

Digital Technology and the Challenges for Nigerian Theatre

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Abstract

This chapter looks at the challenges and opportunities offered by digital technology for the practice of Nigerian theatre. The chapter notes that digital technology offers a lot of potentials for the Nigerian theatre in terms of its impact in achieving artistic viability in the area of aesthetic appeal as well as in generating business and marketing potentials. The chapter examines the emerging transitions of technology application from the traditional theatre period to the modern. It analyzes the application of technology to the Nigerian film industry, the broadcast industry and the arts generally. The chapter concludes that technology and in this case digital technology is sine qua non to the growth of the art industry in Nigeria.

Introduction

Theatre Technology in Nigeria

Theater and the application of technology in theatre practice is not new in Nigeria. It may be altruistic to state that theatre technology emerged about the same time with theatre practice. In traditional African theatre practice one form of technique or the other may have been employed in the course of the execution of performance or histrionics. Many modern scholars including the technical theatre expert, Duro Oni, have examined the relationship between the two.

It could be stated that whereas the techniques unfold in the theatrics of performance, the technology unfolds in the use of designs, colors, signage and other audio-visual enhancers of the theatrics. Traditional theatre techniques according to Olu Obafemi

are symbolic, and mimetic in nature, dialogue, rhythm, and action, meaning therefore comes out not only from the songs and dances but from the proverbs, wise-sayings and praise poems. He also notes that incantations, rhythms and thunderous vocalization through repetition are also features of the traditional performance. This he defines as the expressionist device of direct communication with the audience.

Des Wilson (1997) identifies the technology of traditional African performance to include the **institutional, iconographic, demonstrative, extra-mundane** and **symbol-graphic**. He notes that the instrumental consist of idiophones, membrane-phones, gong, woodblock, drum-bell and rattle, also whistles horns, from plants and animals. He describes symbol-graphy, as the use of cryptic representation in the form of writing, made on surfaces like the rind of bamboo, walls, cloths or on the ground. According to him, iconographic, consist of use of objects and floral media. He notes that they are significant in that the objects refer to a thing, event or concept. This concrete representation may have a universal application or significance, like in the presentation of kola-nut, charcoal, white pigeon or fowl/

Wilson also notes that in traditional communication the visual mode consist of colors and dressing, appearance and general comportment, to communicate feelings or emotions and attitude. It has the advantage of pictorial communication, that is through the speed of the impact of the message. Institutional communication consist of the use of certain traditional institutions, like marriage, chieftaincy, shrines, mask and masquerades.

In his own contribution Adegbite (2006) notes that design and technical concepts spice up theatrical performance, especially when required to contribute significantly to the overall success of performances, whether on stage, television or in video and celluloid. He believes that the theatre designer uses design and technical concepts in theatre to project the playwright and directors artistic expression, communication, and all times of structuring and arrangements.

He adds therefore that any theatrical activity or dramatic enactment without the synthesis of this audio visual element is more or less a

pseudo-theatre meant for the 'glorification of animal' in human skin; so to say. He adds that adequate use of design and technical aids can better the lots of theatre performance. Ododo (1988) believes that African design/technical concepts should try to relate both physically and functionally to those aspects that project true African cultural and artistic endeavors. Adegbite believes that African theatre has come of age having passed through numerous levels of stages, and developments is evidenced in its many forms and styles. In order words, the indigenous African theatre along with its design and technical concepts has been transformed, it changes easily to reflect situations and circumstances. This according to him, pre-supposes that the design and technical concepts that accommodate the frequent changes could be also affected by the changes in form and style.

Ogunbiyi (1981) whilst reviewing Duro Ladipo's performance of Sango comments on the import of technique and technology and notes that traditional Yoruba theatre knows its limits i.e. in the technical sense of lighting effects, stage props, and yet by the same token stage realism is not totally ignored. For example, in the production of Sango, the sight of Sango actually spitting fire, prancing about unpredictable on stage in the manner of the legendary king must be understood within the frame work of psychological realism where the performer performs his role convincingly even though the entire production is partially stylized. He recounts that faced with the task of realizing this legendary feat on live stage Ladipo lets himself be guided by the techniques of stage realism. He reduces the legendary figure of a thousand victims of Sango's anger to a more theatrically convincing figure of a few individuals. Ogunbiyi further rationalizes this inadequacy by explaining that Ladipo may have sought to demythologize the legend thereby reminding the audience that though a good god, Sango was first and foremost a man.

In her own recount, Ebun Clark (1981) notes that during the concert party phase of the Ogunde theatre, foreign musical instrument was introduced in his opera. This suggests a combination of traditional African performances and some foreign instruments or technology. Also, Duro Oni (2004) states that 'the Ogunde theatre was a syncretic process'. According to him Ogunde made use of such

modern equipment as lighting, scenery, and later sound amplification; western type instrument such as stage sets, trumpets and colorful stage lights. He emphasizes that designing for theatre entails not only a sound knowledge of the theatrical processes but also a firm grasp of performing art technologies. Incidentally according to him technological development is in a constant state of flux as science and technology continues to grow.

But put on a comparative scale with Western theatre, modern Nigerian theatre technology has more or less indicated the deficiencies, imitations and lack of third world modern theatre practice. Whereas traditional theatre existed in the historical realities of the African over time and explored the technologies of its time, its artistic potentials were undeniable. The same cannot be said about its application and application to modern technology.

Modern Era

Whereas tradition is said to be static, the technology of theatre is constantly changing and adapting to newer changes and demands of the audiences. It is Nwadigwe (2006) who states that modern theatre benefits immensely from increasing advances in science and technology. This trend according to him is a response to the global digital march. He notes that theatre historians now look upon the introduction of the computer into the theatre; the computer according to him offers greater potential for theatrical creativity.

He further notes that a major constraint to the application of new technologies to the theatre is the huge and often prohibitive cost of acquisition, installation, lack of manpower, apprehension for change and maintenance. He sates that

In many performance venues, architectural limitations may not permit the installation of such stage technologies without embarking on expensive remodeling and reconstruction of the house.

Nwadigwe (2006) identifies irrelevant curricular as a major hindrance

to the development of technical theatre in Nigeria. He submits that Nigerian educational theatre is in decay and has continued to lack basic facilities and adequate manpower. Similarly Illah (1999) observes that the design and technical theatre is taught as theory because of inadequate material input.

Technology according to Mesthene (25), is a set of skills, techniques and activities for shaping of materials and the production of objects for practical ends. Between the theatre technology and the environment; Ugwu (2006) states that 'there is a technological symbiosis'. He notes that like technology theatre maintains technological symbiosis with its environment. He however posits that the symbiosis must be vibrant and development oriented. Esan (2009), states that one of the burdens of Nigerian television since the early days is that it has had to bear with imported technology. WNTV and later other Nigerian stations rely on cast offs from foreign stations that are able to update their equipment as technology developed. He notes that such acquisition of obsolete equipment put a strain on operations. There was no technology to support field production and news report relied on footage from international news agencies especially in the area of engineering.

Nigerian Film

The home video in Nigeria has unarguably emerged as the new and central tool of mass-culture or popular culture. Nwadike (2005) states that as a means of Communication and cultural expression the cinemas exploit material elements such as artifacts, paintings, sculpture, murals, dress, ornaments, architecture, objects and archeological remains of a people in set design and decoration, costuming and make up, establishment shots, location backgrounds and allied visual production.

He notes that these materials when properly highlighted can make profound statements about the cultural norms and values depicted in the filmic narrative. According to Nwadike indeed, material components of culture are available in abundance in many locations such as museums, galleries, cultural centres, public parks etc. He recommends that cinematographic art which digital technology mostly offers can be exploited to make these artworks accessible to

a wider spectrum of audiences.

Nwadike identifies the problem when he says that an analysis of early and recent Nigerian video-films shows a conspicuous neglect of artworks and material cultural in the design and decoration of set. Among the films that this is lacking is *Angel*, *Scores to Settle*, *Deadly Proposal*, *True Confession* etc.

It is Koforowola (1999) who states that Nigerian films can:

...highlight those arrears of culture in which we share common concepts and which can be geared towards the achievement of our common goals. Such an approach to culture through filmic design and décor will deliberately de-emphasize our arrears of difference, while giving priority to those arrears in which we share a common ideology.

Nwadike (2005) mentions that in choosing locations for films, most of the so called suitable locations still require alterations and decorations to create proper sets through the rearrangement of set pieces, units, properties to convey intended ideas with digital technology. He adds that in film production, both make up and costume exert enormous control over the visual representation and this is reinforced by the choice of colors, lines, texture accessories, and mass. As part of the actors personality, costumes and make up act as moving scenery in film production, attracting attention, conveying information and intensifying the narrative action. Visual production is also controlled by lighting through angles, intensities, movement, color and effects including pyrotechnics. According to him all these are special areas for designers and directors.

Digital Broadcasting

With regards to broadcasting, there is no doubt that the switch from analogue forms of broadcasting to the digital is the most significant change to African and indeed the global television. Digital technology for the production, transmission and reception of television is clearly

superior to analogue, the one mostly used by African countries today. But the eventual complete transition to digital transmission throughout Europe and indeed the world seems inevitable. The transition is mandated by the global telecommunication union ITU. An American scholar of Nigerian descent Igyor (2004) projects that cable will be the main source of digital TV bringing in 290 million homes by 2013, followed by DTH 129, DTT 111 million, IPTV 54 million. He projects that at least half of the world's homes or 636 million households will have digital television by 2013. To achieve this in the UK, Great Britain is spending 400 million pounds over a seven year period to educate 60 million citizens about its digitization transmission.

DIGITISATION IN NIGERIA

Is Africa and indeed Nigeria ready for this change? What are the challenges and ultimate value for Africa? Can we as Africans be isolated from the impacts of global policies and initiatives. These are the problems this chapter will attempt to address.

Firstly, millions of Africans do not see this as a challenge due largely to ignorance of the future direction of the industry. Secondly, who is going to ease the burden on the African households to help analogue-dependent viewers buy converter boxes which are crucial and indispensable to equip their TVs to receive digital signals.

Broadcasters as a matter of necessity must begin to rethink their roles and business models, in a multi-channel environment that is particularly imperative for broadcasters wishing to get access to the increasing number of viewers using non-terrestrial platforms.

Thirdly, a multiplication of channels will boost the demand for television programmes and attractive content will become highly valued asset. Igyor (2004) notes that the major challenges that DTT will offer include the promotion of digital television, upgrade, new licensees, and channel availability. To address this challenge he advises that the broadcast industry and governments must publicize, enlighten and create awareness. The second challenge is the entrance of new players, which according to him will precipitate a change in organization and strategies. Broadcasters as a matter of necessity must begin to rethink their roles and business models, in a multi-

channel environment that is particularly imperative for broadcasters wishing to get access to the increasing number of viewers using non-terrestrial platforms.

It is Betiang (2008) who states that the obvious constraints that face digitization in Nigeria, include those associated with cost of reception and those related to service providers. Other constraints relate to filling the gaps in media literacy to be able to navigate and appreciate the new media, the systems capacities, upgrading of technologies and the required technical support. Other challenges to the industry include high level of illiteracy, unreliable and erratic power supply.

Betieng notes that above all there is the challenge for public service broadcasting in an age when it is threatened with extinction from the pressures of consumerism and globalization. He wonders how local and small scale creative industries and media managers will survive global brands that will be competing in a digital age and platform. Therefore, Betiang argues that we need some kind of public policy at transnational level which can harmonize the peculiar needs of local cultures to cushion the effect of the march towards technology.

Digital Art

One thing is not in doubt, that is that, technological advancements have greatly facilitated the ability for the media, especially the production medium to recreate, recast, reposition and refocus cultural content to various peoples and communities. Alfred Opubor (12) explains that the technological advancements expressed in the convergence of the media characterized by high speed broadband connectivity, like internet and satellite broadcasting, based on digital technologies, (like in high definition cameras and digital editing and computer generated effects) in enabling transmission of vast signals, has created immeasurable opportunities for distributing audio-visual services quickly and widely, also in reproduction and repackaging. Noting that, they have the potential to define the way media affect their audiences. Powell (2004) noted the great possibilities offered by the new technologies, when he states that Americans are today witnessing the great possibilities that internet video streaming can offer. He notes that internet has helped to deliver even more competitive and diverse video offerings, adding that this will provide producers of

programming and information with increasing opportunities to serve the individual and diverse interests of American people.

Digital technology has had tremendous influence and impact on the practice of the arts. 'Digital art' according to Wikipedia is a general term for a range of artistic works and practices that use digital technology as an essential part of the creative and/or presentation process. Since the 1970s, various names have been used to describe the process including computer art and multimedia art and digital art is itself placed under the larger umbrella term of new media art.

The impact of digital technology has transformed and influenced traditional activities such as painting, drawing and sculpture while new forms, such as net art, digital installation art and virtual reality have become recognized artistic practices. But more generally, the term digital artist is used to describe an artist who makes use of digital technology in the production of art. The term digital art has in recent time come to be applied to contemporary art that uses the methods of mass production or digital media. There are several ways where the Digital technology can be applied to the arts.

Digital Production Techniques in Visual Media

The techniques of digital art are used extensively by the mainstream mass media in advertisements, and by film-makers and even stage performers and directors to produce special effects. Special effects are very key to achieving dramatic action and reaction in the theatre. This will be very instrumental and effective for instance in achieving the mystical impact that is characteristic of most Nigerian performances.

Desktop publishing has had a huge impact on the publishing world, although that is more related to graphic design. It is possible that general acceptance of the value of digital art will progress in much the same way as the increased acceptance of electronically produced music over the last three decades.

Digital art can be purely computer-generated such as fractals and algorithmic art or taken from other sources, such as an image scanner scanned photograph or an image drawn using vector graphics software using a computer mouse or graphics tablet.

Also digitized text data and raw sound recording and reproduction of audio and video recordings are not usually considered digital art in themselves but can be part of the larger project of computer art and information art artworks which are considered digital. Painting when created in similar fashion to non-digital paintings but using software on a computer platform and digitally outputting the resulting image as painted on canvas.

Digital Photography and Image Processing

Another form of digital art is digital photography and digital printing which is now an acceptable medium of creation and presentation by major museums and galleries. But the work of artists who produce digital paintings and digital printmakers is beginning to find acceptance, as the output capabilities advance and quality increases. Internationally, many museums are now beginning to collect digital art such as the San Jose Museum of Art and the Victoria and Albert Museum print department also has a reasonable but small collection of digital art.

Computer-generated Visual Media

There are two main paradigms in computer generated imagery. The simplest is computer graphics which reflect how you might draw using a pencil and a piece of paper. In this case, however, the image is on the computer screen and the instrument you draw with might be a tablet stylus or a mouse. What is generated on your screen might appear to be drawn with a pencil, pen or paintbrush. The second kind is 3D computer graphics, where the screen becomes a window into a virtual environment, where you arrange objects to be "photographed" by the computer. This is used to create image patterns and visuals which are very useful in the visual arts.

Computer-generated 3D still Imagery

3D graphics are created via the process of designing complex image from geometry shapes, polygons or Non-uniform rational B-spines to create three-dimensional shapes, objects and scenes for use in

various media such as film, television, print, rapid prototyping and the special visual effects.

There are many software programs for doing this. The technology can enable collaboration, lending itself to sharing and augmenting by a creative effort similar to the open source movement, and the creative commons in which users can collaborate in a project to create unique pieces of art.

Computer-generated Animated Imagery

Computer-generated animations are created with computers from digital models created by the artist. The term is usually applied to works created entirely with a computer. Movies especially make heavy use of computer-generated graphics; they are called computer-generated imagery (CGI) in the film industry. In the 1990s, and early 2000s CGI advanced enough so that for the first time it was possible to create realistic 3D computer animation, although films had been using extensive computer images since the mid-70s. A number of modern films have been noted for their heavy use of photo realistic CGI. Films like AVATAR and several other cartoons are computer generated. The Nigerian video industry will do well to address the question of lack of quality and low creativity if they use computer generated images.

Digital Installation Art

Digital installation art constitutes a broad field of activity and incorporates many forms. Some resemble video installations, particularly large scale works involving video projections and video capture live video capture. By using projection techniques that enhance an audiences impression of sensory envelopment, many digital installations attempt to create immersive environments. Others go even further and attempt to facilitate a complete immersion in virtual reality realms. This type of installation is generally site specific scalable and without fixed dimensionality, meaning it can be reconfigured to accommodate different presentation spaces.

Screen is an example of digital installation art. To view and interact with the piece, a user first enters a room, called the "Cave," which is a virtual reality display area with four walls surrounding

the participant. White memory texts appear on the background of black walls. Through bodily interaction, such as using one's hand, a user can move and bounce the text around the walls. The words can be made into sentences and eventually begin to "peel" off and move more rapidly around the user, creating a heightening sense of misplacement.

In addition to creating a new form of bodily interaction with text through its play, Screen moves the player through three reading experiences; beginning with the familiar, stable, page-like text on the walls, followed by the word-by-word reading of peeling and hitting (where attention is focused), and with more peripheral awareness of the arrangements of flocking words and the new text being assembled on the walls. Screen was first shown in 2003 as part of the Boston Cyber Arts Festival.

Various aspects of digital art includes Algorithmic art, Art software, Austin Museum of Digital Art, Computer art, Computer art scene, Computer generated music, Computer graphics, Computer music, Cyber arts, Demo scene Digital illustration, Digital imaging, Digital morphogenesis, Digital painting, Digital photography, Digital poetry, Dynamic Painting, Electronic art, Electronic music, Evolutionary art, Film Movie, special effects, Fractal art, Immersion (virtual reality) Interactive film, Motion graphics Multimedia Music visualization, New Media Art, New Media Photo manipulation Systems art, Tradigital art, Video art, Video game art, Video game design, Video poetry, and Virtual art.

Conclusion

There are several benefits accruing to theatre practice in Nigeria from digital technology. For the theatre, it will provide opportunities for artistic realism, scenery and designs will be more effectively captured. Impressions will be better captured. With respect to broadcasting it will enable television stations to provide several channels of programming at once. This is known as multi-casting. For programme producers, digital technology will simplify, streamline and reduce the costs involved with production, editing storage and transmission of television programmes and services. Because less power is required in digital transmission, the energy consumption

and broadcast cost for each television service is lower than the analogue.

Digital technology is more versatile in that it facilitates enhanced programming (multi-camera angles, additional information to complement programming etc and interactive services, as in internet. Also, the development of digital compression techniques has reduced the amount of spectrum required for television transmission, and this provides scope for a substantial increase in the number of spectrum required for television signals available to viewers.

Nigerian theatre will do for itself and its viewing audiences a lot of good if it embraces the obvious artistic advantages that digitization offers.

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