively**

The high cost and technical expertise required to develop and implement Artificial Intelligence-powered music and dance applications may limit their accessibility, particularly for marginalized communities and grassroots practitioners. Efforts must be made to democratize the use of these technologies and empower local artists and communities to engage with them on their own terms.

### **Technological Limitations**

Current Artificial Intelligence systems may struggle to fully replicate the improvisational, context dependent and embodied nature of traditional Nigerian music performance, arts, which often rely on subtle, tacit knowledge and lived experiences.

Ongoing advancements in areas like machine learning, multimodal perception, and generative modeling will be necessary to create Artificial Intelligence tools that can meaningfully engage with the richness and complexity of these traditions African Music performance.

### **Cultural Appropriation and Misrepresentation**

The use of Artificial Intelligence to simulate or reproduce Nigerian music and dance forms raises concerns about cultural appropriation, particularly of these technologies are developed and deployed without the active involvement and consent of the originating communities.

Safeguards must be in place to ensure that Artificial Intelligence-powered representations of Nigerian music traditional performance arts do not perpetuate stereotypes or misrepresent their true cultural significance. To address these challenges, a collaborative interdisciplinary approach involving musicologists, artists, cultural heritage specialists and Artificial Intelligence researchers will be essential. This will help ensure that the integration of Artificial Intelligence with traditional Nigerian performance arts respect the integrity of these practices empowers local communities and contributes to the sustained vitality and evolution of Nigeria's rich cultural heritage.

### **Masquerade Puppetry**

Jurkowski (2013) posits that masquerade puppetry has played an important role in disseminating knowledge in most parts of the world. Puppetry imbibes elements of all art forms such as literature, painting, sculpture, music, dance, drama and enables students to develop their creative abilities. Since puppetry is a dynamic art form that appeals to all age groups, this medium of communication has been selected to serve as an aid for imparting education in schools. The importance of puppetry in the field of education lies in the fact that this medium helps to develop imagination, creativity and observable skills in the children and audience. The masquerade will incorporate puppetry music and dance and move around and tell stories that will be narrative to pantry like in the New Yam Festival of Agulu, it is a dramatic scene.

Masquerade puppet performances where individuals can elaborate costumes and masks to take on spiritual or mythical persons. Masquerades often incorporate music, dance and drama to enact narratives and community celebrations. Examples include the *ofo* masquerade of the Igbo people and the Gelede masquerade of the Yoruba.

### **Artificial Intelligence Integration in African Music and Dance Puppet Masquerades**

**Cultural Preservation:** Artificial Intelligence can help document and preserve masquerade traditions. Through machine learning, Artificial Intelligence can analyze and achieve patterns, movements and music associated with different masquerades, aiding in cultural preservation.

Artificial Intelligence (AI) is revolutionizing the field of cultural heritage preservation. Through this utilization of Artificial Intelligence, we can analyze vast amounts of data, create virtual restorations, predict preservation needs and even revive lost languages and traditions.

## **Ethical Challenges Posed by Artificial Intelligence Technologies in Safeguarding Our Global Heritage**

One major concern surrounding Artificial Intelligence is the presence of biases. When Artificial Intelligence as used in cultural heritage contexts, these biases can result in:

**Misrepresentation:** Cultural symbols or stories being misunderstood due to data set that lacks diversity, leading to a distorted presentation of history.

### **Exclusion**

Historical accounts of marginalized communities being further marginalized of Artificial Intelligence (AI) systems are not trained on inclusive data sets. For example, facial recognition technologies used in museum visitor experiences might struggle to accurately identify and track interactions from diverse groups. This not only undermines the inclusivity of data that informs future conservation efforts.

## **Artificial Intelligence Role In Decision-Making And Employment In The Cultural Heritage Industry**

The integration of Artificial Intelligence into decision making processes can make operations more efficient but also has implications for employment in the cultural heritage industry.

AI's machines take on more responsibilities: Job displacement – automation may decrease the need for certain jobs, especially those involving repetitive or analytical tasks.

### **Skills Shifts**

Workers may need to acquire new skills to effectively understand these changes to ensure that technology complements human expertise instead of replacing it entirely.

## **Augmented Reality (AR)**

AI-powered Augmented Reality can enhance adding virtual elements that interact with live performers. This can create visually stunning and contextually rich experience.

Artificial Intelligence has had a positive impact in the African music performance by the puppet masquerade music and dance performance. With different colourful masquerade puppet representing different African/ Nigerian collectivity or dance to the rhythms of the traditional instruments; drum, flutes, and vocal singing and the dance will elaborate costumes and masks showcasing the beauty of the diversity of African music and societies in dance traditions which showcases the celebrations of culture artistry through power of telling stories through music and movement of the rhythms percussion instrument.

## **Impact of Artificial Intelligence (AI) On Puppetry Masquerade**

With the advent of Artificial Intelligence (AI) masquerade puppetry have undergone a revolution. It has opened up endless possibilities for creating realistic and interactive experiences through the fusion of technology and creativity.

### **Enhancing Realism and Expression**

One of the most exciting aspects of Artificial Intelligence in puppetry is its ability to enhance realism and expression, traditional masquerade puppets often relied on human mechanical gears and cables to control their movements, limiting their range of motion and expressiveness. However, with Artificial Intelligence these limitations are no longer a concern.

AI-powered systems can analyze human movements and expressions, allowing puppeteers designers to replicate them with incredible accuracy.

### **Improving Interactivity and Adaptability**

Artificial Intelligence has also revolutionized interactivity in puppetry. Through the use of sensors and machine learning algorithms, puppet characters can now dynamically respond to the audience and adapt their behaviour in real-time. For example an Artificial Intelligence-powered puppet can detect voice commands and respond with appropriate actions, making the performance more engaging and immersive. Sensors embedded within the characters can collect data about the

audience's reactions allowing the puppeteer or Artificial Intelligence system to adjust the performance accordingly. This adaptability enhances the overall experience, making it more personalized and memorable for each individual.

### **Creating Autonomous Performance**

Another exciting application of Artificial Intelligence in puppetry is the creation of autonomous performers. By integrating Artificial Intelligence algorithms into the control systems, puppets can operate independently, eliminating the need for manual control. Imagine a puppet that can navigate its surrounding, interact with objects, and perform complex actions without human intervention. This level of autonomy opens up new possibilities for creating interactive installations and immersive experiences that can run continuously without human supervision.

### **Tools for Puppeteers and Designers**

Artificial Intelligence has not only transformed the performances themselves but also the tools available to puppeteers and designers. Skipitares, (2009), stated that machine learning algorithms can analyze and generate data driven insights about puppetry techniques, movement patterns, and character development for example, Artificial Intelligence can analyze the movements of human puppeteers and suggest improvements to enhance realism and fluidity, it can also generate unique movement sequences based on a character's personality traits, providing puppeteers with a rich source of inspiration. Furthermore, AI-powered software tools can assist in designing and fabricating animatronic characters, streamlining the production process and reducing costs (Schumann, (2001).

### **Ethical Considerations**

While Artificial Intelligence brings numerous benefits to puppetry, it is essential to consider the ethical implications of its use. As AI-powered characters become more realistic and interactively engaging, there is a risk of blurring the lines between fiction and reality. This raises questions about consent, privacy, and the potential manipulation of emotions.

Moreover, there are concerns regarding the displacement of human puppeteer's designers by Artificial Intelligence systems. As autonomous performers become more prevalent, it is crucial to find a balance between the advantages automation and the value of traditional craftsmanship.

### **CONCLUSION**

In conclusion, Artificial Intelligence has revolutionized puppetry, unleashing a new era of creativity, interactivity and realism from enhancing expressiveness and interactivity to creating autonomous performers, Artificial Intelligence has expanded the possibilities for puppeteers and designers. However, it is important to carefully navigate the ethical considerations associated with the use of Artificial Intelligence in these art forms. As technology continues to advance, the integration of Artificial Intelligence and puppetry opens up a world of endless possibilities, creating unforgettable experiences for audiences around the globe.

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