COVER PAGE

CHALLENGES OF STAGE LIGHTING MANAGEMENT IN SELECTED TERTIARY INSTITUTIONS IN NIGERIA

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TITLE PAGE

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BY

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NSU/THA/MA/0004/17/18

A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, NASARAWA STATE UNIVERSITY, KEFFI, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF ARTS (MA) DEGREE IN THEATRE ARTS

DEPARTMENT OF THEATRE AND CULTURAL STUDIES
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DECLARATION

I JULIUS JACK SHERIA humbly declare that this work titled: **Challenges of Stage Lighting Management in Selected Tertiary Institutions in Nigeria is** as a result of my research efforts carried out in the Department of Theatre and Cultural Studies, Nasarawa State University, Keffi under the supervision of Prof. Emmanuel Samu Dandaura and Dr Sunday Igbaba. I further wish to declare that to the best of my knowledge and belief, it contains no material previously published or written by another person or material which is a substantial extent has been accepted for the award of any other degree or diploma of any University or institution of higher learning, except where due acknowledgment has been made in the text.

....

JULIUS JACK SHERIA **DATE**

NSU/THA/MA/0004/17/18

CERTIFICATION

The Dissertation, **"Challenges of stage Lighting Management in selected Tertiary institutions in Nigeria"** meets the regulations governing the award of Masters Degree in Theatre Arts, of the School of Postgraduate Studies, Nasarawa State University, Keffi, and is approved for its contribution to knowledge.

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DEDICATION

This project work is dedicated to God Almighty for His faithfulness and my beloved Parents Mr. & Mrs. Julius Meshi Sheria who have been my strength throughout the course of my study.

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I appreciate God Almighty for giving me the opportunity to finish this work successfully. may his name be exalted forever.

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ABSTRACT

Stage lighting and performance design has been a unique factor in embellishing performance when managed properly. The research will discuss the challenges of managing stage lighting and performance design in contemporary Nigerian theatre. focusing on two tertiary institutions- College of Education, Akwanga and Nasarawa State University, Keffi as paradigms. Two theoretical templates have been examined, which include Stanley Russuel McCandless theory of three Dimension method of Lighting, coupled with Richard Pilbrow "Four Dimension Method of Lighting". However, the study emphasized Stanley McCandless Stage Lighting method. It examines how the technical requirements in lighting affects performance design, bearing in mind that several other issues downgrading the effectiveness of achieving a development in both stage lighting and performance design as elements of design. The core aim of the research is to rebrand and improve the knowledge and performance skills of lighting designers, the aspect of which is observed to be an aesthetic medium of communication in Nigerian theatre. The research adopts the descriptive methodology from which interviews, magazines and documented library materials serve as sources. Findings from the research show that most theatres in Nigerian institutions are grossly ill-equipped and lack proper structures. Thus, the research recommends a total overhaul by theatre practitioners in these institutions meeting up with contemporary realities: from analogue to digital operation programs such as seminars/conference can be initiated to encourage effective stage lighting maintains. This will be done by ensuring that theatre also over Nigeria houses are well structured and equipped toward building a valiant institutionalized theatre in other to create a good atmosphere for students and lecturers to engage in practical process.

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CHAPTER ONE

1.0 INTRODUCTION

This chapter intends to examine how stage lighting helps in theatre, because Nigeria seems to be nowhere on the map of technical advancement, most Nigerian theatre buildings and performance venues lack the basic instrument of stage lighting "production" while others barely manage with few obsolete and inefficient instruments that mock the art. It is therefore necessary to focus on what factor antagonized the progression of stage lighting development in our tertiary institutions theatre.

1.1 Background to the Study

In every theatrical performance stage lighting serves as means of illuminating stage aesthetics, and this can be achieved through proper and balanced management. In the theatre stage lighting serves basically to illuminate the action on stage, and in doing this, art and science cohere to interpret the script for a viewing audience. Stage lighting is an invention of modernity and it came into existence for the reason of visibility. In examining the evolvement of stage lighting from pre-colonial era to modern day lighting design in Nigeria theatrical environment, stage lighting future and history in Nigeria will be dated back to the concert and theatre of 19th century. During this period stage lighting did not start with electricity and has been so for hundreds of years before the introduction of electricity in 1896 in Lagos.

Before then the concert of late 19th century used Chinese lamps for theatrical productions/performances, At this period it appeared to experience great difficulty in lighting up productions as the use of lamps could not provide sufficient illumination leading to general complain by viewers.

The lighting of the concert of May 12, 1893 was generally regarded as the first in the Glover hall. Most of the productions were still lit by candles, kerosene, gas, palm oil and colza. This was due to the high cost of electricity and because of the erratic nature, a situation that has not changed for a long time. In 1912 Jones was responsible for the most elaborate lighting of stage shows that Lagos had never witnessed before during an entertain performance at Glover hall featuring the popular Lagos comedian Amgoza/Jones used a concentrated follow spot light which shows up a remarkable degree of excellent costumes.

Theatre in Lagos and in Nigeria context generally witnessed a diffusion of indigenous festival performance with ale stern of dramatic models evolve from the colonials. All dramatic act must be enacted with one of the Most technical components which is stage lighting which helps in enhancing a balance performance design in the theatre. Stage lighting is the most fundamental of all the stage techniques that contribute immensely in performance design because of its visual aesthetics/ without it, the actors cannot perform or be seen by the audience. Light is an art that has come a long way in the history of mankind and many people or scholars have defined this term in different ways and these different definitions are linked to individual's perspective, views and opinions. Scientifically, stage lighting is a form of energy conveyed in an empty space at high velocity, light certainly is responsible for the sensation of sight. It is that part of electromagnetic spectrum detected by the human eyes. (Sanusi 56).

Stage lighting is the craft of lighting that applies to the overall production of theatre, dance, opera and other performance arts, several types of lighting instruments are used in this discipline. Despite these different views they all still agree upon one basic fact that lights are life and darkness is death. However, stage lighting design like other areas of

design depends on the elements of design which includes: line. shapes, measure, position. color and texture.

This research can only be appreciated if it brings out the way to ensure proper management of stage lighting and how it can enhance good aesthetics in performance design, something that is appealing to the audience imagination. In examining the issues or barriers that are limiting the effectiveness of stage lighting in Nigeria theatre, the involvement of this visual element helps in enhancing total aesthetic of theatre production, especially in Nigeria it's a major area that needs attention, bearing in mind that several views and ideas have been put forward regarding the reality and authenticity of lighting design in our various institutionalized theatres. It is therefore engendered by the need to focus on the explorative and innovative tendencies of technical and design concepts from Nigeria theatre context.

Although, there are some factors that are militating against this effort are identified with some possible solutions, lighting design concept spice up theatrical performance especially when it requires to contribute significantly to the overall success of a performance on stage, therefore any theatrical activity or dramatic enactment without this visual component is more or a less an empty theatre meant for the glorification of animals in human skin so to say.

Since the concept of theatre is all embracing, further clarification is necessary, the concept of lighting design which is being collocated into technical theatre, usually ensure the smooth transition/transmission of people feelings and tendencies. However, despite the expertise, educational theatres are the most ill-equipped. The university environment for instance is meant to be training and research centers for students but theatre scholars

complain about university theatres that still lack the basic equipment and accessories of stage lighting productions, and these mock the art of professionalism.

History of institution

Akwanga

In examining the two institutions, it will be wise to give brief history. The emergence of Theatre Arts department, as a functional discipline in college of Education Akwanga, became effective in 2006/2007 academic session. It started with forty-five (45) students who were absorbed from pre-NCE department. Structurally, the programme solely depends on the operational guideline of the National Commission of College of Education (NCCE), which objectives is aimed at training and educating students using theatre as a tool through its numerous prospective development schemes.

At its nascent stage, the department has been able to stage series of productions and exhibited creative and self-initiated craft works, which are evidently preserved to equip its gallery.

Keffi

The department of Theatre and Cultural Studies, Nasarawa state University, Keffi was established on 7th of January 2009 as the first department in Nigerian University to run a full fledge honours degree Programme in Theatre and Cultural Studies. Its establishment coincides with the superlative performance of Nasarawa contingent to the annual national festival of arts and culture (NAFEST) for five Consecutive years (2007-2011). The department starts with seventy-two (72) students.

1.2 Statement of the Research Problem

The major reason for stage lighting is visibility that helps during performance. In examining the management of stage lighting and performance design concept in our educational theatre, illumination helps the total visual effect of stage production. It is therefore a vital area that needs critical attention.

However, stage lighting in Nigeria is draught with challenges because of the poor stage of Nigerian theatre houses and dearth of modern lighting equipment, especially in tertiary institutions, examples of such is college of Education, Akwanga and Nasarawa State University, keffi. Stage lighting can only play a major role in theatrical activities if proper management of instruments and maintenance culture is well guided by professionals. Now, how can this be achieved? Will be the area of focus of this research.

1.3 Aim and Objectives of the Study

This study is aimed at determining the various challenges affecting the growth and contribution of stage lighting in theatre houses of tertiary institutions in Nigeria. Thus, the study is designed to achieve the following objectives:

1. To assess how stage lighting helps in promoting performance in institutional theatre.
2. To highlight special effects and moody atmosphere on stage
3. To identify the dynamics of theme which the director emphasizes in order to support the overall design concept.
4. To explore effects of the natural lighting in different locations on stage.
5. To help the lighting designer during performance through the use of lighting cue chart.

1.4 Research Questions

1. What is the role of lighting designer in a production?
2. How does stage lighting help in promoting aesthetic on stage?
3. How can stage lighting management be practiced or enhanced in institutional theatres?
4. How can a lighting designer ensure proper management of stage lighting equipment in different locations on stage?
5. How can a stage lighting cue chart aid in projecting a unique performance on stage?

1.5 Significance of the Study

Every successful research work contributes and benefits the researcher, institution, organization or the society at large. Therefore, when is completed, it will improve on previous research as well as provide an analytical tool for future researchers. Academics from various research institutes and universities can find the outcome of this study useful for planning a new strategy, evolve appropriate mechanism and techniques in managing conflicts of stage lighting management, and for them to focus more attention on this visual element of design. The research would and still provide information to other schools or outside school theatre faced with such chaos as well as viable suggestions on how it should run and manage performance and stage lighting design.

1.6 Scope of the Study

This research is based on the range of the subject matter, which is on the topic of the ,constraint of stage lighting management in selected tertiary institutions in Nigeria.in this regard, the selected tertiary institutions include: Theatre Arts Department, College of

education, Akwanga and Theatre and Cultural Studies Department, Nasarawa State University, Keffi.

ORGANIZATION OF THE STUDY

Chapter One: This chapter focuses on Introduction; Background of the Study. It also discusses the Purpose and Significance of the study, Statement of the Problem, Scope of the Study, Research Methodology, as well as the Organization of the Study.

Chapter Two: Review of Related Literature: Discussion on this chapter starts with Evolutionary concept of stage lighting, stage lighting worldwide, stage lighting African, stage lighting in Nigeria and Theoretical Framework.

Chapter Three: Research Methodology: the research focuses on both qualitative and quantitative analysis; it covers the following. Research design, research area, research Population/ Sample Population, Sampling Technique Techniques for Data Analysis Justification of Methods.

Chapter Four: Data presentation and Analysis: This chapter deals with discussion of findings.

Chapter Five: This concluding chapter captures Summary, Conclusion and Recommendation with Suggestions given. Finally, it provides work cited and Appendix.

CHAPTER TWO

LITERATURE REVIEW

The focus of the literature review is to examine literatures in relation to the subject matter with a view of understanding what scholars have already written as regards to the role played by professional lighting designers. The chapter will attempt to analyze other aspect of technical theatre practice as they affect the design and execution of lighting as an integral part of designing for the performing art, the thesis will also examine one of the rudimentary functions of stage lighting application. Theatre is a reflection of life which is possible through interpretation of script on stage with the aid of theatrical element which light serves as a vital component.

It is therefore important to note that the effect of stage lighting in aiding performance design in theatre can either be psychological or sociological depending on how it is interpreted. Lighting and performance design are the most powerful medium in the theatre, lighting is for visibility while the performance design on stage is to established an idea to the audience about the place or local.

No wonder the audience clap for an actor; not for the action but for the light that adds more aesthetics to the action and reinforces mood and suggests the locale, time, or period, reflect the rhythmic structure of the play, motivates the actor by enhancing the dramatic action. This will be accomplished with the full synthesis of lighting equipment in the theatre and for proper management of stage lighting, there should be a balance flow of communication between the directors, designers, actors and audience.

The atom feed define stage lighting as the craft of lighting as it applies to the production of theatre, dance, opera and other performance arts, in defining lighting Francis Reid states that:

> Lighting is perhaps the most fundamental of all the stage techniques for there is not much point in the actors doing their stuff if the audience cannot see them so with controlled light, the attention of the audience can focus on the appropriate part of the stage. (78)

As part of the lighting design training and perceptive the lighting designer should use his creative mind to enhance good management of stage lighting to provide the spectators with a balance view of the performance in terms of light mood, focus and distribution as part of stage light direction. Dean and Carra states that style of production, mood of play and each scene, color schemes, atmosphere, motivated light sources, specifics of area lighting and effects, and technical considerations such as heights, trims and masking. (234).

In view of this the performance design approach and how the lighting designers see the need to give good consideration because the activity or process is of expressing ideas and feelings and giving people information, this is applicable to light or the role of lighting designer in theatre. Morrison states that:

> The purpose of lighting is simple: to make the actors and actions visible to create atmosphere, time and place, contrast of mood and emphasis of dramatic kind that only acknowledge of lighting, stage setting, costume and effects can translate a concept into reality. (84)

In the mid-1980s, a prominent Nigerian theatre designer, Duro Oni describe "the poor state of stage lighting equipment in Nigerian universities and colleges of Education whose performance feud with the acute shortage of equipment that do not go beyond basic illumination" According to Duro Oni:

> Stage lighting is no longer a matter of simple illumination as it was less of 100 hundred years now. Today the lighting designer is expected to be a master of art, science, history, psychology, communication, politics and sometimes even mind reading. Duro Oni concludes that: Stage lighting designer does not limit his design to physical consideration without an appreciation of the aesthetic factors in design of all the artistic components of theatre, lighting seems to be the most interesting department because it express beauty (aesthetics) and arouse sensory perception. (Oni, 200)

Morrison adds that: lighting (with its flexibility) contributes most potently to audience emotions. No wonder Adoplh Appia in Bentley states. (119)

That light is the most important plastic medium on stage...without its unifying power our eyes would be able to perceive what objects were but not what they expressed. (33), Francis Reid also observed that: The design of lighting for the stage or for any other medium is science in the service of performing art" while the "art" is the creative use to such equipment. (92)

However, stage lighting design essentially strives towards an aesthetic quality, an expression of sensory perception and judgment that appeal to the audience impetus. A lighting designer according to Dean and Carra

> is the person responsible for the visual aspect of production. his areas of responsibility include: Style of production, mood of play and color schemes atmospheres, motivated light sources, specifics of lighting and effects, with technical considerations such as heights. trims and masking. (384)

The purpose of lighting is to enhance performance, to make the actors action visible, to create atmosphere, time and place, contrast of mood and emphasis of dramatic kind. Morrison adds

> That only knowledge of lighting stage setting, costume and effects can aid or help to communicate the concept into reality. (11)

Charles Nwadigwe in Bellma observes:

> That the power of lighting is rooted deep in the recessed of our psychological make-up". He goes further to state that "darkness repels or at least disturbs, while light attracts or at least reassures. Based on this fundamental psychology, lighting designers need to explore their creative idea into practice to ensure proper management of stage lighting in terms of dramatic act. (74)

In theatre design, lighting cannot be discussed without scene design or performance design; it is believable that performance design and stage lighting are inseparable since light unifies MISEN-EN-SCENE (visual production). Light holds the key to the final composition: the dramatic picture of the performance provides potent effects in terms of communicating to the audience throuhg the use of color. Parker and Smith state that:

> Every element of the scenery must be washed in relevant colors through graphics painting of additives mixing and filtering of stage light. The colors are consciously chosen and applied to the scenery to achieve the intentions of the designer. (363)

Light is one of the strongest allies of a director as a maker of mood. Francis Hodge adds

> That light has a great capability of arousing mood-strong, feelings light is not just seeing but it is also feeling. Lighting application and effect are probably the most effective in performance design approach available to the director, its impact on mood and atmosphere is well known in theatre. (248)

Talking about stage lighting in theatre, it can only be evaluated by the finished picture and the audience reaction to it. therefore lighting techniques for the stage must develop through practical work or experience, it might be argued that the basic obligation of stage lighting is to give the actor or performer meaning In his surroundings and to provide him with an atmospheric display in which he may logically interpret his role at the same time. stage lighting like performance design has to assist in creating an environment suitable for the action of the play that brings to the audience the full meaning and emotions of the playwrights concept with only the synthesis if managing lighting, because without the accomplishment of lighting barrier will be grossly.

Effects of stage lighting in theatre cannot be analyzed without color in scene and lighting. Color is the basic element of design and through which it creates an impact in the psychology of consciences audience. Bellman observes that: The power of light is rooted deep in the recesses of our psychological make-up.

One of the most powerful ways which performance design and stage lighting affect our psychological feelings is the interplay of colors. Consequently, colors terminologies used to describe light and setting were derived from psychological effects, such colors exert on human emotions: for example, Red, Orange, Yellow, Amber, Mauve and Magenta fall within the category of warm colors while cool colors include: Blue, Green, Indigo, Brown, Violet, Purple and Gray.

Warm and cool colors have definite and almost have opposite effects on one's emotional stage, the response is so definite that it influences ones perceptive of the temperament of his surroundings, however the perceptive of psychological effects of light depicts mood through the application of colors on stage productions.

According to Robert Lepage in his international massage of world theatre day, 27th.march.2008. that nowadays the light of projectors has replaced the original bonfire, and stage machinery, the wall of the quarry, and with all due difference to certain purists, this table remind us that technology is at the very beginning of theatre and that it should not be perceived as a threat, but as a uniting element.

2.1 Evolutionary Concept of Light

It will be wise for the researcher to review briefly the origin of light in theatre. According to Oxford Advance Learner Dictionary, evolution is the gradual development of something over many years, from simple to more complicated forms.

The primary objective of light is and still remain visibility. According to the Holy Bible when "God said let there be light and light appeared" (*Gen 1:3*) so in the beginning of the world, God gave life to the earth by separating light from darkness. In theatre today the lighting designer is seen and regarded as the god of light because without him/her there will not be light. People who make and use light for many other purposes then to see. also found ways of making and controlling light in order to see when there is no light, at first they produced light with campfires and torches. Later, they developed candles, oil lamp, gaslights and electric lights.

The development, importance and scope of stage lighting is visibly linked to the evolution of theatrical form. In 1545 an Italian artist and architect, Sebastian Serlo first advocated the use of candles and lamps behind colored glass to light the stage, the idea of stage lighting quickly spread around Europe and probably influenced some of the sinister scenes in later Shakespeare plays and in Jacobean theatre of all inventions which changed the theatre, none was so influential as the introduction of fire gas and later electric stage lighting.

Gas was in use in British and European theatre from about 1817 upward and gradually electricity replaced it during the 1880s. In subsequent years, lighting equipment has reached a very high level of sophistication but from the early years of the first century, the control of intensity, direction, color and movement of light has been seen as an integral part of the art of theatre.

In African setting as time goes on, theatre practitioners realized that it could not do without light, because light is responsible for facilitating visibility on stage, the audience cannot see any action on stage without adequate stage lighting. Right from the traditional African theatre which was held in open village square, they make use of natural sources of light such as (storytelling under the moonlight,bonfire after returning from hurting) even in the Greek where drama was said to have originated, performance in the Ample theatre was under the moon light, this was the time when light was used for its primary purpose of illumination.

However, the gradual movement of theatrical performance in the indoor theatre during medieval period practitioners had no option then to provide artificial sources of light on stage. The worship of light through public fireworks in late 15th century Rome and late 16th century in France as well as the introduction of strip light greatly influenced the development of better method of stage lighting, the introduction of proscenium stage during the Italian renaissance created the new lighting problem which led to the search for a better lighting technique and instruments for both auditorium and light box stage.

First candles, touch lights and tad fuse covered with weak finder were used, the touch light and tad fuse were hugged around the auditorium and led by prompt men to provide illumination. The English theatre were among the first to experiment with more efficient oil lamps at first, both the stage and auditorium were illuminated by the same lamps which were positioned in an overhead chandelier.

However, with time there was a growing need for great illation on stage, so the stage was illuminated specifically from the auditorium that was the time they gradually introduced land light which was used for the principal actors. Before the advent of computer aided design (CAD) in theatre, lighting and set designers spent countless hours and days drafting

,lighting plots and rendering set designs. The introduction of (CAD) eliminated time consuming and repetitive tasks in drafting thereby increasing productivity in its ability to produce more finished products in floor plans working drawing and light plots.

2.2 Overview of Stage Lighting

The classic Greek theatron (literally, "a place of seeing") was built in the open air, usually on a hillside, and placed so that the afternoon sunlight came from behind the audience and flooded the performing area with light. The larger Roman theatres were also outdoors, but the added luxury of a coloured awning stretched over the spectators softened the glare of the sun. Later, in the Middle Ages, Miracle plays and mystery plays were primarily performed outdoors on the front steps of the church and the adjoining square, although the first dramatized biblical scenes were performed as part of, or following, mass inside the church. There is no record that these scenes were lighted any differently from the mass itself. In England the pageant wagon, complete with actors and properties, was drawn through the main street of a town. Until the 16th century, the theatre continued to be mainly an outdoor institution.

Under the patronage of the aristocracy in Italy, private performances: pageants. and tableaux began to be given indoors. Sebastiano Serlio, an Italian architect, gave considerable attention to theatre design, and in a treatise written in 1545 he discussed theatre construction and the creation of lighting effects.

He recommended placing candles and torches behind flasks filled with amber- and blue-coloured water. Andrea Palladio's indoor theatre, also in Italy, used common light sources: torches, pine knots, open-wick lamps, and tallow candles. In England at the end of the 16th century, the Globe Theatre was used for summer performances of William Shakespeare's plays, but in winter performances were given in the completely enclosed

.Black Friars Theatre. Artificial light, produced mainly by candles, was used in several indoor theatres to light the stage and the auditorium.

In the early 17th century, Inigo Jones introduced several innovations in lighting and stagecraft, using reflectors to intensify the light sources and making use of colour on stage. The earliest known definite description of stage lighting may be found in Architectural Civil is (1628; "Civil Architecture"), by Joseph Furttenbach (also spelled Furtenbach). He describes the use of oil lamps and candles set in a row along the front edge of the stage but out of sight of the audience, and he also mentions vertical rows of lamps behind each wing at the sides of the stage.

The common method of lighting the stage and auditorium was by means of tallow candles. As seen in old prints, these candles were mounted in crude hoops or chandeliers, which were hoisted aloft on pulleys to hang in dripping splendor. Gold decorations applied to the interior of the auditorium caught the many reflections. The inconvenience of the lighting system was that candles were expensive and hard to control. The twisted wicks had to be constantly trimmed during the performance, and this was the duty of the snuff boy. A transformation from light to darkness was affected by the agile skill of the candle snuffers.

When David Garrick used footlights at the Drury Lane Theatre in 1765, he masked the candles with metal screens. By 1784, when Richard Brinsley Sheridan managed the Drury Lane. all lights used to illuminate the stage were out of sight, hidden by the now familiar wings and borders. The floating oil wick lamp was replaced after 1783 by Argand oil lamp, in which the cylindrical wick was enclosed in a glass chimney to steady the flame and provide a brighter, whiter, and cleaner light source. The chimney eyed oil lamp

eventually replaced the candle, but it was still hung in clusters above and bracketed to the walls.

At the Haymarket Theatre in London, the oil lamps had chimneys of white and green glass that were controlled by levers, so that raising or lowering the chimneys could affect light changes. Actually, rather than subtly shifting the quality of the light, the chimneys' movement merely made the actors and scenery more or less visible. Stage design and stagecraft had now advanced as far as was technically possible under the limitations of low-intensity stage lighting.

The first major advance in several centuries was the introduction of gas lighting. Near the end of the 18th century, the Scottish engineer William Murdock developed a practical method to distill gas from coal for illumination. The first successful adaptation of gas lighting for the stage was demonstrated in the Lyceum Theatre, London, in 1803 by a German, Frederick Winsor. The Chestnut Street Opera House in Philadelphia installed a gas lighting system in 1816 and supplied its own gas by installing a gas generator on the premises. (Gas stations and city mains did not come into use before 1850.)

The advantages of gas lighting were immediately realized and exploited, despite the initial cost. No new methods of lighting, however, were devised for stage lighting. The conventions remained the same: footlights (a row of lights across the front of the stage floor), border lights (a long horizontal row of lights used for the general lighting of the stage from above), and strip lights (a row of lights usually mounted in a trough reflector and placed in the wings to illuminate specific portions of the stage or setting).

Even without a chimney, an open gas jet flame was brighter than oil lamps or candles. The additional advantage was control; by varying the control valves from a central point, a smooth increase or decrease of light could be affected; and at variable speeds. For the first

time, to add to the realism of the play, the auditorium lights could be darkened. Elaborate central control systems were devised, with a main regulator, branch mains, secondary regulators, and valves. This growing array of valves and pipes was organized into circuits and displayed on the "gas table"—the forerunner of the modern switchboard.

But there were also disadvantages to gas: heat, offensive vapours, and the serious fire hazard of the open flame. Protective codes were soon established that necessitated the use of guards, screens, and glass chimneys. In 1890, after the introduction of electric lighting, the incandescent gas mantle was developed (Incandescent lamp). Although the mantle greatly improved the quality of light—which was brighter and whiter—the hazards of fire still remained.

Although Thomas Drummond), a British engineer, invented the limelight in 1816, it did not come into general use until some 30 years later. A limelight produces light by directing a sharp point of oxyhydrogen flame against a cylindrical block of lime. The tiny area of lime becomes incandescent and emits a brilliant white light that is soft and mellow. As the block of lime is slowly consumed by burning, it has to be slowly and constantly turned by an operator to supply the flame with a fresh surface. Since the brilliant area was very small, the addition of a mirrored reflector was necessary to give accurate control.

The intensity of the limelight permitted it to be directed onto the stage from the auditorium. Since it offered control as well as intensity, the limelight was quickly adapted to follow individual performers around the stage. The sharpness produced by the small point source made possible the creation of realistic effects, such as sunlight and moonlight, and moving effects, such as clouds, water, and fire electrification.

An advance of great importance was the introduction of the electric carbon- arc lamp, which was exhibited in experimental form in 1808 by Sir Humphry Davy. The Paris

Opera, developed the earliest electric arc effect—to represent a beam of sunlight—as early as 1846. By 1860 the Paris Opéra had also developed a lightning machine, a rainbow projector, and a luminous fountain. Most important, the company made the earliest spotlight, a carbon arc and reflector housed in a hood, which included a lens and a shutter. The next great advance in lighting was the development of the incandescent electric lamp, in which light is produced by a filament electrically heated to incandescence.

The invention of a practical electric lamp by Thomas Edison in 1879 marked the beginning of the modern era of stage lighting. Gas was quickly discarded; within one year the progressive Paris Opéra introduced the new system. Two years later, at the Electro Technical Exposition in Munich, a small theatre was erected that used electric lighting exclusively for both stage and auditorium. The success of the experiment received worldwide acclaim. In London the Savoy Theatre was the first to install the new lights; in Boston the Bijou Theatre followed the new trend in 1882. The following year the Land estheatre in Stuttgart, the Residenz theatre in Munich, and the Vienna State Opera were among the first completely electrified theatres.

At the turn of the 20th century, incandescent lamps were in almost universal use for stage lighting, but no new methods or techniques of lighting appeared. The conventional footlights, border lights, and strip lights were merely electrified, and the arc light was used for concentrated light sources. Gradually, new improvements provided brighter lamps that were both more durable mechanically and available in larger wattages. Metallic filaments replaced carbon, and in 1911 drawn tungsten. Filament lamps appeared.

The use of inert gas in place of a vacuum produced lamps of even higher efficiency and larger sizes. The introduction of concentrated coil filaments made practical the development of the incandescent spotlight. The refinement of the incandescent spotlight

added an exciting new tool for the advancement of stage lighting and the further development of stagecraft. Gradually the arc spotlight was replaced by the new incandescent spotlight, which, in turn, gave way to the tungsten-halogen lamp.

In his music dramas, German composer Richard Wagner suggested new possibilities for the use of light and design in a unified production—a lyrical synthesis. Adolphe Appia and Edward Gordon Craig gave tremendous impetus to the new plastic stagecraft. They conceived of the stage as a cubic volume of space bathed in a continuous play of functioning light. All the vast optical effects of Baroque design previously obtained with paint were now possible by means of light.

In 1902, in Germany, Mariano Fortuny developed an elaborate system of soft reflected light using arc lights bounced off coloured silk fabrics. The simulation of natural lighting was remarkable, but the entire mechanism was too bulky and intricate and required the construction of a special theatre. In the course of his experiments, Fortuyn evolved a dome-shaped cyclorama, its rear wall surfaced in plaster. Flooded with light, it gave the illusion of infinite space and was the perfect means of simulating spectacular sky and background effects.

Because it was dome-shaped, however, it occupied a large amount of stage space and tended to distort optical projections. In modified form, as a curved, hanging cyclorama, it became an indispensable tool of the new stagecraft. Earlier, Sir Henry Irving had used transparent colour lacquers to coat lamps to produce.

Colour effects, using separate circuits for each colour. Irving was also the first producer to introduce organized light rehearsals in his productions. David Belasco, with his electrician Louis Hartman, developed a standard of realism in stage lighting that anticipated the motion picture and went on to dominate the 20th century. In their lighting laboratory,

Belasco and Hartman developed and refined many new lighting instruments. Individual sources were developed and used to light the acting areas from above the stage as well as from the auditorium. David Belasco's realistic setting for the New York production of Tiger Rose, 1917.Courtesy of the Theatre Collection, New York Public Library at Lincoln Center, Astor, Lenox and Tilden Foundations.

A dimmer is an electrical device by which the intensity of stage lights connected to it can be controlled. There are two methods used to control the flow of electrical current through a dimmer: mechanical and electronic. Mechanically controlled dimmers require the physical manipulation of an axle running through the core of the dimmer to adjust current flow. An electronically controlled dimmer uses a low-voltage control system to adjust the current flow in the high-voltage load circuit. The advantage of electronic control is that it allows the dimmer to be controlled from a remote location.

There are three basic types of mechanically controlled dimmers: resistance, saturable core, and autotransformer. The resistance dimmer was the first commercially successful theatrical dimmer. Developed in the late 19th century, it was portable, efficient, and extremely rugged, and, because it ran equally well on both alternating current (AC) and direct current (DC) power, the resistance dimmer survived for decades as the standard in commercial theatre throughout the world; its use was in general decline after the 1950s. By the end of the 20th century, it was no longer being used.

A saturable core dimmer uses a small DC current to magnetize an iron core through which AC current flows. As the level of magnetism increases, the conductivity of the core also increases; more AC load current is thus able to pass through it, and any lights connected to the dimmer will come on. Like the resistance dimmer, however, the saturable core dimmer is no longer used. The autotransformer dimmer controls current flow by varying the

voltage in the circuit. It was rarely used to control stage lights, but at the turn of the 21st century it was still being used in some theatres to control house lights. The first electronically controlled dimmer was the thyratron tube dimmer, developed by George Izenour in 1948. It was the first dimmer to make use of gating—a rapid turning on and off of the current flowing through the load circuit—to control light output and intensity. The thyratron vacuum tubes were large and noisy, and they required a considerable warm-up period before they worked properly. They also needed frequent maintenance, did not last very long, and were expensive. But the demonstration that the gating principle could be used for effective intensity control paved the way for silicon-controlled rectifier (SCR) dimmers.

The magnetic amplifier dimmer, developed in the 1950s, was in essence a saturable core dimmer that used electronic, rather than mechanical, control to vary the level of magnetism in its iron core. While it was an improvement over the saturable core dimmer—because the electronic control allowed the dimmer to be remotely controlled — its control circuit needed almost daily maintenance to run properly. Theatrical applications of the magnetic amplifier dimmer lasted only a few decades; it was quickly superseded by the SCR dimmer, which became the standard in stage lighting in the 1960s. Like the thyratron tube dimmer, it operates on the gating principle, but its on-off cycle, at over 100 times per second, is significantly faster.

This rapid on-off cycling controls the flow of current through the dimmer. The electronic dimmer control circuit tells the SCR dimmer when and for how long to conduct the current during each cycle. For example, if the dimmer is set at half intensity, it conducts for half its cycle and does not conduct for the other half. This causes the light connected to the dimmer to glow at half intensity. If the dimmer is set at three-quarters intensity, it conducts for three-quarters of the cycle and does not conduct for the other quarter, causing

the light to glow at three-quarter intensity. The on-off cycling in an SCR dimmer occurs so quickly that the individual on-off cycles are indiscernible Control consoles.

The earliest electrical dimmer switchboard, or control console a device that centralizes control of the intensity of the stage lights resembled the gas table that was used with gas lights in the late 19th century. These first electrical switchboards, introduced in Europe and the United States in the late 19th century, were used to control groups of resistance dimmers, which were permanently wired to circuits in the footlights or border lights. The only open (or flexible) dimmer circuits were the floor and wall pockets (electrical outlet boxes set in the floor and walls of the stage area). Large banks of resistance dimmers were normally located backstage in the wings and in close communication with the stage manager, who could see what was happening on the stage.

Later, the development of headset sound systems—which allowed the stage manager to remotely communicate with the light-board operators—allowed portable resistance switchboards to be placed in the cellar or other places with no view of the stage. This, in turn, freed up more offstage space for the actors and scenery. The introduction of electronically controlled dimmers allowed the dimmers to be placed anywhere in the theatre; likewise, the control console could be placed in the rear of the auditorium, where the operator had a full view of the onstage action.

Two categories of electronic control consoles emerged during the 20th century but had become obsolete by the century's final decades: group master and preset. (A combination board is sometimes identified as a separate category of control console, but it simply combined group master and preset controls.) The group master and preset boards were a direct carryover from the layouts first used on gas tables. On a group master console, a so-called grand master—an electronic fader or control that controlled the output of two or

more sub masters—and each sub master normally controlled between two and eight individual dimmers.

The preset board was derived directly from the group master board, but the preset board allowed dimmer intensity levels to be set in advance, before they were needed onstage. Preset boards typically had anywhere between 2 and 10 preset banks; each bank controlled a specified number of dimmers. Such boards also included a cross-fader, a device that allowed the lighting controlled by one preset bank to be gradually replaced by that of another preset bank. The computerized control console had by the turn of the 21st century replaced all other types of systems. Such consoles use computer memory to store dimmer intensities for each cue.

They also store fade times and have numerous capabilities that simply cannot be duplicated by any other type of control system. Of particular note is the ability of computerized consoles to repeat tasks consistently and accurately. That repeatability means that the lighting will look exactly as the designer intended for each and every performance. Prior to the introduction of the computer board, this level of precision was simply unobtainable even with the best board operator Projections and special effects.

A significant amount of lighting equipment has been developed for special effects. Standard effects include the representation of moving clouds, rippling water, fire, rain, snow, rainbows, and fireworks. For practicality, most special effects are built around a standard spotlight housing. The effect head, containing a painted or photographic transparent disk and the mechanism for revolving it, is placed in front of the spotlight housing. An additional objective lens is used to magnify and focus the image. The oldest effect projector, which dates from the World War I era, is the Linnebach lantern, often called a "scene" projector. It is simple both in principle and in construction. A

concentrated light source is placed in a deep black box, and a painted slide is placed on the side of the box that is left open; since light travels in straight lines, the design painted on the glass is thus projected against a drop onstage, greatly enlarged, at a relatively short distance. Since no lens is used in a Linnebach lantern, the light source must be powerful and concentrated. The design must be simple and bold, for any line narrower than the point source itself will be lost. The overall effect is stylized and borders on the abstract. Rear projection with at least two projectors is required for any ambitious production. Large incandescent lights replaced the original carbon arcs in the Linnebach lantern.

In the mid-20th century there was renewed interest in the use of projections, and the development of new projection equipment provided a powerful instrument to produce effects not previously possible.

After World War II, at the music festivals at Bayreuth, Ger., Richard Wagner's grandson Wieland reduced three-dimensional scenic elements to the barest essentials and then flooded the stage with multiple overlapping projected patterns. In subsequent years additional scenic elements were added to give variety of texture and depth to the flow of light and pattern. Still later, at the Festspielhaus in Salzburg, Austria, the productions of Wagner's music dramas designed by Gunther Schneider-Siemssen elaborated this concept to achieve even more dramatic and sumptuous effects; Schneider-Siemssen filled the vast, extra-wide stage with patterns of light in depth, softened with scrims (loosely woven meshes that diffuse the light) and translucent drops (backdrops with sections dyed to transmit some light).

The Czech designer Josef Svoboda did more than any other designer during the second half of the 20th century with "visions in space." For some productions, he used a direct, journalistic approach, massing three-dimensional screens to create a montage effect with

slides and film. A production conceived and executed by Svoboda for the Czech pavilion at the 1967 international exhibition at Montreal, was a brilliant multimedia experience. In his other productions, which were equally stylized but more indirect and abstract, he used alternating surfaces of scrim and scenic elements to catch the patterned light. cast complex shadows, and float in depth before a seemingly infinite background.

Innovative contributions to lighting and the use of projections were also made in American dance during the second half of the 20th century. Alwin Nikolais made very original use of dancers, costumes, light, and projections to form moving geometric and abstract designs. At times, the moving bodies of the dancers in his productions became the screen for the projections. Robert Joffrey 's production of his ballet Astarte (1967) used a unique combination of film and slides on a moving, pulsating screen.

By the early 21st century, digital projections had become the standard mode of projection in the theatre. The early generations of digital projectors, which first appeared in the 1980s. were not sufficiently bright for stage use. But technological advancements made after the turn of the century resulted in projectors bright enough for just about every theatrical use. The advantages of digital projections are many: the projected images can be still images or video; the "slides" are computer files that neither fade nor burn out as a result of the heat of the projector lamp; and the images can be created by hand, computer, or a combination of the two. Computer imaging therefore provides the projection artist with a much wider creative palette than ever before.

Many contemporary plays permit no approach other than realism, which must be achieved by suggestion. Nature provides the model. On a cloudy day, the overcast sky diffuses the direct sunlight and produces a soft, shadow less light of low intensity and cool colour. Intense "sunlight" onstage and the attendant light of the bright sky together produce

reflected light that diffuses or fills in shadows, while the ambient light of the stage "Moon" reflected from sky, trees, and buildings is too weak to wash out the shadows. So, by means of the direction, diffusion, and intensity of light, as well as its colour, it is possible to suggest time, place, and season.

The means of suggesting natural lighting indoors are more arbitrary. The simulated sky or sunlight seen through a door or window a scenic element provided by the dramatist and the designer is essential to indicate the time of day or night. To render the feeling of bright daylight flooding a room, the strong motivating light (i.e., light that suggests the direction of its source) must be supplemented with additional light from other directions for adequate illumination. If only a sliver of sunlight creeps through a parted curtain in a dark room as the scene begins, the mood may be retained through the gradual illumination of important areas as the scene progresses.

Artificial light indoors is easier to suggest because it more closely approaches the normal quality of stage lighting. Actual light fixtures are used onstage to suggest the sources of the light, and opaque shades can be used on some of these fixtures so that they cast actual patches of light against walls and furniture. The exteriors seen through doors and windows are darkened and different in colour from their appearance in a brightly sunlit scene.

The walls fall off in shadow even though the general illumination is smoother and more diffused than in daylight. Light serves as a unifying medium for the stage composition. It is a mobile and changing accent that reinforces the action, sustains the mood, and focuses the attention of the audience. Light and shade define the size and shape of objects, as do brightness and contrast, but it is colour that creates mood, atmosphere, and an emotional response from the audience.

The creative concept formed for lighting a production requires that the essential qualities of the play be understood and absorbed. The theme or main line of the script may suggest an overriding motif: enervating heat, ominous clamminess, dappled sunlight, penetrating northern light, a feeling of being in limbo or underwater. The final choice must satisfy the particular qualities of the production and the concepts of the playwright, director, and actors, as well as the designer. Run-throughs in the final period of rehearsals often reinforce previous impressions and suggest refinements in the rhythmic changes of light required. The actors' performances may also suggest to the designer lighting changes that can enhance the emotional range of the production.

Theatre is one of the cultural elements that best exemplifies Africa. It is at the crossroads of the sacred and the profane, oral and the written word, of inner roots and external adjuncts. The product of an accretion of diverse forms, it is rooted in Africa's traditions while, at the same time, it continues to assimilate foreign theatrical traditions, especially those of Europe. Long before cultural contact with Europe, Black Africa had its very own personal forms of lighting and dramatic expression. But, in order to understand them, one must banish all notions of theatre as it is thought of in the Euro-American context something dependent on text, on halls, on technology.

In this sense, African tradition has not handed down to us a specific theatrical system; rather, it has handed down to us a series of functions, which themselves were modified under colonial influence and which gradually moved away from their traditional means of lighting such as burn fire night, moonlight tale roots, though they were never eliminated completely.

The term theatre itself has diverse, complex, contradictory and even antagonistic connotations in Africa. As well, the study of dramatic phenomena involves diverse

approaches. Even in the west, the word "theatre" often denotes very different realities, and what is meant by theatre in one country is not always the same as what is meant in others. It would be unwise, therefore, to expect to find in ancient Black Africa types of theatrical performances analogous to European forms.

Rather than referring to the cultural traditions of Europe then, it seems more sensible to look at the evolution of African culture from within its own unique dynamic and from within its own history. Rather than referring to the cultural traditions of Europe then, it seems more sensible to look at the evolution of African culture from within its own unique dynamic and from within its own history.

It is the functioning of society itself which most directly dictates artistic expression in Africa, whose theatre is rooted in myths, rites and folk celebrations, which externalize the beliefs, passions and concepts that preoccupy any given group. The fact is that early Africans never invented a generic term to designate these representations. They did not name their theatre; rather, they lived it. In their scheme of things theatre was taken for granted. Theatrical art in Africa, therefore, is very ancient, its origins lost in prehistory. Yet; it is part of every day in public places and at home.

Everywhere theatricality is evident. The slightest pretext often gives rise to complex theatrical events where music, dance and verbal parody figure in equal parts. The African has always lived in close accord with theatre and the theatrical; the performer, to use a contemporary term, is an integral part of his or her identity, Gule Wamkulu a secret cult, involving a ritual dance practiced among the Chewain Malawi, Zambia, and Mozambique.

In this sense, early Africa offers an example of perfect harmony between theatre and society. If one considers the genres and styles of theatre in connection with the milieu in which they originated, if one tries to ascertain the specific elements that gave rise to

African theatre and if one studies these indigenous forms as such, it can be concluded that theatre in ancient Black Africa can be clearly found in such elements as ritual gesture and communal celebrations by large rural publics where these forms first emerged; artistic forms that synthesize spectacle and the spoken word, rhythm and dance, forms that integrate many modes of expression. It is to rituals, dances, masquerades, storytelling and folk celebrations with all their theatrical elements, then, that one must look for such an African definition. Togolese people in traditional clothes dance the religious voodoo dance.

The fact is that Africa is prodigiously rich in rituals of all kinds. Some are in a lighter vein and give rise to comic expression, but the great majority has their origins in religious expression and magic. Intended as a discourse with supernatural forces in order to channel them, control them, appease them or honor them and to ensure the survival and equilibrium of the community, rituals were and still are shields defending the community against evil forces.

Through gestures and actions believed to be endowed with supernatural powers, these rituals enable society to reaffirm, perpetuate and commemorate aspects of existence and beliefs deemed essential for the community's physical, moral and spiritual health. Such rituals are numerous and varied, going back to ancient times and elaborated differently by each of the continent's more than one thousand different ethnic groups. In this sense, each of these thousands of rituals constitutes the germ of a theatrical performance in its use of mask, dance and incantation.

While it is also true that rituals are accompanied with various lighting activity (chanting to gods, thunder strike, locally made light at various corner of the shrine), it is evident that theatre, of all the arts, is the one most apt to use the same elements as those found in ritual.

It is for this reason that so many African researchers and practitioners put ritual at the center of both their reflection and their stage practice. Imbued with symbolic meanings and using a concrete language, rituals delineate spaces that are always seen as symbolic or mythic, places to come together, places for an exchange between the human and the divine, or between human and human. Created by master-celebrants and shared with participant spectators, such ritual ceremonies designate specific roles often supernatural with actions and words rooted not in aesthetics but in their efficacy as part of the whole performance construct.

The root here is religion in this case, animism which permeates all activities and constitutes the basis for a whole network of customs. African thought is steeped in animism which places humanity at the center of its concerns. God, in the African universe, needs people in order to be fully realized. It is people, by their sacrifices, their cultural manifestations and their incantations, who give the gods meaning. In this way, each human being in conjunction with his or her ancestors participates in divine creativity.

2.3 Stage Lighting in Nigeria

The stage lighting art continue to function locally before the introduction of electricity in 1896 in Lagos, While the bozze (a lighting instrument) was used in the early productions in Italy, the concerts of late 19th century Lagos used Chinese lamps and after numerous criticisms from the critics of the period, notably Cherubino and Dionysius of the Lagos Observer, suspending lamps were later used, these lamps burnt colza or paraffin sources of their energy for illumination.

The period appeared to have experienced great difficulty in the lighting of the productions as the use of the oil lamps could not provide sufficient illumination, leading to general complaint by reviewers. For the lighting of the concert of May 12, 1893, generally

regarded as the first in the Glover Hall, the lighting was described as "poor." Even with the installation of electricity in the Glover Hall in 1901, most of the performances were still lit by candles, kerosene, gas, palm oil and colza. This was due to the high cost of electricity and its erratic nature, a situation that has not changed much in Lagos one hundred years after. In reviewing the case of the stage presentation designed by the energetic and enterprising Mr. Jones during the time under consideration, Lynn Leonard7 offers a glimpse of the state of the arts at the turn of the twentieth century:

In 1912, Jones was responsible for the most elaborate lighting of a stage show that Lagos had ever witnessed. During the performance at Glover Hall, in an entertainment featuring the popular Lagos comedian Amgoza, Jones used a concentrated follow spotlight as seen extensively in the English Music Halls of the day, which "showed up to a remarkable degree of excellence the different costumes." Theatre in the Lagos and Nigerian context has witnessed a diffusion of indigenous festival performance tradition with western dramatic models, evolving from the colonial through Christian contacts and church Morality Plays and concerts to the contemporary literary performance traditions.

According to Veronica Esohe Omoregie,... most theatre scholars in citing the roots of modern Nigerian theater, agree on the meeting held in October 1866 by a section of the influential Lagos elite "who had been raised to an intellectual level of appreciating music and drama" to set up The Academy, a social center for public enlightenment dedicated, for the most part, to promote the arts science and culture.

It was Hubert Ogunde, acknowledged as the doyen of Nigerian theater, who succeeded in pushing his theatre as a vehicle for social commentary and entertainment, with the full complements of staging facilities. Ogunde's awareness of the theatricality of the performing arts manifested early.

In 1946, he traveled with his wife to England and purchased lighting and staging equipment worth two thousand pounds sterling. In examining the styles of productions and the use of stage lighting by performing theater groups in Lagos, we agree with Femi Osofisan' in his analysis of the economics of production.

The costs of maintaining a company, paying actor's wages, buying costumes and props, mounting adequate publicity, paying for rented space, and so on, all those expenses which a producer must think of add up nowadays to a sum few promoters can afford. Further. Osofisan proposes the "packaging" of the theater as a necessary and expedient orientation of the theater in a capitalist economy. He asserts that what we may be ignoring (because it is painful for us to accept or assimilate) is that even a revolutionary theatre must sell itself nowadays as a commodity, and therefore learn to present itself like all products, if it must sell, as a necessary and glamorous item of consumption to consumers. One of such universities where theater still survives is the University of Lagos, a federal university established in 1962.

Lagos is regarded as the cultural and economic nerve-center of Nigeria, in spite of the fact that political headquarters has moved to Abuja. From 1974 to 1997, the Centre for Cultural Studies coordinated theatrical activities at the university.

Conceived as a research and performing center, it had a core of playwrights and directors who researched into, and engaged in performances created from their research10. The Center engaged in a number of dramatic and musical productions for the twenty-three years of its existence. Most of the performances had Abayomi Barber designing the set while the present writer designed the lighting. Prominent among the productions staged included Wole Soyinka's *Trials of Brother Jero*, UwaHunwick's Ogban/'e, *Bode Osanyin's Ogedengbe and Woman* and Ola Rotimi's *The Gods Are Not To Blame*. The performances

were held in the two standard theaters of the University Auditorium and the Arts Theater. Built between 1974 and 1977, both theatres were well-equipped and afforded the Center the opportunity to have standard productions, using the twenty-five member Performing "Arts Troupe". As the in-house lighting designer, this writer's work featured prominently in the lighting of productions emanating from the University of Lagos.

It is significant to note the declining fortune of the Nigerian economy. While in the mid-seventies, about 70 lighting instruments, considered a sizable number, were available to light a production, only about 20 instruments are easily available to light most shows in the new millennium. The approach to the lighting of the productions has been to achieve basic illumination while also making some attempts at realizing the atmosphere and mood of the productions with a sparing use of effects. At some period in Lagos, Yoruba theater groups performed plays in Lagos and other parts of Nigeria. These theater groups belonged to the Association of Nigerian Theater Practitioners (ANTP).

Since the foray of these theatre practitioners into the film and video media, however, they have practically abandoned live theatre. The indigenous theatre groups thrived largely among the Yoruba in the south-western part of Nigeria. Lagos was an attraction in view of the city's commercial nature and the number of available performance venues. According to Biodun Jeyifo, the themes of their dramas range from the historical to the mythological, and the folkloric, with doses of comedies and social commentaries.

Because of the itinerant nature of these groups, they employed a minimum of sets and props and therefore depended on stereotyped lighting for the portrayal of mood and atmosphere in their plays. Red color gels were used for war scenes, green for forest scenes and blue for the romantic and love scenes. Ghost scenes were portrayed with the use of ultraviolet tubes or backlights.

The incursion of this group into film and video productions has enlarged their wardrobes. It has also made significant impact on their approach to lighting, which has broadened beyond the simple floodlights and ultraviolet on switches to the use of some dimmers and control equipment along with a few spotlights and effects such as the strand fire effect. Lagos is replete with amateur and semiprofessional theater groups working in the English language medium.

The reasons for ghsh-speaking heater practice heater groups. has been attributed to the difficulties encountered in making a living out of theater practice by the English-speaking theater groups. Prominent semi-professional groups that have made some impact on the theatrical scene include Sola Fosudo's Centre Stage Productions, Olu Jacob's Lufodo Productions and Israel Eboh's Fezzi Productions. Others include Felix Okolo's Tempo Productions, Rasheed Gbadamosi's Phoenix Playhouse, Fred Agbeyegbe's A/o Productions directed by Jide Ogungbade, Ayo Oluwasanmi's Gangan Productions and Chuck Mike's Performance Studio Workshop and Collective Artistes.

In the last few years Lufodo Productions has been the most successful in this category. His Christmas production of Holy Child was staged for three Christmas seasons from 1993 to 1995 with an all-star cast of professional actors that included Taiwo Ajai-Lycett, Joke Silva, Richard Mofe-Damijo and Ayo Mogaji. The production was directed by Yomi Layinka while technical direction and lighting was coordinated by Duro Oni with John Johnson and Demola Tejumola handling the set design and construction.

In April and May, 1997, of an adapted play, *Digging for Gold.* Chuck Mike's Performance Studio Workshop and Collective Artistes has become a positive studio for theatrical endeavors by attracting funds to tackle topical political, social and development issues. Stage lighting for the performances of the amateur and semi-professional groups has

largely depended on the theaters in which their performances are held. In some cases, it has also depended on who is handling the lighting. This writer has been responsible for the stage lighting of over a hundred productions by groups in this category and can therefore draw on his personal experience in analyzing lighting design for this genre. First, the funds available to this category are limited. While most of the directors are aware of the importance of lighting design to their productions, they have been seriously constrained in terms of available financial resources. *Digging for Gold* which was staged at the Muson Centre Agip Hall.

As at the time of the production which ran over a four-weekend period, the lighting equipment at the hall was severely limited and comprised a few one-kilowatt spots lights and Fresnel's with a twenty-four-channel dimmer board. The producing organization could not hire additional lights to complement those in the hall. As it were the theater had sufficient lighting instruments without a complement of lamps. This is not unusual in Nigeria as most shows hardly have more than twenty lighting instruments to light an average production.

2.4 Theoretical Framework

This study is based on two theoretical templates, which include Stanley Russuel McCandless theory of three Dimension method of Lighting, coupled with Richard Pilbrow "Four Dimension Method of Lighting". However, the study emphasized Stanley McCandless Stage Lighting method.

Stanley McCandless was born on May 9th ,1897 and died August 4, 1967, is considered to be the father of modern lighting design, he paved the way for future lighting designers by playing a role in all aspect of theatrical lighting, from the engineering of lighting instruments to consultant work, and of course designing realized theatrical productions.

McCandless outlined a method of lighting the stage, known today as the McCandless method, is still in wide use today.

Lights aim downward toward the stage to simulate natural lights direction; no single stage lighting theory suits every performance situation. For beginning designers, two of the most common lighting theories are useful for special event lighting: McCandless lighting theory and three –point lighting. Special activities such as dance and puppetry have their own lighting theories, but all lighting design should focus first on visibility from the audience's point of view.

McCandless lighting theory developed by Stanley McCandless himself proposes dividing the stage into overlapping acting areas. Two sources from the front and one source from the back light each area, forming an equilateral triangle around the area with the light fixtures with the apex at the back. The two front lights should overlap the same space, generally with colored, blue or lavender and the other colored pink or amber, mixing to form white light. The McCandless method is a particular approach to providing stage lighting, first proposed in his book, A Method of Lighting the Stage, which has been through several editions. The McCandless method is still in wide use today.

In the McCandless method, the actors are meant to be fully front lit but also provided with some "sculpting" of the features. Full lighting is provided by at least two lights from opposite sides, above the plane of the actors by about 45 degrees and approximately 90 degrees apart. These two lights come in from opposite directions. Top lighting may also be used for fill, as may limited footlights. McCandless describes these angles as being the diagonals of a cube in the center of the acting area.

However, the key to the McCandless method is that one light of the primary pair is "cool" relative to the other. One may be blue (a cool color, i.e. higher kelvin temperature) and the

other amber (a warm color, i.e. lower kelvin temperature). Thus, one fills the shadows left by the other in a way that produces a degree of depth which is striking and recognizable on the stage, similar to stage makeup in the way it exaggerates and clarifies the actors' faces.

This method of pairing a warm lantern with a cool lantern simulates sunrise in an outdoor environment, as in real life, giving the production a naturalistic (notion of realism on stage invented by Constantin Stanislavski) feel, thereby producing intimacy of the play with the audience.

This coupled with the depth created, enhances the facial features of the actors, enabling them to convey emotion more effectively than before. This comparison of warm and cool also enables the lighting designer to shift the balance of the warm and cool lanterns in accordance with what time of day it is. For example, if a scene was set in the middle of the day, the warm and cool lanterns would be equally bright, so the shadows created would be filled equally by warm and cool lights, giving the actor's face a balanced look similar to that of standing outside in the middle of the day.

However, as it becomes later in the day, the cool lantern would become brighter than the warm lantern, so the light upon the actor's face becomes cooler overall, suggesting to the audience that the time has shifted into the evening, without any mention of time in the scene itself.

To be totally realistic in this representation of daylight, four lanterns should be used to cover one area of the stage, in two pairs at 45-degree angles, so on each side of the actor's face both a warm and a cool light would be present. This would enable the lighting designer at midday to switch the warm light from one side of the actor's face to the other, simulating the sun passing overhead in real life, enhancing realism. Alternatively, this effect can be achieved with two lanterns equipped with scrollers (a device which fits on

the end of the lantern capable of holding different colour gels and switching them during the performance) each containing a warm and a cool gel.

However, scrollers are renowned for breaking unexpectedly in the middle of shows, and therefore in a best-case scenario two lanterns from each side should be used. Having said this, smaller theatres with fewer resources use this method to great success with only two lanterns per area of the stage.

Stanley McCandless began devising this system while at Harvard College. He fully developed it following his move to Yale University, which was then near the center of American theatre, in part because many producers of Broadway -bound shows staged opening runs at New Haven's Shubert Theatre in order to assess their wider potential. Additional lights can be added straight down from the top or from high or low side angels.

The two-point front lighting with different colors helps illuminating both sides of the performances, yet casts slightly different shadows on each side to create shapes. The black light helps separate the performance from the back drop, enhancing the visual depth other lights can add color or fill in shadows.

(i) Three-point lighting

Three-point lighting also divides the stage into areas in this case; each area is lit from the front by single sources called a "key light". plus a back light, usually from a high or low angle (this avoids shining the light into the audiences eyes, as a medium or flat-angle back light would) and a third light from one side to fill in shadows, this lighting theory stems from the ideas that natural light, such as sunlight or interior lighting usually comes from a single source, mimicked by the key light. Back lighting adds dimension, while the fill light enhance visibility by adding soft light into the shadows left by the key light.

(ii) Dance lighting

Dance performance lighting often relies heavily on lights from unusual angles, such as low angles, side lights or lights that shine straight up or down. The theory behind this lighting technique is that shadows help add dimension the curves of a dance is musculature are highlighted by side or low angle light, which also make each movement more visible to the audience. Because body movement is often more critical then facial expression in dance, this lighting style emphasizes whole body lighting over a focus on bright face light.

(iii) Other special lighting

The theory applicable for puppetry and magicians often focuses on drawing the audience attention to one portion of the stage while hiding other portions, bright light from low to high angles may shine directly across the stage, so objects placed within the light are seen while puppeteers or magicians assistants are hidden in the darkness just behind the light. Stage lighting for other events also pulls from this technique using lit areas to pull focus to certain areas of the stage while leaving other areas dark or dim to control what the audience sees.

Richard Pilbrow (Four Lighting Dimension)

Another lighting proposed by pilbrow is that light and shade in four dimensions, Pilbrow 1997 further elucidates on the essential elements of lighting. Light is used as an element of design in space, but this design is not static as painting or sculpture, lighting design is visual design in space and time. The controlled compositions of light may change and follow the play like a musical accompaniment. Pilbrow theory starts with "idea" of visual effect, the feel or look developed upon and how every moment of the play is to be visually realized is considered. In this regard Pilbrow:

> Explains that the lighting is expected to "enwrap the actor, shape the visual and emotional environment of the play and help in telling the tale" Pilbrow substitutes the "Motivated light" of the method with the "Dominant light" in which the degree of priority given to the motivated light is higher than that of the acting-area light. Pilbrow philosophy therefore proposes a four-level concept to the art of stage lighting design. It includes: Dominant light, Secondary light, Rim light, and Fill light. (23)

The dominant light is expected to set the dramatic key of the scene, the secondary light is the mix of the acting area and supplementary acting areas, the rim light on the other hand is expected to provide highlighting from the top, back or sides of the actor, while the fill light generally comes from front, which softens the shadows and blends the key and secondary lighting, Pilbrow cautions that:

> Lighting is not a mechanical process it is neither simply a matter of illumination nor of making effects, the act of creative lighting is to begin with an idea based upon a play and upon and space that enfold the actor and helps him project his story to his audience, therefore the designer must have a mental image of the overall visual effect of the stage filled with actors and scenery. This image must be in three dimensions and in the fourth, too-in-time-as the lighting ebbs and flows with the drama. (30)

With the above statement, the future of dramatic presentations will be depending less on scenery and more on lighting. This fact supports and up builds Pilbrows position that stage lighting has influenced the shapes and looks of the theatres. The stage will be filled not with actors and scenery as Pilbrow proposed but with actors and light in four dimensions: as it is lighting at one time was only in three dimensions and essentially functioned for the purpose of providing illumination. The fourth dimension in stage lighting is not only lighting that envelops the actor but also creating of time being in motion. For any lighting situation, the lighting designer must choose the theory or lighting style that suits the dramatic act, venue, available lighting equipment and performance needs.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter centers on the methods that was used to gather data for the purpose of this study. The chapter discusses the research design, methods of data collection, sources of data, techniques for data analysis as well as justification of methods.

3.1 Research Design

Research design is a blueprint, or outline, for conducting the study in such a way that maximum control will be exercised over factors that could interfere with validity of the research result (Patton, 28). It is a logical model of proof that allows the researcher to draw inferences concerning causal relations among the variables under investigation. It also defines the domain of generalizability, that is, whether obtained interpretation can be generalized to a larger population or to different situations. (Obasi, 19)

The tenet of research design is that it describes the major procedure to be followed in carrying out the research work. It specifies the plan of the study, choice, pattern or scheme for attacking or solving research problem systematically. To put it simply, research design is essentially research plan that provides necessary details about the structure and strategy of the research at hand. The research design used for this study is descriptive design which seeks to describe the existing status of what is being investigated. The descriptive approach involves the normal gathering, analysis and interpretation of a set of data so as to explain the underlying factors that triggered the research.

Descriptive research is adopted in this research because it is primarily concerned with the collection of data for the purpose of describing and interpreting the historical condition with the central purpose of discovering certain facts that were hitherto obscure.

The descriptive research adopted in this research is also to give a picture of the situation of how situation is in the affected places under study. It is primarily concerned with the collection of data for the purposes of describing and interpreting existing conditions that are in with the central purpose of finding solutions.

3.2 Population, Sample and Sampling Techniques

The target population of the study comprises of students and lecturers from different tertiary institutions which include Nasarawa State University and College of Education, Akwanga Theatre Arts Department. The total population of the study is 400 but due to the heterogeneous nature of the number of these informants the researcher however, picked 200 informants as representatives of this study.

The study sample size is 200 respondents who were sampled using purposive sampling. Therefore, in purposive sampling, specific elements, which satisfy some predetermined criteria, are selected. Although, the criteria used is usually a matter of the researcher's judgment, he exercises this judgment in relation to what the researcher thinks will constitute a representative sample with respect to the research objectives.

Their views were compared with secondary sources. While sampling is usually a fractional part of the population, it's a small population of the total population selected to represent the whole population. While Sampling techniques or procedures is generally referring to the process of selecting a small part of a whole in other to determine some qualities or characteristics of the whole.

3.3 Method of Data Collection

There is no doubt that the quality of data is tied to the methods and techniques used for gathering the data. Basically, this study utilized both the primary and secondary data. The secondary data were sourced through documentary sources like journals, text books,

reviews, newspapers and internet materials. Under the primary method, the researcher used interview method to collect primary data for the study. The interview method was chosen because of its advantage in gathering information directly from the sample population. They are cost effective and proved to be useful in sounding opinions of respondents. Direct face-to face contact was employed in administering the interview.

3.4 Techniques for Data Analysis

All the information gathered from the interviews and data collected for this study will be analyzed qualitatively through simple percentage and content analysis method. The main objective of content analysis is to convert recorded raw phenomenon into data, which can be treated in a scientific manner to build up a body of knowledge. The technique or method of data analysis is also to involve the use of statistical techniques through the use of simple percentage method of analysis where the frequency is used against the total number of questionnaires administered. The formula used in arriving at the percentage or negative responses is:

F = frequency or number of responses

N = the total number of respondents

I = on a test item or a group of test items %= the percentage of all the positive or negative responses on a test item or a group of test items.

3.5 Justification of Methods

Justification or validity is the extent to which a measurement instrument assesses the true exposure of interest. In general, justification is an indication of how sound a research is. The interview and questionnaires serve as a research instrument and how the validity of this instrument is, and how to obtain information from the respondents in which is to be

used for data analysis. The research topic which is based on investigation into the constraints of stage lighting affecting tertiary institutions is been looked into through the instrument used which will aid proper and thorough search or investigation on the problems. In regard to the action taken, which is the administration of instrument, series of different opinion, responses, result will be obtained adequately for data analysis which will also help the researcher to summarize the result obtained and finally gives his or her recommendations and suggestions on the findings. Therefore, the justification of the instrument, enables the researcher get access to the people opinion especially students, lecturers in selected tertiary institutions in which it will help in proffering possible solutions to the identified problems.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

This chapter presents the analysis and result of data collected for this study. The data were presented based on the research question, objectives and proposition that guided the study. Views of respondents through the structured interview were analyzed and evaluated in order to provide answers to research questions.

4.1 Data Presentation and Analysis

The part A which is the respondent's personal data is presented in the table below;

Table 4.1 Gender Distribution of the Respondents

Sex	Responses	Percentage
Male	30	60%
Female	20	40%
Total	**50**	**100**

From the table above, out of the fifty respondents interviewed, thirty were male representing 60% and twenty were females representing 40%.

Table 4.2: Age Distribution of the Respondents

Age	Responses	Percentage
21-40	15	30%
41-60	19	38%
61 and above	16	32%
Total	**50**	**100**

Table 4.3: Marital Status of Respondents

Marital Status	Responses	Percentage
Single	40	80%
Married	10	20%
Total	**50**	**100**

The result in table 4.3 above shows that 80% of the respondents are single while 20% of the respondents are married.

Table 4.4: Educational Qualification of Respondents

Educational Qualification	Responses	Percentage
SSCE	5	10%
ND/NCE	18	36%
HND/BA	22	44%
M.A and above	5	10%
Total	**50**	**100**

Source: Field survey, 2019.

From the above, it is clear that those with SSCE stand at 10%, the same with those with ND and NCE, while those with Degree and HND were 44% as against those with MA and above which was 10%.

Table 4.5 Do you think engaging students in practical aspect will improves stage lighting management in tertiary institutions?

RESPONSE	NO. OF RESPONDENTS	PERCENTAGE
YES	61	52.1%
NO	40	47.9%
TOTAL	**101**	**100%**

Source: Retuned Questionnaire

Here 73.5% of the respondents agree that engaging students in practical process help in developing the trainee idea on stage lighting management while 47.9% disagree

Table 4.6: Do you think our educational theatre have enough stage lighting equipment?

RESPONSE	NO. OF RESPONDENTS	PERCENTAGE
YES	31	26.4%
NO	86	73.5%
TOTAL	**117**	**99.9%**

Source: Returned Questionnaire

In the above table 26.4% of the respondents agree that our theatre Institutional theatre adequate equipment's while 73.5% of the respondents disagreed.

Table 4.6: Stage lighting helps in communicating effectively during stage productions?

RESPONSE	NO. OF RESPONDENTS	PERCENTAGE
YES	47	90%
NO	3	6%
TOTAL	**50**	**100%**

Source: **Returned questionnaire**

In the above table 90% of the respondents strongly agree that stage lighting aided in communicating effectively during stage productions while 6% disagree with that view.

Table 4.7: Do you think our educational theatre has less or unqualified lecturers in stage lighting design?

RESPONSE	NO. OF RESPONDENTS	PERCENTAGE
YES	70	62%
NO	28	22%
TOTAL	**98**	**100%**

Source: **Returned questionnaire**

According to the above, 62% are of the opinion that our institutional theatre does not have much or less qualified lecturers in stage lighting. While 22% disagree with their opinion.

Table 4.3: Interview question for the first research question

What are the Challenges Facing Stage Lighting in Theatre?

Responses:

According to Daniel Okpa he respondent's sample, Lack of enough manpower in this specialized area of theatre practice, lack of modern lighting equipment, the reason is not farfetched understanding that even some professional lighting designers are constraint by the huge amount involve in purchasing this equipment. also creating a good atmosphere for students to engage in practical, this has really downgraded their ability to comprehend both Analogue and Digital understanding of lighting instruments and how each can be managed (Theatre and Cultural Studies Department, Keffi and Theatre Arts Department, Akwanga).inadequate equipment, we borrow lighting equipments from private theatre for better output of production. The lighting booth lack good lighting instruments to depicts the action or for better interpretation of scenes to the audience, lack of sufficient lights in theatre also create a lot of challenge to the student that are interested in such field, in our theatre the only light we have are parcan and fresnal, we don't have enough plastic gel to create special effects. Instability of power supply and sometimes during production, NEPA usually take off the light and theatre has no generator. (Student, College of Education Akwanga, Theatre Arts Department)

In your opinion how can Stage Lighting be Managed and help in Promoting Performance in Institutional Theatre?

Response: According to Philip Madibo: Light deals with creativity in the process of the designers thinking ability to harmonize the basic idea of lighting aesthetic, Creative stage

lighting also functions to direct the spectator's attention to the vital actions spot and forms one detail to the other in performance design circle. Creative lighting designer would carefully select the appropriate colours of light, the degree of brightness and spread of lamps on stage. The first tool in the hand of the lighting designer is the intensity of his instruments, observation has shown that brilliant lights stimulate high spirit in human, as such it is suitable in a production with a wise chose of colour.

Table 4.5 Interview Question for Third Research Question

How can a Lighting Designer Operate, Manage and Coordinate with other Designers?

Response: Eliminating the challenges of stage lighting and ensuring proper managing of lighting design in theatre begin with the designers creative understanding of basic lighting instruments, these are the basic equipment he/she utilise in contributing his quota toward the overall stage composition. He needs to understand fully the dramatic potentials and limitation of each instrument. They need designer will discuss these cues with the director during one of the production conferences, the extent of this discussion varies greatly, whereas other directors will leave the matter entirely to the lighting designer, the board operator will have roughed in the intensity settings for each cue before the lighting rehearsal. During lighting rehearsal difficulties might occur and it will be easier to identify and correct the problem before production day. and it is advisable for all the production team to be present to decide on any compromise that may be require during lighting rehearsal.

What Role did Professional Lighting Designers Play in Addressing The Conflict?

Response: Lighting designers in Nigeria theatre need to operate in an environment that is conducive for the practice, provision of adequate training, sufficient modern design

tools, instruments and the professional attitude of some theatre producers towards lighting, Nigeria theatre faces a lot of bottle necks because of unavailability of requisite facilities and issues surrounding producers who pay less attention to stage lighting and performance design.

Stage Lighting has been Seemed as Vital Component in Theatre, how can it be Managed?

Response: The use of stage lighting has advanced to that in which an environment is used for dramatic presentation is created, stage lightning design is also advancing to the stage of substantially reducing the use of stage sets, light is said to be the most relevant medium in theatre so it has to be properly fixed up, rehearsing with the light is a step for a successful production in theatre. Lamps must be properly cared for his need to know that handling of lamps with bare hand reduces the life span of the lamp because of the dirt deposited.

In most theatres the lighting designer or technician most therefore ensure that his lamp are properly care for, continuous removal of lamps seriously affect it, lamps should be left in the lantern for as long its functioning, when rigging off the lighting has been completed the lighting designer should have a quick flashback through all the circuits, testing the circuit member one by one to ensure that everything is working and that the channel number or the control corresponds to the plan.

The lighting designer will also have noted the position of any motivated or unmotivated lighting cue that he or she may want to use in the production.

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4.2 Discussion of Findings

From the foregoing, the data collated from the field, using primary data (unstructured interview), along with quantitative secondary data literature; here are some of the observation and findings.

I. Inadequate number manpower in this specialized area of theatre practice, studies and observation shows that Nigeria theatre shows there is inadequate modern lighting equipment, the reason is not farfetched understanding that even some professional lighting designers are constraint by the huge amount involve in purchasing this high-tech equipment. It is not an over statement that the dearth of this modern equipment ultimately affects the quality of production, as much as these available technical materials are unlimited in terms of visual effect.

II. Another revelation of the review is that lamps must be properly cared for; he need to know that handling of lamps with bare hand reduces the life span of the lamp because of the dirt deposited. In most theatres the lighting designer or technician most therefore ensure that his lamp are properly care for, continuous removal of lamps seriously affect it, lamps should be left in the lantern for as long its functioning, when rigging off the lighting has been completed the lighting designer should have a quick flashback through all the circuits, testing the circuit member one by one to ensure that everything is working and that the channel number or the control corresponds to the plan.

A flash through again will also give some indication of whether the lantern is likely to do the job assigned to it or not, for another reason the light may not be able to hit the design part of the stage, if this is recognized now the lighting designer may correct it to avoid

misinterpretation of performance design. For eliminating some constrains faced in theatre the lighting designer must decide to work on the four Ws:

1. Where to put the light
2. Which light to put
3. Where to point these light
4. Which color to light

III. Lighting design needs to be flexible to address these basic problems with other designers by coming together, share ideas on how to solve them. Paramount in this instance is how to create a conducive training environment for designers and to assert their professional rights, to achieve these, support of government and corporate organization must be sought: It is through the government that training facilities for lighting designers in Nigerian universities could upgrade, it is also through the government that any codes of conducted formulated to guide the practice of lighting and performance could be given a legal right or muscle, the involvement of corporate organizations would foster the funding of the provision of some of these facilities".

IV. The management of theatre bodies and institutions can procure lighting equipment within the limits of their resources; they need not to acquire all the equipment at once unless they can afford it. Alternatively, procurement by installment whereby the instrument, accessories and spare parts are purchased in batches is advised, the equipment when acquired, must be entrusted into the care of an experienced theatre technician for better handling and management.

That since theatre is a big business; there should be a serious resistance against these designers and technologists who are more interested in form then function, in method s as opposed to the result, in machinery as opposed to people". He explains for instance that it

will be economically unwise and indeed a foolish luxury in a high school theatre to procure a new-fangled stage lighting equipment/system if no one has the knowledge or ability to operate it. (Langley 66).

So, Nigeria designers need to continually update their knowledge of current trends in the lighting industry as they make proposals to acquire sophisticated equipment, and the option is to send theatre lighting designers for short courses, workshops and festival abroad where they can interact with and learn from other professional in their field.

V. Computer education is another way forward in doing away with the problems of stage lighting, computer education is highly recommended for every aspiring and practicing of theatre, in few years' time analogue and Manuel lighting equipment will be phased out, judging in recent trends in the sector. Only a trained and experienced technician can make the best use of digital and fully computerized operations, in the area of training, Duro Oni advises:

> That it should extent from designers to playwrights and directors to make them sufficiently knowledgeable about the machines of the play production and enable them co-ordinate the design resources at their disposal" he adds that institutions responsible for the training of theatre artist should make their programmed more comprehensive, so as to include training in technical theatre for all students. He also advises that intensive computer training should be mandatory especially for student that wish to specialized in lighting design and technical theatre. (202-3)

All shareholders in the arts and entertainment industry should make concrete efforts to ensure that Nigeria keeps abreast with current global trends in theatre industry especially in the area of lighting equipment and manpower development. Stage lighting is a remarkable part of modern theatre, although theatrical productions have been presented for many years, the new ability to accurately and sensitively control light has led to stage lighting emergence as an ever more significant element in the creation of theatre.

It is also very vital to have equipment checks before each technical or dress rehearsal or performance takes place, all dimmers and instruments need to be properly checked to determine that they are functioning very well. With the aid of check sheet, crew members can test all the instruments and dimmers in a short time, as the board operator turns on each dimmer, the other electrician to check and see that all of the instrument assigned to the dimmer are functioning well, at the sometime that the person checking the instruments can see if any of the color media are bleached out, torn or otherwise in need of replacement.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Stage lighting is something noble that we need to cherish, something that has bound us together. Lighting provides entertainment, enlightens, communicate enable atmosphere, mood creation, encouragement and hope in the mind of the audience. Stage lighting design like other areas of design depends on the elements of design, which include line shapes, measure, position, color and texture, the lighting designer does not only limit his designs to physical consideration without appreciation of the aesthetic factors in design.

Even though the lighting designer in our contemporary theatre faces a lot of challenges ranging from institutional and non-institutional level, the challenges of managing stage lighting in this research work has been discussed, how to arrest the problems depend on the organization since the research work has provided some other possible solutions on how to enhance balance and effective stage lighting in Nigeria.

Theatre is not a blind man environment because without the full accomplishment and synthesis of stage lighting, it will be regarded as dark man theatre. To achieve this, each Nigerian theatre, regardless of institutional and non-institutional need to have good lighting equipment in other to increase audience understanding of both emotional and intellectual context of performance/production. Theatre is life and that life is achieved by working together as a team, working as a team also helps in doing away with the challenges faced in the theatre. According to Sally: Lighting has a very particular function in theatre, since it can enhance a set or actor and at the same time as a mood changer (157).

Lighting needs to be reconstructed to aid a proper understanding on how the upcoming new lighting designers to enhance the role and good management of lighting practice, 'government on the other hand need to focus much attention in this field of studies to provide the necessary resources needed by the designers.

The governments need to play a vital role in funding institutionalized theatre in this regard, It will help us to compete with developed countries in term of theatrical approach or practice, the survival of stage lighting depends on its capacity to reinvent itself by embracing new trends.

The research captures various contributions of scholars whose attention is given much to lighting development. The contributor's view that stage lighting is not just a mere art but it is a collaborative factor of both art and science, and it helps in developing the country's intellectual level of the students, that is if governments pay attention to this design component. Learners need to have passion to the of study stage lighting and performance design because of its great importance to theatrical activities. Lighting designers should view this as their food, and how it will contribute in the area of human development, through sponsorship of student training and other technical skill acquisition programmes or courses.

5.2 Conclusion

Theatre as a dynamic medium needs to reposition itself to remain relevant in the new dispensation. Similarly lighting design have become indispensable elements in our educational theatre. As a vital art of the theatre, lighting design add meaning and aesthetics to the performance. It is hard to conceive of a theatre without light since the theatre is basically an audio-visual art. Many artists and bodies in Africa are already repositioning and getting attuned to this global trend of computer assisted especially in the

area of theatre technology, but the situation in Nigeria is different. This is caused mainly by poor funding which makes it difficult for theatre institutions and organizations to procure proficient equipment and embark on sustainable manpower development.

The research also provides a brief description of stage lighting evolvement in Nigerian theatre context and how scholars contribute immensely to lighting design, and it also provide some technical suggestion on how to arrest or tackle this current issue if we are to achieve our aim. Stage lighting is really a reliable source in gingering theatrical production/performance design circle, growth and development; however, the progress of stage lighting design is constraint with many factors ranging from management, finance and the operation which requires urgent attention since the promotion of stage lighting and performance design is very vital.

In theatre, the production process serves as a medium of exchange between the designer, actor and the audience. This has been discussed by Bellman, Parker, Wolf, Pilbrow, Duro Oni, Rosenthal and Wertenbaker explain: Lighting affects everything that falls upon, how you see what you can see, how you feel about it, and how to hear what you hear. Light as the most powerful medium of artistic appreciation can correct and at the same time can corrupt base on the lighting designer interpretation.

5.3 Recommendations

Based on the various findings made in the process of this research, the following recommendations are therefore put forward as ways to do away with challenges of managing stage lighting design in our institutionalized theatre.

As noted by Sunny Ododo in his book *Technical Theatre Practice in Nigeria, Trend and Issue*:

> To address this problem identified, designers have to come together, share ideas on how to solve them, paramount in this instance is how to create a conducive environment for designers to assist their professional right. To achieve this, the support of government and corporate organization must be sought; it is through this agency that training facilities for lighting designers can be obtained in Nigerian universities. It is also through this that any code of conduct formulated to guide the practice of lighting design in Nigeria can be given a legal muscle. The involvement of corporate organizations would foster the funding of the provision of some of these facilities. (Ododo,154)

Professional standard should be set for designers to attain before being allowed to participate in theatre design, because lighting design is a practice of technical theatre not wake-up and do work, it will be very wise for the government to establish a regulatory body to give license to the practice of such art. This profession should be given a kind of recognition that has been given to professions like Advertising and Public Relations For student of theatre who are interested in further research in the area of stage lighting, it is possible with better documentation by lighting designers in Nigeria theatre institutions, documentation of their works inform of lighting plots of production in our institutional theatre.

The lighting designer must be very familiar with the material of the production, reading and re-reading of the script. He must also carry out necessary research as to the study of

lighting of the play requirement and most take cognizance of the practical lighting requirement in the play, it is also recommended that most theatre arts department in the country to include in their curriculum basic drafting techniques and styles of stage lighting.

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APPENDIX A

Nasarawa State University,

P.M.B Keffi,

Nasarawa State.

Dear Respondents,

LETTER OF INTRODUCTION: JACK JULIUS SHERIA

This is to introduce to you **Jack Julius Sheria**, with matriculation number **NSU/MA/THA/ 0004/17/18**. A postgraduate student of the Department of theatre and cultural studies, Nasarawa State University, Keffi (NSUK), Nasarawa State. He intends to undertake research in your institution on the topic: **Challenges of Stage Lighting Management in Selected Tertiary Institutions in Nigeria**, as a requirement for the award of Master of Arts degree in Theatre Arts.

Please kindly give to him the necessary assistance needed.

Any information given will be treated as confidential and such information will be used strictly for academic purpose.

Thank you,

Dr. Philip Umaru
Theatre Arts PG coordinator

APPENDIX B

SECTION A: PERSONAL DATA

i. Sex: Male ( ) Female ( )

ii. Marital Status: Married ( ) Single ( )

iii. Occupation:

QUESTIONNAIRE

1. Stage lighting serves as instruments that help in projecting stage properties and actors on stage. True or False
2. Artificial source of stage lighting has aided theatrical performance. True or False
3. Stage lighting Management has reinforced quality performance in institutionalized theatre. True or False
4. Stage lighting helps in creating special effects on stage. True or False
5. Stage lighting enhance moody atmosphere by given different play interpretation. True or False
6. Proper use of stage lighting through the use of colouration helps in passing a massage to a lively audience. True or False
7. There is a clear difference between stage lighting and management. True or False
8. Stage lighting cue or plot aid in helping lighting designers in achieving their aims. True or False
9. There is a clear connection between stage lighting and other elements of design. True or False.
10. Theatrical performance needs a well skilled lighting designer in putting up a good lighting. True or False

APPENDIX C

SECTION A: PERSONAL DATA

Sex: Male ( ) Female ( )

Marital Status: Married ( ) Single ( )

Occupation: ( )

INTERVIEW QUESTIONS

1. What are the challenges facing stage lighting in theatre?

2. In your opinion how can stage lighting be managed and help in promoting Performance in institutional theatre?

3. How can a lighting designer operate, manage and coordinate with other designers?

4. What role did professional lighting designers play in addressing the conflict?

5. Stage lighting has been seemed as vital component in theatre, how can it be managed?

APPENDIX D

PICTURES GALLERY

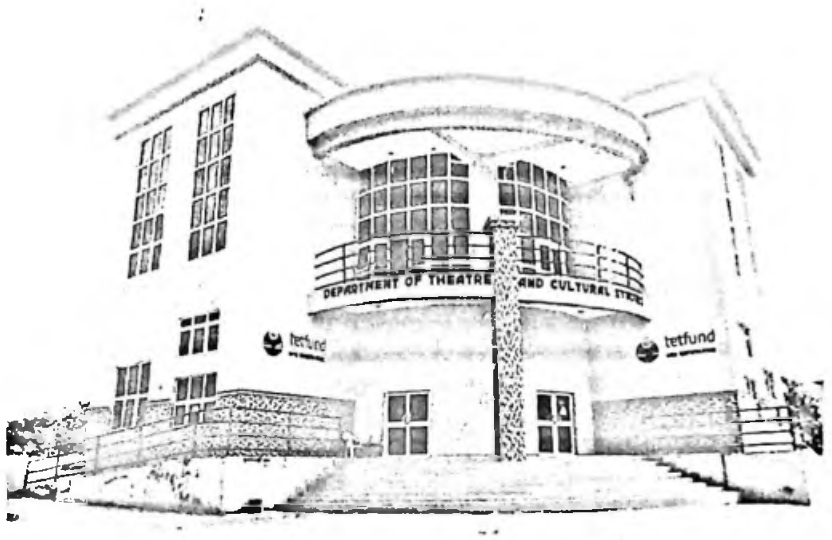

Fig. 1: Exterior of Theatre and Cultural Studies Department
Photo Credit: *Jack Julius*

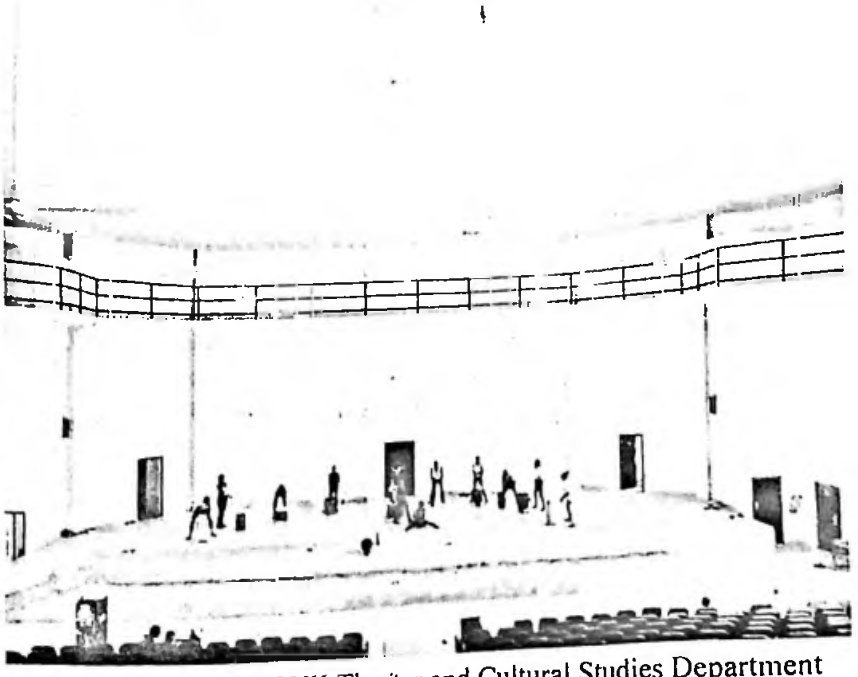

Fig. 2: Interior of NSUK Theater and Cultural Studies Department
Photo Credit: *Jack Julius*

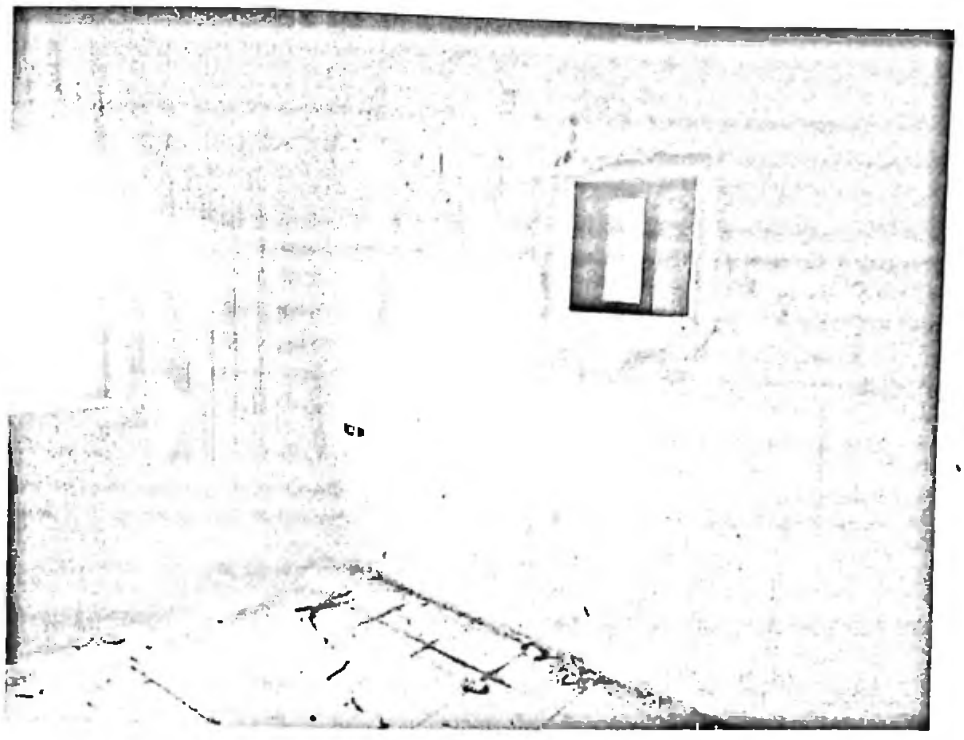

Fig. 3: Theater Arts Lighting Booth. College of Education, Akwanga
Photo Credit: *Jack Julius*

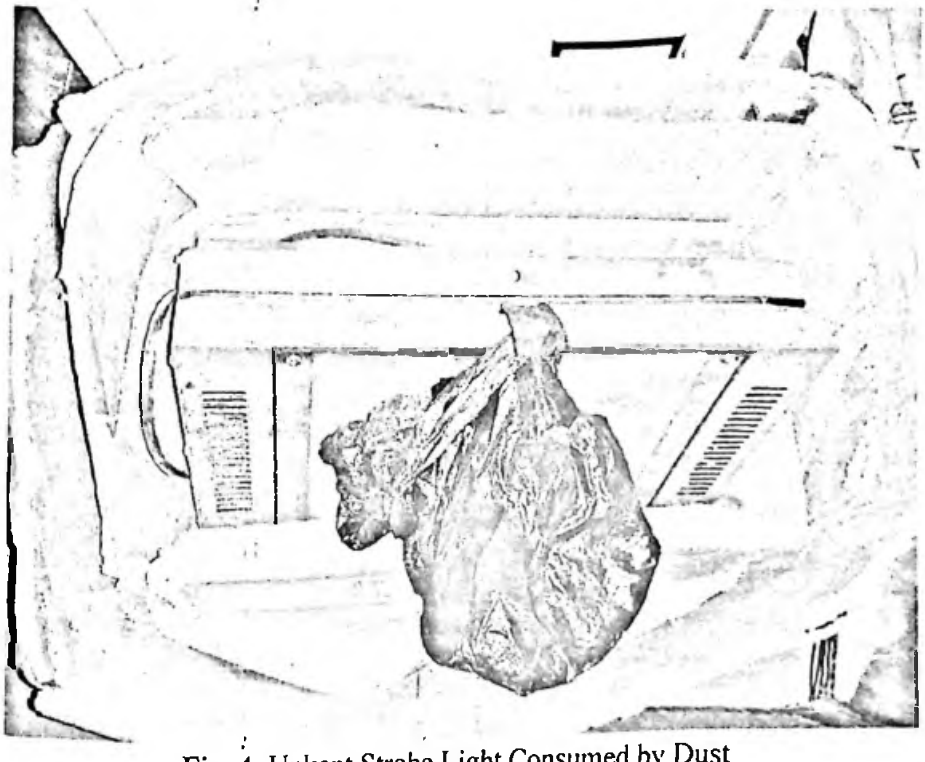

Fig. 4: Unkept Strobe Light Consumed by Dust
Photo Credit: *Jack Julius*

Fig. 5: Interior of College of Education,Akwanga Theatre Arts Department Lighting Booth
Photo Credit: Jack Julius

Fig. 6: Lack of Rigging Equipment to Hang Lights, College of Education, Akw
Photo Credit: Jack Julius

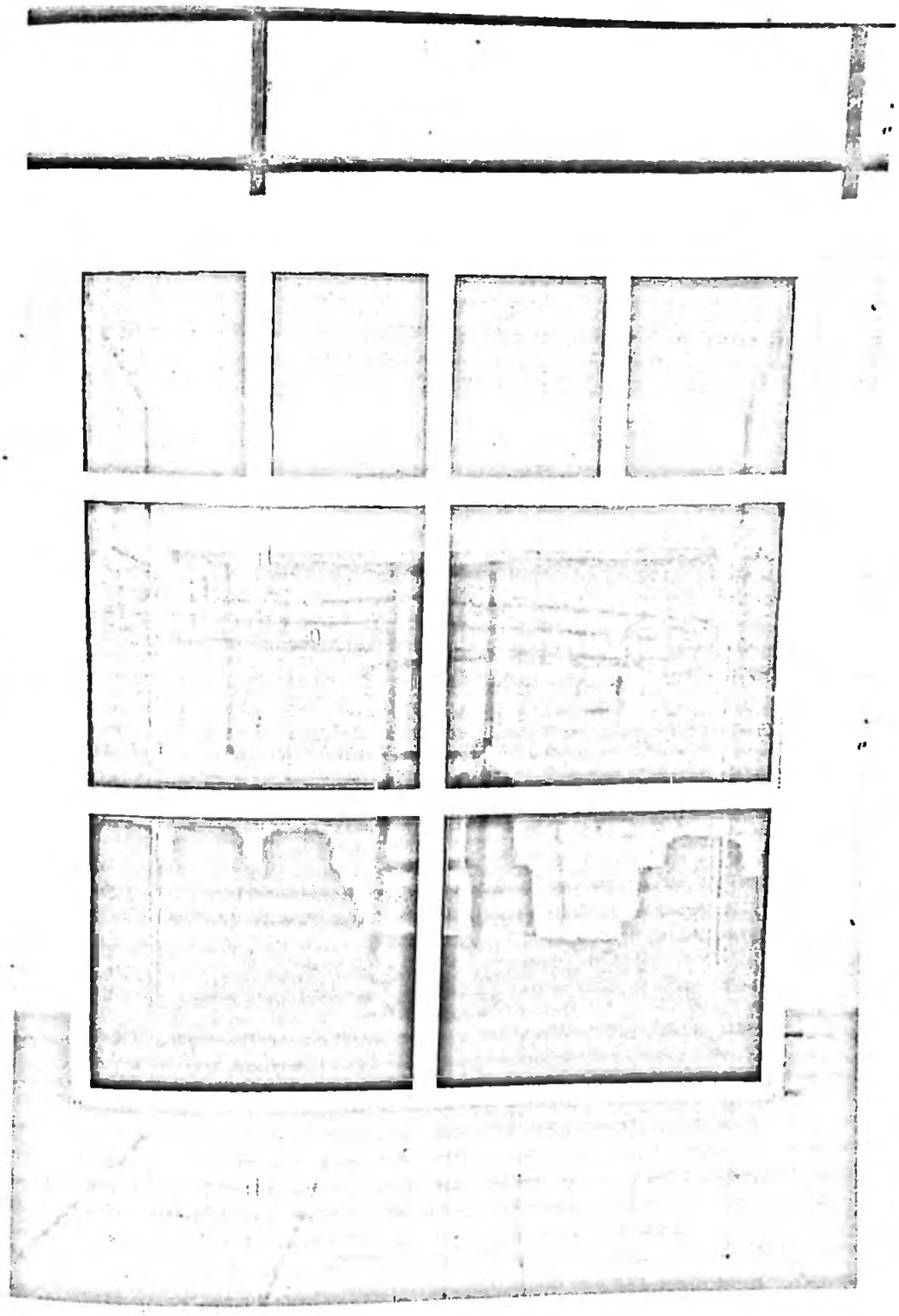

Fig. 7: A well-furnished lighting booth,NSUK but no facilities
Photo Credit: Jack Julius

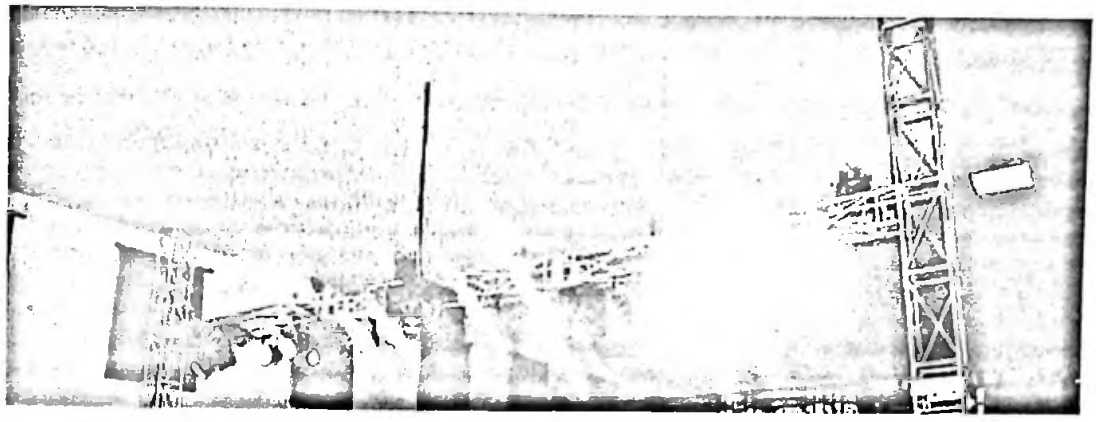

Fig. 8: Light hang on Thrust to ensure effective light on state
Photo Credit: Jack Julius

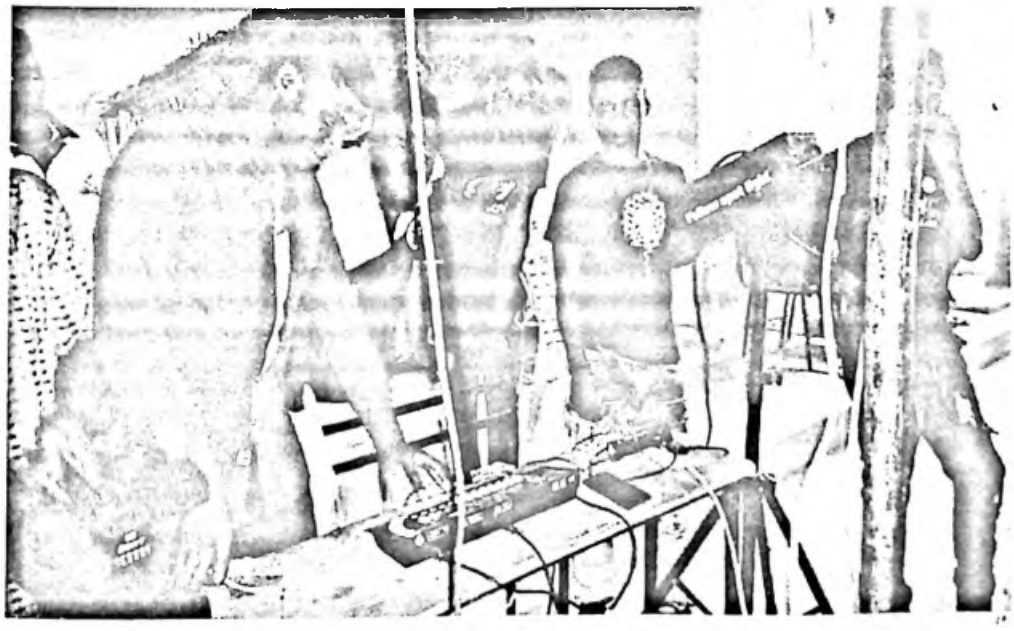

Fig. 9: College of Education, Theatre Arts Department
Students... Engaging in Stage Lighting Practical Under Weak Atmosphere
Photo Credit: Jack Julius

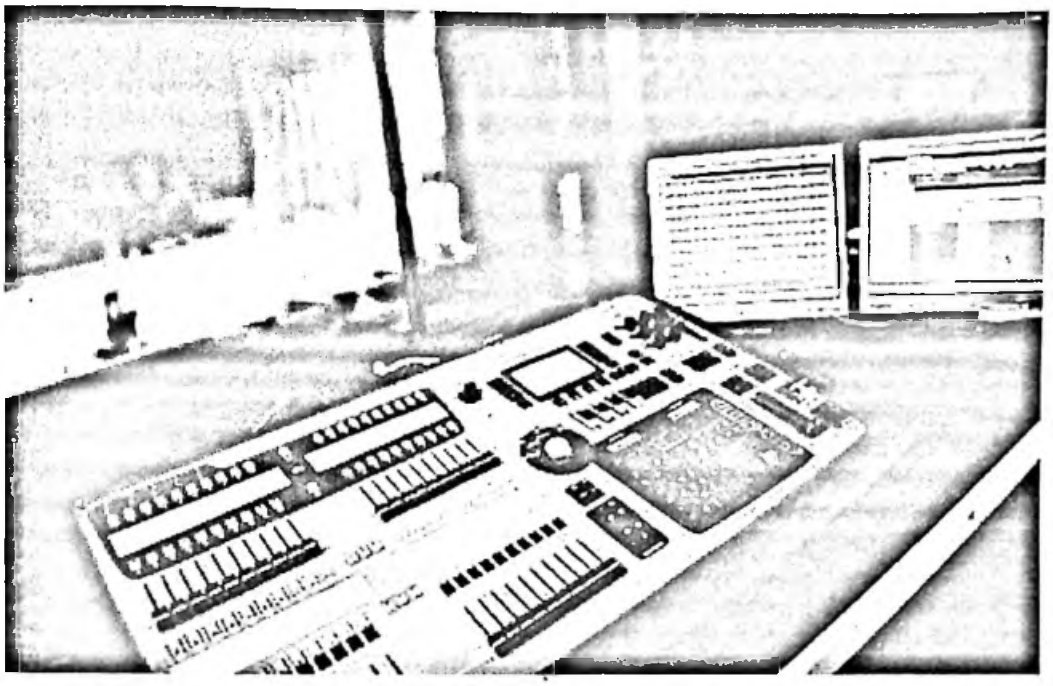

Fig. 10: Auto Program Console and Display Screen… which the two department need to procure in order to aid learning
Photo Credit: *Jack Julius*

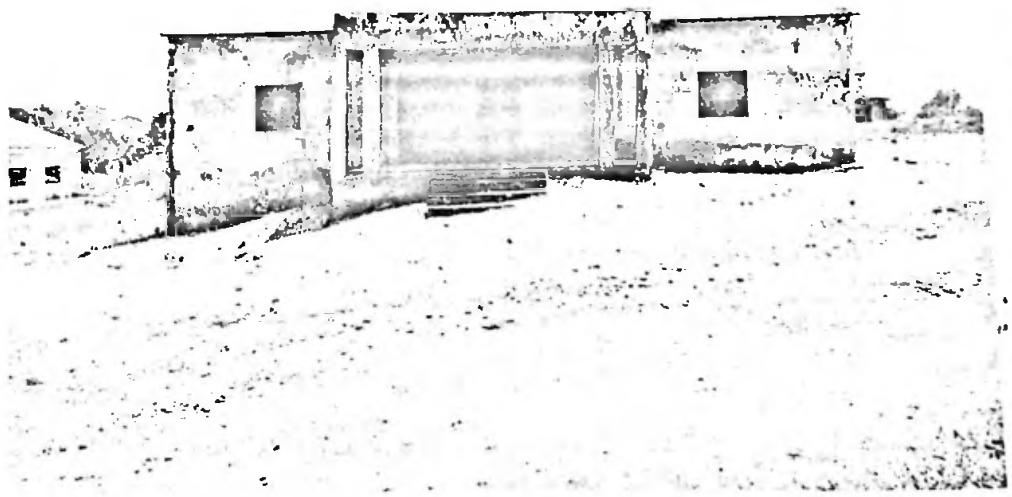

Fig. 11: Exterior of Theatre Arts Department, College of Education, Akwanga
Photo Credit: *Jack Julius*