

Concept, Process and Practice of Costume Design Digitalization in Contemporary Nigerian Theatre

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Costume design constitutes fundamental component of theatrical productions, shaping not only artistic performances but also the cultural and visual representation of individuals and groups according to thematic, characterization and context demands. Over time, costume design has undergone significant transformations, particularly with the advent of digital technologies which have redefined creative processes in contemporary theatre practice. This study examines the evolution of costume design from the analogue foundations to present day digitally mediated practice. It interrogates how digital techniques and tools are increasingly employed in the conceptualization, execution and visualization of costumes for theatrical productions. Adopting qualitative research approach, the study analyses the approaches of traditional costume design and evaluates the integration of digital technologies within contemporary practice. The findings underscore significant need to embrace digital innovation in costume design; and recommends that theatre practitioners incorporate digital methods and tools in their productions to enhance creativity, efficiency as well as realism in theatre practice.

Keywords: Costume design, Digitalization, Nigerian Theatre, African traditional and cultural flavour, theatrical productions.

Introduction

The global exploits in technology have digitally affected many areas in the theatre practice especially in the area of costume design which is a major physical component in theatre productions. From the Classical period of the Greek society, through the Roman society to the present society, the theatre has experienced characteristic progression from analogue to digital through advancement in technology. An observation of the historical perspective of theatre reveals many advanced strides achieved through the development of early existing technologies like in Africa. According to Ekeke and Ekeke, “the material aspect and the unique African traditional and cultural flavour can be seen from artifacts and relics in its broadest form such as tools, clothing, food, medicine, utensils and housing” (33). A cursory look into the history and development of theatre reveals distinctive technologies associated with specific periods and this remains a springboard with which theatre technologists advanced their

professionalism to suit their demands for contemporary theatre. However, it must be noted that digitalization is driven by technology and arts.

The theatre itself has responded to these new technologies positively. Advancement in theatre technology in the area of designing costume holds the key to the future of the theatre. In contemporary theatre, costume designers have become so technologically propelled, and their advancement is measured by the level of integration of technology into every fabric of costume designing in this context. A close affinity exists between technology and theatre, “some of the greatest technologies in our society today are created basically out of the need to solve a problem” (Iseyen). Technologies exist to serve humanity. Technology thus does serve as a tool in the hands of theatre studies in probing and understanding the human condition. According to Adebite, “Technology possesses that instrument which is capable of aligning man to himself and to his world, while art

enables the human mind, his thought, his value and help gauge his action” (381).

Although technological advancement in theatre has empowered the designing of costume by offering more advanced tools and techniques to work with, it is the ability of the costumiers to effectively and discerningly utilize the available technology available in costume design for contemporary theatre. There is no doubt that digitalization and the sophistication in modern technology have greatly affected in inputs of various are making up the theatre arts especially in the area of costume design. Today, digitalization has contributed greatly to the present development in theatre and allowing the actualization of the emerging theatrical aesthetics in costume design to enhance the interpretation of theatrical situation.

This study is focused on digitalization of costume design through evolving technology in theatre that helps in reducing the hitherto cumbersome analogue and traditional modes in designing costume for the theatre as well as achieving more aesthetics in costume design and making the process faster and easier. Pertinent to note that the digitalization of costume design, as witnessed in Nigerian theatre is made possible as a result of various changes in theatre, from pre-modern theatre through steady but gradual technological inventions relevant to the theatre. This study examines the incorporation of digital technological tools into designing of costumes for theatrical productions. It also comparably presents the replacement of traditional approaches and equipment in costume design by digital approaches and equipment as

witnessed in Nigerian theatre that have added to aesthetic worth of costume in terms of designs and also minimizing cost, lessening the manual burden, speeding up the designing process and guaranteeing efficiency.

Conceptualizing Digitalization

The concept of digitalization is driven by a continuing technological evolution, ignited and manipulated by human initiative and inventions, which has afforded theatre practitioners and especially costume designers the opportunity to practice in a simple process in what would have been more complex under traditional analogue system of designing costume. Bassey defines Digitalization as the process of employing digital technologies in the transformation of processes, systems or activities that previously operated in manual or analogue ways. Relatively Ekpe and Akpabio opine that digitalization could be seen in the light of its function of integrating digital technologies into existing social, cultural or professional practices in such ways that reshape processes, production, modes of interaction as well as forms of representation. In designing costume for Nigerian theatre, digitalization has driven the development of costume designs that would not have been impossible without increasingly advanced apparatus, made possible by technology. As theatre and costume design are progressing, so has the sophistication in their technologies in terms of practice and process culminating in digitalization.

Digitalization is advantageous in this area because it broadens the tools made available to Nigerian theatre in terms of

costume designing through equipment, methods and approaches employed to achieve the desired production. However, it should be noted that digitalization of costume design has greatly added value to production and ease the process when compared to the hitherto traditional concept, process and practice.

Costume and Costume Design

Costumes are any material that is worn by a performer in a film or play to build up, emphasize or portray his character. As a visual art, costume in the words of Ekeke and Ekeke “has the power to change the viewer’s perspective” (111). Costume includes clothing, eye wears, footwears, headgears and clothing accessories. Costume design can help to:

1. Enhance the emotional mood and the stylization of the production.
2. Separate the range of main characters and minor ones.
3. Explain the way the characters relate to each other.
4. Suggest changes in the way an actor looks.
5. Recommend changes in character development and age.
6. Treat every character as an aesthetic object per se.

All other pertinent accoutrements such as canes, hats, gloves, shoes, jewellery and masks should be taken into consideration because costume designs, even though these are considerations that are not always very visual, as these accounts tend to be the determining factors between the different characters. As noted by Ekeke, a mask made with semblance of a fearful human being, possibly with large obvious eyeball and

heavily projected teeth will likely be used to represent a strict spirit.

Costume helps to depict the place and time setting of the story. The culture of the performer as well as determine the social class of the character being depicted. In the context of this seminar paper, costume design enhances the appearance of actors on a theatre stage and helps to reveal the status (social, economic and psychological) of the character portrayed. Costume design in the Nigerian theatre, has begun incorporating digitalization (computer technology) to fabricate materials. Because of evolving advancement in technology, the concept work in theatre, particularly, designing of costumes is made easier and faster with digital devices. Ekeke in *Designing Costume for Artistic Performance* argues that “design in the theatre implies the purposeful planning and visualization of theatrical elements for desired effect” (136). Having explained the importance and usefulness of costume and its design, the place of digitalization of costume design shall be further examined in this context.

The Costume Designer in Contemporary Nigerian Theatre

Considering the field of costume design, it can be concluded that visual identity of a particular character is produced with the help of careful choice of clothes and accessories in which actors will wear when they perform. These costumes can be created by a designer, purchased, renewed, or hired according to his/her aesthetic decision and complexity of the production, to make the theatrical experience more impressive. Nkan,

Akaenyi, and Bassey have suggested that costume design is a form of cultural expression, and a creative form, dedicated to transferring the characters within the text into material, visual components. Forms, colors, textures chosen by a designer are very vital in creating an immediate and powerful visual impression to the viewer, and collaborative work with the director, set, and lighting designers will make sure that costumes will be properly integrated into the larger picture of the show.

In the modern theatrical practice, the costume designer has a key position in the production team and collaborates with the director, scenic designer, lighting designer, and sound designer. In many cases, the designer works with hair/wig masters, or the makeup artists, as well. In European theatre, costume designing often has a broader scope, including design of scenic elements, as it is more open to the concept of more integrated visual storytelling.

The main aim of the costume designer is to add more colour and depth to the character and to trace a developing story of colour, social position, and epoch with the visual language of clothes. At the same time, the designer should ensure that the costumes should fit the natural movement of actors and still maintain the historical quality thus allowing the actor to perform the blocking of the director without damaging the content of the fabric. Other real-life issues like durability and washability are particularly relevant when operation is prolonged. The modern designers will have to keep a continuous communication with the director, and with the set and lighting

designers so that the total aesthetics of the production acts in symphony.

To be a successful costume designer, one needs to combine strong artistic acumen with technical skills in building up patterns, draping, and drafting, and to be sensitive to ergonomic factors to which pre-modern times were sensitive. Receptiveness to the creative vision of the performer is the main thing, where the designer must be able to transfer the subtle guidance of a particular character to a unified sartorial image that is in line with the overall dramatic intent.

These designers are accused of providing the audiences with implicit information about the occupation, social status, gender, age, personal style, and adherence to conformity or individuality of a particular character. Costume designers heralds of narrative richness in that they can use sartorial hints to make viewers make subtextual assumptions upon the basis of visual signage.

Designer creative process starts with the exhaustive reading of the script in the initiatory stage. In case the production is to be established in a certain historical period, a thorough research on the fashion of the time should be conducted to strike the period authenticity. It is also common that, when first meeting with the director and the design team, a professional shows some initial sketches in order to develop a style discussion at the earliest stage. It is also a timely occasion to just verify the exact number of characters that are going to be costumed because the non-speaking characters might not have been clearly listed in the script.

The costume designer now has the task to create a worked out costume plot- an inventory chart that is a chart that shows which characters occur in which scenes, what they wear, and the time a costume changed happens during the presentation. This aid facilitates the determination of any possible logistical difficulties, e.g. the speed with which costumes change between the scenes. When the director and the production team approve the initial sketches, the designer will then sketch final designs in full colour, expressively through visuals the way of style, silhouette, texture, accessories and other distinctive details of each piece of apparel.

This painstaking development leads to a series of final, colour-packed designs that also serve as a complete visual dossier, a way of summing up the artistic vision of the designer and also of ensuring that all the costumes serve not only to further the story but also to work successfully within the practical limitations of the theatre.

Major Elements in Costume Design

Colour: Colour in theatrical design is the quality which allows the eyes to see the difference between the objects that are of the same shapes and size such red and blue. Colour is therefore the eye's perception of wavelength of light. It has to do with attribute of objects appearing differently according to their ability to emit, absorb or reflect light of difference wavelength. Colour is more important in theatrical design because it has the ability to capture emotional and associative responses.

Shape: Shape refers to the appearance, the outline of the contour of a line. It has to do with

the definite form of lines. In theatrical design, it is the shape that defines the form and the outline.

Space: Space in theatrical design has to do with the ability "to judge the size of objects and the relative distance between the objects, without the aid of measuring device" (Gillette, 74). Apace however is largely the skill of intuition.

Texture: Texture in theatrical design is simply the degree of roughness or smoothness, coarseness or fineness. Gillette is of the idea that texture refers to the visual or textile surface characteristics or appearance of an object (77). In theatrical design, both lightening, costume, make-up and the scene designers make good use of texture to provide the visual reference to the psychological environment of play; texture in theatrical design usually is related to the sensuous value.

Line: Line as one of the elements of theatrical design according to Gillette, is "a relatively narrow, elongated mark" (74). Line represents edge of forms. It corresponds to the direction of movement, the distance between two points or the boundary of an area, Russell sees line as "a record of movement of the eyes when it examines an object..., even the simplest lines have mood, meaning and emotional associations, and thus we feel a strong difference in the effect of vertical and horizontal lines, of curved and serpentine lines... it may be complex, with zigzags, scallops, and intricate patterns" (Jacobus 6).

Mass: Mass as an element of theatrical design is applicable and relevant to all areas of the theatrical design. It is appreciated when an occupied stage is viewed at a distance that

allows the viewer to take in all objects at once. Therefore, mass is described as the three-dimensional manifestation of shape that creates an orderliness of depth and spatial arrangement.

Position: This has to do with where something is being placed, kept or hung, in relation to other objects. Gillette says, “position refers to the relative location of adjacent shapes or masses” (77). The definition encompasses both the distance between objects and their placement relative to forms around them.

Digitalization and Costume Design Process

In pre-modern times, costumes were designed in a crude way with the natural raw materials available due to lack of knowledge in science and technology that emerged from the modern era upwards. With the advent of modern technology and advancement, there is a boost in designing costume to meet the currency of the present global demand.

Internet: Through digitalization, costume designers now use relevant internet sources for the purpose of research on specific costumes and their designs to position and inform them of the design demands and procedures which would have been difficult in a traditional and analogue setting. Through the internet sources information on various costume cultural designs are browsed to actualize realistic costume designs required by the costume designer.

Computerized Sketching: In Nigerian theatre, designing of costumes has been digitalize because of the costume design sketching computer software that is programmed to digitally sketch the graphic

design of intended costume in various designs as desired in some theatrical production. This digitalized sketching device enhances efficient and realistic designing of costumes associated with a particular production. (textiles.ncsu.edu>news)



Corel Draw: Corel Draw is widely used as a graphic designing tool which provides lot of applications of designing, sketching, drawing, vector designing and many other things. Corel Draw provides slot of different and advanced features so that you can learn variety of designing things through it. It also has a vast library of templates of designing so that you can boost your creativity levels and boast your creativity levels and enhance your creation through it. (www.youtube.com>watch)



Roving Raves: This digital device is a customized-programmed microprocessor

running displays in costumes. This advanced technological device has reached the level of complexity in wiring up an entire self-contained entertainment system, free to roam around to an available space, set up and accentuate costumes worn by performers during a show or performance. In a charming mix of technological advancement General purpose Robot (Claptrap) invented with wood frame, is a robot (marionette puppet) manually driven via a series of connector and rods but adorned with glowing costume and sound effect controlled by smart phone.

Technological advancement, in the area of costume building has incorporated a variety of technological devices to produce additional effects on costumes during production. For example, the EL wine and finger-tip lights are powered by four 9 V battery packs while sound reactive mask use a single AAA battery to recharge the devices built into the costume. (m.youtube.com>channel)

There is also a method of integrating a sound-system into a costume, activated by a single one-pound Lithium Ion motorcycle battery that can keep the light and audio under the costume running for two to three hours: A wireless device, installed in the costume, helps to direct strobe light to the costume to produce desired effect. All these devices have further enhanced costume building.

Engineered Structures: Engineering technology has enabled the fabrication of costumes to look like the original. Though they may not last or possess the original quality inside, the outward and physical appearance satisfies the eyes of the audience. Sometimes

cheap existing materials can be adapted for use. Some costume designers pick up materials that will allow them to crate their vision without crippling them financially or physically. The consequence is the exploration of materials science and engineering, with as much pre-planning as possible to minimize breakage or waste them on a new costume design. (www.encardio.com>blog>structure)

Technological advancement has seen to the emergence of Polyvinyl Chloride (PVC) a type of plastic which is used especially for making clothes, floor covering and bags. In costume building, PVC piping is very popular for structural support. PVC can be connected with light LED strips, depending on the specified diameter to highlight costumes. This method is however powered by a DD battery. Engineering comes into play when assembling individual pieces into a coherent costume. Modification of existing technologies is prevalent in costuming. Costume designing can access many commercially available materials to create variety of desired light and sound effects during production. Costume can be designed with thermoplastics when using the required temperature. When cool, it can be lined with craft foam trimmed and glued into a place for better fit and improved comfort. It can be finished with different painting patterns. The end result will be custom-fit and well-designed costume. Borrowing the words of Ekeke, such processes are "... highly stressful activities in time, energy and finance" (95).

Heat Control for Helmets: In costume design, technological advancements have facilitated the invention of digital Heat Control

Helmets that are used during carnivals, fashion parades, film-acting, beauty pageantry, theatre production as well as several other entertainment performances. These helmets have in-built digital fan-cooling system mounted inside the helmets, repurposed to bring a bit of fresh air and comfort within the confined space. These portable personal air conditioning helmets are products of technological advancement that is helping the building of costume in Nigerian theatre. This helmet as shown below has inbuilt air conditioner that make for convenience in wearing of costume.



Digital devices for costume design are easy to find. The increasing availability of microprocessors, portable lighting, and 3D-printing, along with access to professional tools is impacting greatly on designing costume where innovations are enabled through greater access to a variety of tools and materials to realize visions of costume design. Not limited, many more explorations are still on course to successfully and significantly digitalize the process of costume design.

Algebra for a Better Costume Designing:

In digitalizing costume design, algebra has played significant role in solving equation and building experiments. This digital device helps in putting into consideration the multi-step process of materials, layers, paint, fixatives, electronic devices and other necessities. Algebra, in this context is basically on the mathematics required in sewing of costume. It takes the dexterity of a costume designer to plan and figure out the ideal inner and outer diameter ratios to produce enough cascading ruffles evocative of tentacles when building a particular costume for a particular purpose, but algebra device makes it easier and faster.

However, building of costume goes beyond the issue of applying mathematics. It takes the creative ability, material science, theatre education, costume orientation and other pro-costume tools available to design costume for a particular reason or purpose; be it academic, commercial, festival, competition and entertainment purposes.

Evolution of Fashion Craft tools from Analogue to Digital

ANALOGUE	DIGITAL
<p>1 Needle and Thread. Sewing with needle and thread takes a longer time and mass Production will be difficult</p>	<p>Sewing machine makes the job faster and easier and could produce in thousands within a short period of time.</p>
	 <p>Electric sewing</p>

2. **Box Iron:** as the name implies is flatiron that is heated by inserting live charcoals or a piece of hot metal in its boxlike holder.



Electric Iron: is an equipment for making clothes flat and smooth.



3. **Hand Fan:** is a broad flat surface that is waved back and front to create an air flow. It could be used manually to dry moist surface.



Rechargeable Fan: Is an electric hand held fan which dries the moist surface faster and easier.



4. **Sun:** Is the natural source of light and heat for the planets in the solar system. He use of sun can delay a lot of millenary work because during winter, a lot of jobs can be put on hold



Electric Dryer: Electric Drier is an artificial way of producing heat. In summer or winter it functions the same making millenary work easier and interesting.



5. **Adhesive Gum:** Adhesive gum like Evo-stik, top bond and other solvent-based gum that is cost saving and has superb bonding strength.



Glu Gun: Glu Gun is an electric machine used in adheasing trimmings, crystals, stones and general accessories on fabrics. A high temperature glue guns gives a very strong bond and also minimise operator's fatigue while maximising efficiency.



6. **Trimings:** thread and needles where used in creating desired designs. This pattern use to be time consuming and difficult because of its harzardous nature



Trimings: Ready-made trimmings are made with the use of app and machine to produce them in various shape sizes colour withine a very short time. The contemporary trimmings serves time, energy and money.



Conclusion

In contemporary theatre, digitalization has become an integral part in costume design. The infusion of digitalization to costume designing has proven to drastically reduce the traditional and analogue approach in the costume design process. Digitalization of costume design has facilitated the exploration of creative ingenuity in stimulating adequate and efficient methods in making the process easier, stress-less and faster. The professionals in these areas have no reason to fret because any conjectures-creation and dream-production in the creative mind, can be achieved and realized, courtesy of the available digital devices in costume design. However, it is pertinent to conclude therefore that what is available at this present time is not enough. The invention of digital devices to aid costume design is still on course, which therefore means that designing of costume is not static but dynamic, as on more discoveries through technological advancement will be invented to improve on the already available digitalized equipment in the costume design process and practice.

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