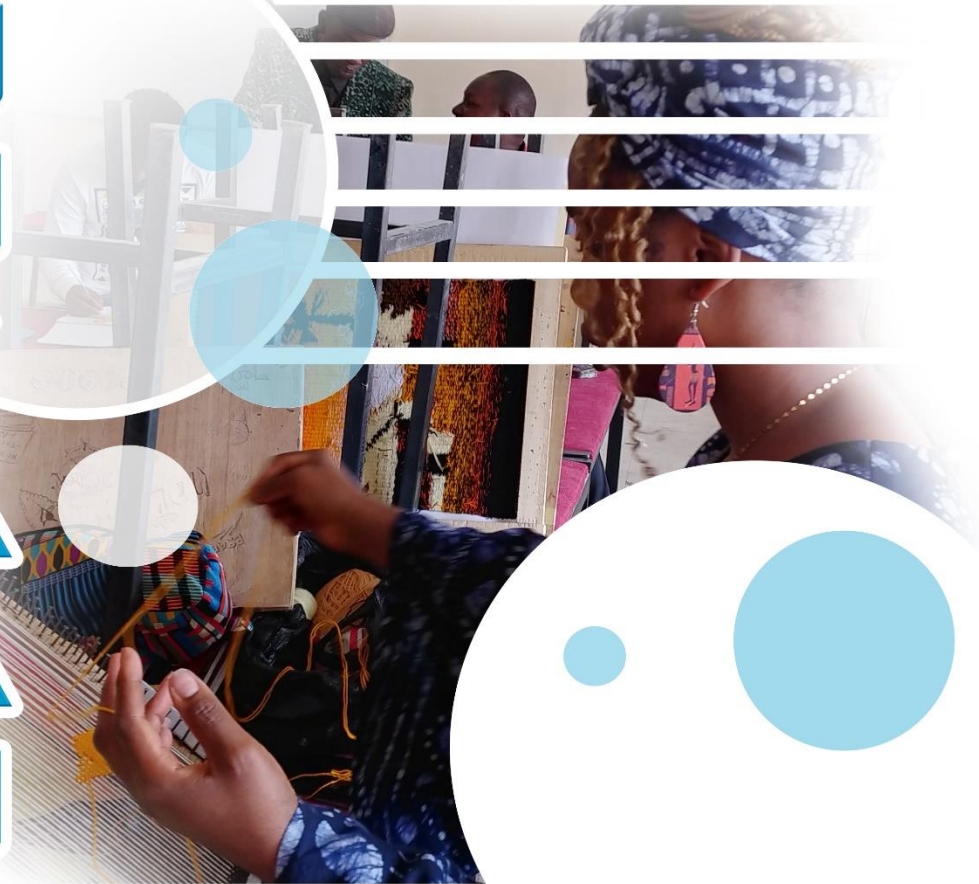




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FINE AND APPLIED ARTS

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Jos – Plateau State.

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University of Jos Fine and Applied Arts Journal (UJFAAJ) is a peer reviewed Journal. The journal helps to spread visual arts research findings and reports from the studio, theoretical and empirical works in the field in order to advance the knowledge base of practice led and practice based studies. The Journal is peer reviewed and published twice in a year and welcomes contributions from academics, art connoisseurs, critics and art Entrepreneurs.

EDITOR – IN – CHIEF

Dr. John Oyedemi Joshua
Department of Fine and Applied Arts
Faculty of Environmental Design
University of Jos – Jos
Plateau State.
E-Mail: johnoyedemi@gmail.com

EDITOR

Dr. Jacob E. Onoja
Department of Fine and Applied Arts
Faculty of Environmental Design
University of Jos – Jos
Plateau State.
E-Mail: onojaja@unijos.edu.ng, jacobonoja1@gmail.com
Phone: +2348035984125

ASSOCIATE EDITORS

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Department of Fine and Applied Arts
Faculty of Environmental Design
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Plateau State.

Prof. Habila Joel Gukas
Department of Fine and Applied Arts
Faculty of Environmental Design
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Plateau State.
E-Mail: gukas05@yahoo.com

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Faculty of Environmental Sciences
University of Jos, Plateau State

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Prof. Enoch G. Wuritka
Department of Industrial Design
Faculty of Environmental Technology
Abubakar Tafawa Balewa University Bauchi (ATBU)
E-Mail: wuritkagotrigenock@gmail.com, egwuritka@atbu.edu.ng

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Department of Industrial Design
ATBU
E-Mail: aaumar63@yahoo.com

Prof. Philip O. Gushem
Department of Fine Arts
Faculty of Environmental Design
Ahmadu Bello University
Zaria – Kaduna State
E- Mail: pogushem@gmail.com

Prof. Jerry Buhari
Department of Fine Arts
Faculty of Environmental Design
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Ahmadu Bello University
Zaria – Kaduna State

Dr. Talatu Onkala Adiwu
Department of Visual and Performing Arts
Faculty of Arts,
University of Maiduguri
adiwutalatuonkala@gmail.com
07066478884

FOREWORD

Dear Readers,

It is with great pleasure that I welcome you to the latest issue of the University of Jos Fine and Applied Arts Journal (UJFAAJ). As the Editor-in-Chief, I am excited to present the remarkable contributions of artists, scholars, and researchers in this peer-reviewed publication.

The UJFAAJ aims to be a platform that fosters critical discourse and showcases the diverse perspectives within the realm of fine and applied arts. Our journal is committed to promoting intellectual growth, stimulating creativity, and encouraging interdisciplinary approaches that push the boundaries of artistic exploration.

In this issue, we continue to explore a wide range of topics that reflect the ever-evolving landscape of the arts. The articles featured cover various themes, including but not limited to contemporary art practices, art history, art education, design, and visual culture. Each contribution has undergone a rigorous review process, ensuring that the content is of the highest quality and meets the standards of academic excellence.

Furthermore, this issue features in-depth interviews with prominent artists and art practitioners who share their experiences, insights, and inspirations. These conversations offer valuable perspectives on the creative process, artistic motivations, and the role of art in society.

As we move forward, the UJFAAJ remains committed to promoting inclusivity and diversity in the arts. We actively seek submissions from artists and researchers across different cultural backgrounds, perspectives, and artistic disciplines. By embracing a broad range of voices, we strive to cultivate a journal that reflects the richness and complexity of the global art community.

I would like to express my sincere gratitude to the editorial board, reviewers, and all those who have contributed their time and expertise in ensuring the quality and rigor of this publication. Your dedication is invaluable and greatly appreciated.

To our esteemed readers, I encourage you to delve into the articles, engage with the ideas presented, and share your thoughts. Your active participation is vital in fostering a vibrant and dynamic scholarly community.

Finally, I invite all researchers, artists, and scholars to consider submitting their work to the UJFAAJ. We welcome original research articles, critical essays, book reviews, and exhibition reviews that contribute to the discourse surrounding fine and applied arts.

Thank you for your continued support of the University of Jos Fine and Applied Arts Journal. Together, let us embark on this intellectual journey, exploring the boundless possibilities of artistic expression and scholarship.

Sincerely,

John Oyedemi Joshua PhD.

Editor-in-Chief

University of Jos Fine and Applied Arts Journal (UJFAAJ)

EDITORIAL

Exploring the Vast Horizons of Art

In this edition of the University of Jos Fine and Applied Arts Journal (UJFAAJ), we embark on an exhilarating journey through the diverse realms of art and its myriad intersections with technology, history, education, and culture. The articles presented herein serve as a testament to the boundless creativity, critical inquiry, and innovative spirit that define the field of fine and applied arts. Join us as we delve into the following captivating contributions:

"Between Conventional and Unconventional Styles: Analysis of Dress Styles of Female Figures in Modern Nigerian Art" by Chukwuemeka Nwigwe

Nwigwe presents a thought-provoking analysis of the dress styles portrayed in modern Nigerian art, specifically focusing on female figures. Through a critical examination of conventional and unconventional styles, the author reveals how artists utilize clothing as a means of expressing cultural identity, challenging societal norms, and narrating personal stories. This exploration enriches our understanding of the intersection between fashion and art, and the significance of dress as a form of artistic expression.

"Department of Fine and Applied Arts, University of Jos: The Axiom, Nexus, and Historiography" by Jacob Enemona Onoja, Ezra Rabo Samuila & Akila Yusuf Gunok

Onoja, Samuila, and Gunok shed light on the rich history and dynamic nexus of the Department of Fine and Applied Arts at the University of Jos. This article explores the department's evolution, its significant contributions to the artistic landscape, and its continued commitment to fostering creativity, academic excellence, and cultural preservation. By tracing the historical trajectory and discussing the department's vision, the authors provide valuable insights into the institution's impact on the art community.

"Developments in the Visual Arts: A Documentary from CRUTECH Art School" by Abetianbe G. & Enamhe B.

Through a captivating documentary, Abetianbe & Enamhe take us on a visual tour of the developments unfolding within the CRUTECH Art School. The film provides an intimate glimpse into the creative endeavors, techniques, and artistic achievements of the school. By showcasing the work of students and faculty, this documentary showcases the innovative spirit, vibrant energy, and dedication to artistic growth that define the CRUTECH Art School.

"Downtrend of Ceramics Practice in Nigeria and Efforts at its Resuscitation" by Samira Abdulsalam and Anto Peter Audu

Abdulsalam and Audu decry the decline of ceramics practice in Nigeria as a concerning trend that threatens our cultural heritage and artistic community. Samira Abdulsalam and Anto Peter Audu's

article sheds light on this issue and the efforts being made to resuscitate ceramics. They identify factors such as limited resources, infrastructure, and support as contributing to the decline.

"Adaptation of SARS-CoV-2 Microscopic Imageries into Abstract Painting" by Avav, Joshua Aondona & Uzoji, Jennifer Engo

Avav and Uzoji present a captivating exploration of the convergence between science and art. Their article delves into the adaptation of microscopic images of the SARS-CoV-2 virus into abstract paintings. By translating scientific data into visual expressions, the authors bridge the gap between art and medical research, offering a unique dialogue that engages viewers on both an aesthetic and intellectual level. This innovative approach underscores the power of art in communicating complex scientific concepts.

"Challenges in Art Education Programme in Nigerian Institutions of Learning: An Overview of its Developmental Changes Before and After the 18th Century" by Rabiun Badamasi

Badamasi provides a comprehensive overview of the challenges faced by art education programs in Nigerian institutions of learning. Tracing the developmental changes in art education from before the 18th century to the present, the author sheds light on the historical context that has shaped the current state of art education in Nigeria. This article serves as a call to action, emphasizing the need for continuous improvement and support for art education to nurture the next generation of artists and scholars.

"Effects of Information and Communication Technology (ICT) on Teaching and Learning of Graphic Design" by Idowu Kojusotito Olatunji, Sangotowo Amos Olugbemiga & Olabiyisi, Matthew Olusola

Olatunji, Olugbemiga, and Olusola explore the impact of Information and Communication Technology (ICT) on the teaching and learning of graphic design. Their article investigates how digital tools and advancements in technology have transformed the graphic design field, providing new avenues for creativity and enhancing the learning experience. By highlighting the benefits and challenges of integrating ICT into graphic design education, the authors contribute to the ongoing dialogue on technology's role in shaping artistic disciplines.

"Examining the Capability and Characteristics of Twill Weave Fabric with Different Weaving Manufacturing" by Phoebe Rishante

Rishante gives a technical report on ongoing research in the field of textiles to advance the fabric structure for the array regarding the capability and properties of fabric woven on a sword carry-less weaving machine by utilizing twofold yarn with twill weave patterns. It was discovered that a list of interlacements assumes an imperative part in changing fabric properties and other interesting findings.

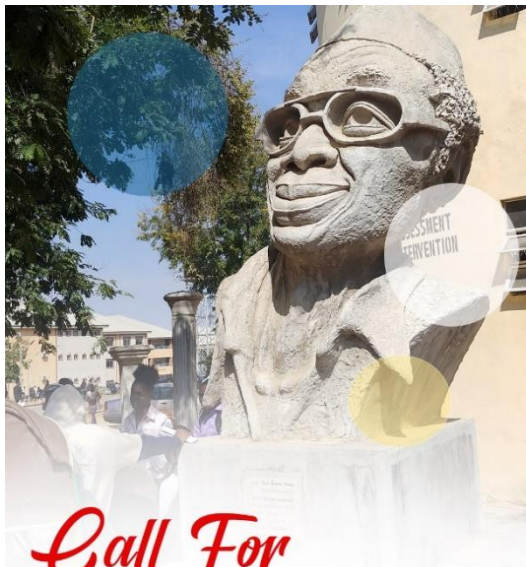
In closing, the UJFAAJ continues to provide a platform for diverse voices and ideas to flourish within the fine and applied arts community. We express our heartfelt appreciation to the authors, reviewers, and editorial team for their unwavering commitment to excellence. We invite you, our esteemed readers, to immerse yourselves in the enriching world of art presented in this issue. May these articles inspire, provoke thought, and ignite your own creative endeavours.

Jacob Enemona Onoja Ph.D.

Editor – UJFAAJ.

Department of Fine and Applied Arts, University of Jos.

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Call For PAPERS

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UJFAAJ

**UNIVERSITY OF JOS
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5. Introduction - including motivation, aims (and for long paper, overview and references to related work (in separate action)
6. Main body - explanation of methods, data used, instrumentation
7. Results and Discussion
8. Conclusions
9. References in APA 6th edition
10. Paper should not exceed 15 pages for each presentation.

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Figure should appear throughout the text as close to their mention as possible and it should be in Arabic numerals, while plates should be in Roman numerals. figures and plates shouldn't infringe upon the page borders. tables must be centered according to the length of the caption. large table can be in one column in order to see them more clearly and avoid placing them in the middle of the columns. (Figure 1, Plate 1 and Table 1, should be used accordingly and appropriately where necessary).

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University of Jos Fine and Applied Arts Ass.

Jacob Enemona Onoja PhD.
Editor +2348035984125

CONTRIBUTING AUTHORS

1. Nwigwe, Chukwuemeke PhD

Department of Fine and Applied Arts,
University of Nigeria, Nsukka
chukwuemeke.nwigwe@unn.edu.ng

2. Onoja, Jacob Enemona (PhD)¹, Samuila, Ezra Rabo (PhD)², & Gunok, Akila Yusuf³.

Department of Fine and Applied Arts, Faculty of Environmental Sciences, University of Jos, Plateau State.

E-mails: 1*onojaja@unijos.edu.ng, 2. ezeesamaila@gmail.com, 3.
akilayusuf142@yahoo.com

3. Abetianbe, Agianpuye George PhD and Enamhe, Bojor PhD

Cross River University of Technology, Calabar. Cross Rivers State.

4. Abdulsalam, Samira¹, Anto, Peter Audu²

- i. Federal College of Education Zaria,
Kaduna State, Nigeria.
- ii. Innovation Start-up Hub, Airport Road,
Lugbe, Abuja.

5. Uzoji, Jennifer Engo¹ & Avav, Joshua Aondona²

1&2 Department of Visual and Creative Arts
Federal University of Lafia,
Nasarawa State, Nigeria.

6. Rabi'u, A. Badamasi (PhD)

Department of Fine Art
Faculty of Environmental Design
Ahmadu Bello University - Zaria

7. Idowu Kojusotito Olatunjii (Ph.D)¹, Sangotowo, Amos Olugbemiga² & Olabiyisi³, Matthew Olusola

- i. Department of Creative Arts, (College of Humanities)
Tai Solarin University of Education Ijagun, Ijebu-Ode
idowuko@tasued.edu.ng
- ii. Department of Fine and Applied Arts, Federal College of Education (Special), Oyo.
gbemosglobal@gmail.com
- iii. Department of Fine and Applied Arts, Federal College of Education (Special), Oyo.
olabiyisimatthew@gmail.com

8. Rishante, Phoebe Sule PhD.

Department of Fine and Applied Arts, University of Jos.
phoeberishante@gmail.com

CONTENTS

I. TITLE PAGE	-	-	-	-	-	-	-	-	-	ii
II. EDITORIAL BOARD	-	-	-	-	-	-	-	-	-	iii
III. FOREWORD	-	-	-	-	-	-	-	-	-	v
IV. EDITORIAL	-	-	-	-	-	-	-	-	-	ix
V. CALL FOR PAPERS	-	-	-	-	-	-	-	-	-	x
VI. CONTRIBUTORS	-	-	-	-	-	-	-	-	-	xi
VII. CONTENTS	-	-	-	-	-	-	-	-	-	xii
1. BETWEEN CONVENTIONAL AND UNCONVENTIONAL STYLES: ANALYSIS OF DRESS STYLES OF FEMALE FIGURES IN MODERN NIGERIAN ART. NWIGWE, C	-	-	-	-	-	-	-	-	-	1
2. DEPARTMENT OF FINE AND APPLIED ARTS, UNIVERSITY OF JOS: THE AXIOM, NEXUS AND HISTORIOLOGY. ONOJA, J.E, SAMUILA, E.R, & GUNOK, A.R.	-	-	-	-	-	-	-	-	-	19
3. DEVELOPMENTS IN THE VISUAL ARTS: A DOCUMENTARY FROM CRUTECH ART SCHOOL ABETIANBE, A.G & ENAMHE, B	-	-	-	-	-	-	-	-	-	35
4. DOWNTREND OF CERAMICS PRACTICE IN NIGERIA AND EFFORTS AT ITS RESUSCITATION. ABDULSALAM, S. & ANTO, P. A	-	-	-	-	-	-	-	-	-	50
5. ADAPTATION OF SARS_COV-2 MICROSCOPIC IMAGERIES INTO ABSTRACT PAINTING UZOJI, J.E & AVAV, J.A	-	-	-	-	-	-	-	-	-	61
6. CHALLENGES IN ART EDUCATION PROGRAMME IN NIGERIAN INSTITUTIONS OF LEARNING: AN OVERVIEW OF ITS DEVELOPMENTAL CHANGES BEFORE AND AFTER THE 18TH CENTURY. RABIU, A.B	-	-	-	-	-	-	-	-	-	74
7. EFFECTS OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ON TEACHING AND LEARNING OF GRAPHIC DESIGN IDOWU, K.O, SANGOTOWO, A. O. & OLABIYISI, M.O	-	-	-	-	-	-	-	-	-	88
8. EXAMINING THE CAPABILITY AND CHARACTERISTICS O Twill WEAVE FABRIC WITH DIFFERENT WEAVING MANUFACTURING RISHANTE, P. S.	-	-	-	-	-	-	-	-	-	102

BETWEEN CONVENTIONAL AND UNCONVENTIONAL STYLES: ANALYSIS OF DRESS STYLES OF FEMALE FIGURES IN MODERN NIGERIAN ART

NWIGWE, C.

Abstract

Women's social identity has been changing rapidly in Christian-dominated southern parts of Nigeria due to the influences of globalization and new media culture. This paper engages the local practice of female figures in conventional and unconventional dress styles in Nigeria. The nonconforming modern mode in reference is trousers while non-bifurcated styles primarily associated with the female gender constitute the conventional styles. The paper adopts both discourse analysis and visual analysis methods. It reveals two broad categories of Nigerian artists. The first and mainstream, beginning from Ben Enwonwu, has the general tendency to depict women in conventional female dress. The second, exemplified by Obi Nwaegbe, portrays women in trousers. This paper extends key arguments raised by my recently concluded post-doctoral fellowship project on female cross-dressing in Southeastern Nigeria. The paper hinges on the conceptual frame: the social responsibility of the artist. The argument is that the prevalence of skirts, gowns, and other purely female styles in more general art practice is based on their longstanding feminine characteristic and some moral stance. Local artists are more frequently representing them and this tends to obscure the appearance of female trousers in artworks by home-based Nigerian artists.

Keywords: Nigerian artists, trousers, skirts, gowns, wrappers, female figure.

Introduction

The prevalence of Western-style clothing in parts of Africa today evinces an aspect of sartorial change in the absence of formal dress reforms. Some styles have attained the status of conventional while other styles have been restricted to the margin. Interestingly, the peripherals are becoming a status symbol.

This speaks to the dynamics of culture. Change is expected in any cultural contact. The more powerful cultures introduce their cultures to less powerful cultures, sometimes in a forceful manner. For instance, during the European colonial project in parts of Africa, colonial masters made efforts to persuasively and legislatively introduce Africans into a new sartorial culture (Comaroff, 1996).

Undoubtedly the change was to craft a respectable look, modern and decent in the Western sense. The commercial interest behind the move becomes clear when one realizes that colonial service uniform which was compulsory for male and female workers was produced in Europe and shifted to Africa. The changes in this regard were noticeable because clothing as a social skin cannot be hidden in an embodied context (Hemmings, 2005).

Before the European 'dress reform' in colonial Africa, various ethnicities had their dress codes intact. Clothing was an important marker of gender, social status, class, ethnicity, and occupation. In their gendered clothing practice, the Igbo of southeastern Nigeria, for instance, permit both genders to tie loin wrappers differently. For instance, passing a part of a loincloth in-between the legs was acceptable for men but forbidden among the Igbo women (Okafor, 1992). This is why the earliest attempt by the local

women to wear panties was resisted by the locals. Female cross-dressing among the Awgu people of Southeastern Nigeria once attracted such a grave consequence as selling the culprit as a slave to slave dealers (Eze, 2013, p. 101).

This paper explores how conventional and unconventional dress styles have been portrayed in Modern Nigerian Art, starting from the period of Ben Enwonwu and until the contemporary time when young artists, such as Obi Nwaegbe, challenge the stereotypical pattern of portraying women's mode of appearance. While frocks, wrappers, and other robe-like garments have remained popular female styles, trousers have entered women's wardrobes and thus constitute atypical styles for women.

The primary data are visual images of female figures (artworks) which will be examined in art historical terms where contextual dimensional will be emphasized. The paper adopts both discourse analysis and visual

analysis methods. It reveals two broad categories of Nigerian artists. The first and mainstream, beginning from Ben Enwonwu, has the general tendency to depict women in conventionally female clothing styles. The second, exemplified by Obi Nwaegbe, portray women in the unconventional outfit – trousers. The analysis will be infused with ideas from personal observation. Secondary data are literature subject to annotation.

In what follows, I will hint at the conceptual frame, review relevant literature and contextually analyze and discuss selected images of female figures in both conventional and unconventional styles.

Conceptual Frame and Literature Review

Boas (1947) has written a beautiful text on the social responsibility of the artist. His ideas on the subject provide a conceptual framework for this work. He remarks, for instance, that the social responsibility of the artist is about his or her social relevance as an artist. This relevance lies in telling the truth,

not an alternative to the truth, “whether one does anything about it or not” (Boas, 1947, p. 276). Sometimes, the truth one tells does not require action as in the case of the selected Nigerian artists who have simply represented women in their ‘choice’ dress for various purposes. I believe they did not envisage the kind of engagement their works would elicit. I share the view all the artists who represented women in trousers are socially responsible for depicting women as they appeared. They made appearances that bear testimony to the “currents of changes” of the time (p. 275).

It is in the sense of being precise in their social commitment as writers that they occasionally describe the attire of their characters. Achebe’s (1958) fictional *Things Fall Apart*, in capturing the intriguing encounter between the Igbo and the Europeans before and during the colonial period, reveals, for instance, the traditional dress of the Igbo. Female dress is said to

consist of pieces of jewelry such as *jigida* waist beads, necklaces, and anklets while men's styles include raffia skirts and pieces of fabric loosely wrapped around the body draping down either from one shoulder or from the waist to the knee or below. This male style would be changed to trousers in imitation of British dress practice at the time (Comaroff, 1996). Several African groups adopted trousers and shirts as work dresses or civil uniforms. Christian and other religious groups popularized foreign modes such as trousers and shirts for men and gowns and frocks for women towards the beginning of the twentieth century. Such attires enabled them to achieve a sense of respectability and maintain a close relationship with their European masters.

Bastian's (1996) study of the adoption of voluminous outer garments locally called *agbada* by Igbo women reveals the disrupting nature of the phenomenon. *Agbada* ensemble consists of two-piece tops and a piece of

trousers. Misty Bastian did the study in the 1980s among the Igbo, particularly in Onitsha. The cross-dressing tendency among women was portrayed as a means of offense to men and a way of challenging gender stereotypes in a patriarchal society where "the dress of men is seen as the dress of power ..., whether mediated by generation, class, ethnicity...."(p.125). Women in such dress were seen as being too assuming and loose. It is today they would be regarded as tomboys or ones with a transgender identity. In a different context, one of two female queer characters in trousers was described by Stobie (2005, p.74) as having transgender sexuality in South Africa.

Before the time the Igbo were "fully exposed to the full blast of Europeans influence" (Diogu 2010, p.92), few boys/men could be seen in singlets, jumpers, and shorts. Some young women had access to Western-styled gowns, blouses, and skirts. The Igbo women have shown a particular preference

for factory prints known as "Abada." Apart from wax and fancy prints, other women's designs include fancy brocades and yards of cloth (George) from Manchester and Holland. They often turn these into two-piece wrappers occasionally using a portion thereof as scarfs while the blouse is often from a different kind of fabric. Tying of wrappers is so significant among women that have assumed certain ceremonial status as in "Ima Ogodo," a marriage ritual among some groups (Egbochukwu, 1974) where the bride symbolically ties the wrapper to mark her entry into family life.

Amanke Okafor (1992, p.142) in discussing the cultural practices of the Awka of Southeastern Nigerian people provided an account of how the priests and other patriarchs revoked the customary prohibition on women's access to pant-like tying apparel. The origin of European-styled dress among the people was linked to the early imitative attempts by local women who desired their

white counterparts' style. Two dates were given in this regard. British administrators ended Nri's political and ritual hegemony in Igboland in 1911. In 1936, a ceremony at the shrine of *Aja-oka* was held; during the event, it was solemnly declared by the key participants that passing a piece of cloth between a woman's legs in a fashion like a man was no longer an abomination. This event was not effective as an Awka-Igbo priest denied the event during an interview.

The popular traditional modes from the pre-colonial period to the late 1970s in Southeastern Nigeria appear highly gender marked. Women could wear an earthworm-like brass coil, plastic disc, or cowrie shell waist bead (Dike, 1978). Wearing such ornaments usually begins at the first sight of the girl's menses. Necklaces, body patterns drawn with local plant dye extract known as *uli*, body marks in the form of scarifications, varieties of hairdos, anklets in the form of disc-like brass, and the spiral variant

constitute women's vanities. Dike was interested in the changes in women's styles. For instance, he notes that in the late 1940s, Western-style gowns became shorter due to the effect of the Second World War. The size reduction tendency continued in the late 1950s and early 1960s. Then dresses appeared knee tight. Umoetuk (1983) shared a similar narrative, reporting that Southern Nigerian Ibibio women's dress include: Western maxi gowns, 1900 – 1918; midi dress, 1919 – 1925; knee-length dresses, 1926 – 1930; midi dress, 1931 – 1937; knee length (and knee-tight) dress, 1938 - 1944; more different knee-tight dress styles, 1945 1956 and flared and knee-length gowns, 1957 - 1961. None of these styles included trousers which were essentially regarded as male clothing. Although controversies surrounding trousers have been discussed in several texts, the arguments for or against the outfit appear tangential here.

Trousers have been described as something that reveals the sexualized parts of women's bodies. The palaver revolves around the concept of nakedness. So much was the fuss about nudity and indecent dressing among women it received some official attention in Nigeria's legislative chambers at the time (Bakare-Yusuf, 2011). This is true of Uganda, for instance, where the Anti-Pornography Act (APA) signed into law by Uganda's President Yoweri Museveni in 2014 heightened social distaste for sexually provocative female dresses in the country (Tamale, 2016). APA is reminiscent of Kamuzu Banda's Decency Act of 1973 which forbade women to wear miniskirts and trousers in Malawi. Hence, there have been reported cases of public stripping of women perceived to be indecently dressed in short skirts or tight-fitting trousers by some moral police and vigilante groups for falling short of standards of public decency. These developments position female dress as

something historically charged. Little wonder, clothing items have been delicately rendered in art forms across the ages.

Artists from the Paleolithic age through Renaissance and up to modern times have idealized the image of women. Consequently, they have produced fascinating female figures in different attires and accessories. In Bronze Age Europe, for instance, two different sets of female clothing have been established (Sørensen 1997, p.98). They show simple cuts for skirts, gowns, and blouses. That no such study was conducted to address similar concerns on the part of male clothing at the time suggests female dress styles appear more popular than male styles. In other words, the attention given to her sartorial elegance tends to surpass that of man who is the primary gazer of the female body. The body has become an important historical site for the artist in history.

For instance, the Egyptian, Greek, Etruscan, and Roman artists have demonstrated some

sense of social responsibility through the naturalistic figures they created. They might not have set out to document people's dress styles but their works have become a resource for the study of peoples' dress history. When the figures represented predate the period of their creation, they still bear the semblance of the dress cultures of the artist at the time of their creation. For instance, Andrei Lublyev created *Three Angels*, around 1410, a tempera-wood artwork that exemplifies the Byzantine style in Russia and features three Old Testament characters, angels who appeared to Abraham. Italian Renaissance fresco painters created similar historical and socially significant works. Yet there are some works like *Monalisa* and the *Last Supper* by Leonardo da Vinci which exude an outstanding aesthetic quality and socio-historical significance.

Nigerian artists have frequently represented women in bronze, terracotta, stone, wood, cement, painting, and drawing. Benin

bronzes and Esie stone figures are clear examples of the interest traditional artists had in female imagery. Nigerian artists have engaged the female imagery more than male figures. Onipede, A and Ajayi, T. (N.D) who looked at selected works showing the human body by selected Nigerian artists presented four or so female images out of the seven images presented as Figures. One of the female figures was nude and two others were in semi-nude appearances in conventional female skirts. In what follows, I shall examine the primary data: twenty-one artworks that bear images of African women in traditional and modern modes. I have classified the former as conforming modes, and the latter as non-conforming modes. The reason for the classification is based on the level of acceptance; the first is generally accepted while the former has been resisted in some quarters.

Images of African Women's Dress: Analysis and Discussion

Male and female masters as well as burgeoning artists, mostly from southeastern Nigeria, drew from diverse sources to render the images. Some of them have been archived online and others in printed texts such as art exhibitions catalogs and other volumes. For instance, a book edited by Paul Chike Dike and Patricia Oyelola, on Nigerian women in visual art, features fifteen essays on the challenges and success of women in art; it includes images of 135 works from over 50 female artists such as Stella Awoh whose works show female figures in the characteristic dress.

Conventional Female Clothing Styles in Artworks

Conventional styles of dress are found with figures by masters. For instance, Ben Enwonwu (1917-1994), arguably the most influential modern master in Nigeria, is behind several masterpieces in painting and sculpture showing female figures in conventional Western styles. I see it in the *Portrait Statue of Queen Elizabeth*,

Christine, Tutu (Figure 1), and *Anyanwu* (Figure 2) for their characteristic Western dress styles.



Figure 1: Ben Enwonwu, *Tutu*, 1973. Oil painting. Source: <https://news.artnet.com/art-world/ben-enwonwu-portrait-found-1612051>



Figure 2: Ben Enwonwu, *Anyanwu*, 1956. Bronze. Source: <https://www.bonhams.com/auctions/23892/lot/29/>

The *Portrait Statue of Queen Elizabeth* by Enwonwu also features an English dress of a female leader, Queen Elizabeth. The body-fitting bodice and flared-down parts of her gown must have been the cynosure of all eyes in the late 1950s. The form, particularly the bodice and fray lower part, has defined a typical wedding gown in Churches in Nigeria. *Christine* is a depiction of an American hairstylist who relocated with her British husband to Lagos where she became friendly with the artist. Enwonwu painted a portrait of the Nigerian royal princess, Adetutu, Ademiluyi, also called *Tutu* (Figure 1) in 1974. *Tutu* was said to be “the most expensive Nigeria modernist painting ever sold at auction” at \$1.67 million in 2018 (Cascone, 2018) while *Christine* produced in 1971 was sold in 2019 for \$1.4 million (Mohamud, 2019). *Anyanwu* (Figure 2) is a bronze work depicting a female figure whose legs are stylistically conjoined and tappers towards the down part of the legs, forming an

elongated pole-like stand. Although the title was drawn from the Igbo name sun, which is also the name of the deity in Igbo, this work produced in 1956 symbolically represents Nigeria as a nation emerging from the suppressive colonial government. Four years later, Nigeria had her independence.



Figure 3: Uche Okeke, *Motherhood*, 1959.
Oil on board, 36 x 24 in.
Source:<http://www.artnet.com/artists/uchoekeke/>



Figure 4: Uche Okeke, *KATE*, 1965.
Oil on board, 27.6 x 19.3 in. Source:
<http://www.artnet.com/artists/uchoekeke/>

Uche Okeke (1933–2016), a creative master who produced a series of drawing and

painting with themes and forms drawn from Igbo traditions, produced realistic works such as *Motherhood* (Figure 3) and *KATE* (Figure 4). Both paintings are of female figures dressed in gowns, accessories, and headgear, possessing a matron look. The gown evinces Western influence. Demas Nwoko is a versatile artist known to “produce works that propagate national ideal” (Ikpakronyi, 2019, p.40) His painting captioned *Explosion Crisis* was produced in 1967. It was inspired by the effect of the Nigeria-Biafra war. All five women in the painting were captured topless in relative miniskirts; they appear frightened and thus grab their breasts and children in their confused state. Adimora-Ezeigbo (2005, p.225) affirmed Nwoko’s figure representation in context by quoting a woman who witnessed the Nigeria-Biafra war saying, “Seven of the children couldn't walk ... We carried two babies each while the older ones held on to our skirts.” Such skirts are basically for the female gender.



Figure 5: Solomon Wangboje, *Romance of the Head Load II*, 1978. Lino Print, Source: *Zaria Art School 50th Anniversary Exhibition Catalogue*

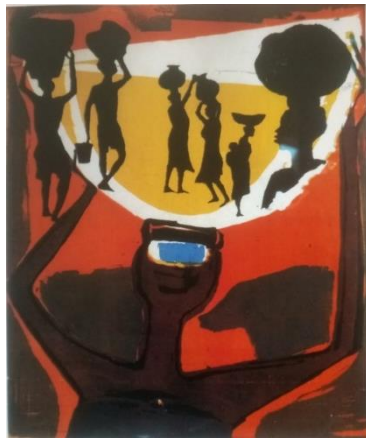


Figure 6: Solomon Wangboje, *Romance of the Head Load I*, 1978. Lino Print, Source: *Zaria Art School 50th Anniversary Exhibition Catalogue*

Solomon Wangboje, a notable Nigerian artist, produced several prints. Two of such are in Figures 5 and 6, captioned *Romance of the Head Load, I & II* respectively. They

feature local women in their characteristic dress, carrying loads. The first looks more stylized. The second is easily identifiable with Fulani young women who carry who usually carry calabash from place to place. Etsename (2007) did a visual analysis of a print showing a Fulani woman in her prime, bedecked in a revealing calico blouse, with some rows of beaded necklaces. Her minimal clothing was said to possibly connote that she is doing some domestic chores and that she is not married (p.39). Emerging artists have produced artworks showing female forms in various dress styles. For instance, Tsedemo's Emoseh's *Visual Arts: A Means of Effective Communication* (Figure 7) depicts a young maiden in traditional attire that leaves the upper part of the body, including the belly and the breast, bare. This is somewhat reminiscent of the Fulani maiden's wear in Figure 5. Regina Okafor's *African Rhythm* in Figure 8 is a painting that images a dancing damsel whose long wrapper and short

sleeveless top, a “show belly” style, reveals her navel region.



Figure 7: Tsedemo'a E. Emoseh, *Visual Arts: A Means of Effective Communication*, 2009. Oil on canvass. Source: 2nd National Visual Arts Competition, NGA.



Figure 8: Regina Okafor, *African Rhythm*, Acrylic on canvas. Source: Ikpakronye (2019).

Fashion Parade, Figure 9, by Betty Bassey is a painting that portrays at the center two women in voluminous gowns. One could see

in the same painting two other women whose portraits dominate the foreground. All four women wear conforming modern women's attires. There is no gainsaying the fact that conventional representation of female dress is in the mainstream while unconventional styles remain at the margins, being promoted by avant-gardes and young artists who were simply recording the social realities of their time from their standpoint. Stella Awoh created *African Costume Design* (Figure 10) using concrete and Metal as a mannequin (Dike and Oyelola, 2004). The illustrated dress costume appears fashionable among the Igbo people of Nigeria at the time of this writing. The three figures represented in the ensemble tied wrappers however, the style of tying the male wrapper appears differently. Awoh seems to be positing that a piece of the wrapper is the traditional attire of the people or group she represented. Of course in certain traditional contexts, trousers are unsuitable

for neither males nor females in the local Igbo context.



Figure 9: Betty Bassey, *Fashion Parade*, 1994. Oil on canvas. Source: Dike and Oyelola 2004



Figure 10: Stella Awoh: *African Costume Design*, 2001. Concrete and Metal 18", Source: Dike and Oyelola (2004).

Trousers – The Unconventional Female Clothing Style in Artworks

Women in trousers constitute an uncommon sight in Nigerian painting tradition. Expectedly, young Nigerian artists who grew with the tradition advance the narrative of change in women's dress tradition. Several of Nwaegbe's paintings and Ndidi Emefiele feature female figures in trousers. For

instance, in Figure 11, *Bar Tales*, and Figure 12, two paintings by a young Nigerian artist, Obi Nwaegbe, capture seated women in trousers. The woman in Figure 12 sits more freely because of the practical nature of her trousers. Such a sitting position is difficult to assume by women in certain conventional female dress. Ndidi Emefiele, a young Nigerian female artist, painted two female figures assuming a masculine look in a dark uniform dress consisting of trousers. She titled it *Space Lunch*. Emefiele lives in the West at the time of this writing and uses such works to "explore and challenge the social, cultural, and religious pressures she has seen women face in Nigeria and beyond."



Figure 11: Obi Nwaegbe, *Bar Tales*, 2018. Acrylic on paper, Photo Credit: The Artist.



Figure 12: Obi Nwaegbe, *Untitled*, 2018. Acrylic on paper. Photo Credit: The Artist.

Kenechukwu Udejaja, a young artist of the Nsukka School, tried to appropriate Igbo masking costumes as a creative resource for innovative carnival costumes during his Masters of Fine Arts program. His *Maiden Beauty*, Figure 13, alludes to the Igbo maiden masquerade. The artist innovated by the use of leggings as part of the costume. The hand-painted trouser leggings bear the linear and marked design of the Igbo group. Figure 14 is a cartoon Akapa. It was published in a local newspaper, *Vanguard* in 1987. It captures what one may describe as a gender battle exemplified in female cross-dressing, the use of the male style by women. The text written below the image of the cartoon reveals the

sentiment thus: “Now I think you are carrying this your what-a-man-can-do-a-woman-can-do-stuff too far!” The message provides us a window into the politics of gender suggestive of female cross-dressing.



Figure 13: Udejaja KC, *Maiden Beauty*, 2018. Mixed media. Photo Credit: The Artist.



Figure 14: Lawrence Akapa, *MR & MRS*, 1987, "Now I think you are carrying this your what-a-man-can-do-a-woman-can-do- stuff too far!" Source: Bastian (1996).

Such is also a typical example of traditional dress among Fulani women in Nigeria. Figure 15 is captioned *A girl in front of her house* by the artist, Olamide Elegbede. This appears as a child's watercolor paperwork.



Figure 15: Olamide Elegbede, *A girl in front of her house*. Water Colour, 2007. Source: Aresuva, NGA 2009

The title of the work suggests the subject, a little girl in front of her house. On the whole, one could see the dominance of the conventional female dress styles in the figures. Artists who depicted women differently are fewer in number compared to those who refused to break away from the tradition established by the early generation of modern artists in Nigeria.

Conclusion

The presence of female characters in African literature and visual arts in the post-colonial era implicates the dress practice of women. As this paper has shown, most of the writers and artists whose works have been reviewed did not primarily engage female dress as a subject. They simply described the dress of a particular character. These writing and artworks however clearly suggest that women's chief clothing styles were not the bifurcated styles such as trousers and shorts. Trousers as female attire is a recent development. They have come into favor

among women following their practical nature. However, some contexts and places forbid such outfits for the female gender. Many mainstream churches in Nigeria still frown at the practice, especially in their place of worship. The social transformations in African society which account for many women appearing in trousers tend to redefine the traditional understanding of female dress. The changing narrative is bringing the periphery (female trousers) to the center. Gowns, frocks, wrappers, and other conventional styles have retained their quality of femininity. Would local artists,

especially the living masters, be socially responsive to the changing trends by capturing female trousers in their works as a way of documenting the sartorial practice of the time? Although this question appears rhetoric, it begs for some answer, considering how masters appear to be inclined to classical styles in their arts. The tendency is bound to skew real-life social developments in women's dress practice represented in art forms.

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**DEPARTMENT OF FINE AND APPLIED ARTS, UNIVERSITY OF JOS: THE AXIOM,
NEXUS AND HISTORIOLOGY.**

ONOJA J. E., SAMUILA E. R., & GUNOK A. Y.

Abstract

The establishment of the Department of Fine and Applied Arts in 2013 also known as the Jos Art School, bears credence to a long-standing historical antecedence in Plateau State. From earlier traditions of the establishments of art academies across the globe and Nigeria in particular, art sages stand on given philosophies on which they propagate and build their academies on. The Zaria Art Society and Nsukka Art School are some cases in view of the natural synthesis of indigenous forms with Western ideas (Dike & Oyelola, 1998) and the adaptation of *Uli* traditions respectively. The Jos Art School draws from the rich Nok culture and unique landscapes which started with the slogan “avant-gardes in creativity” on a philosophy geared to prepare staff and students to be creative and critical thinkers, artists, and patrons in the visual arts through dedicated teaching and practical demonstrations. This is achieved through fostering creativity and the dissemination of information through exhibitions, art-historical documentation, cultural displays, and all-around aesthetic engagements. One of the projections of the pioneering staff of the department is to have a department in today’s bustling, marketable world, the need for art programmes in the University of Jos to create compelling forms for objects seen in almost anything visual and engage in academic dialogues (Undergraduate Student Handbook, 2019). The department has had three Heads of the department from inception till date with landmark aesthetic visual culture showing in the various tenures and ongoing. This article views the axiom of Jos as a creative hub, the nexus between what was and now, and a historiology of the trends from inception till date. Projections and recommendations were also gleaned from the article to fill the lacuna of the art practice of Nigerian art space.

Introduction

The Jos Art School of the bustling Department of Fine and Applied Arts of the University of Jos as a unique School of Art, is seemingly a new kid in the block. This art school which started in the year 2013 some ten years back is living up to her expectation

by the passing day. This was corroborated in an article by Onoko (2022) titled “NGA, Unijos and the Art of Synergy”. In a speech by the Director General of the National Gallery of Art (NGA) Chief Ebeten William Ivara at an art fair organised to celebrate the achievements of the art school, Ivara

mentions that “NGA seeks to encourage the creative spirit of the Jos Art School, and recognise the immense contributions of the staff and students alike, to the growth of the art school, since its inception in 2013”. In Contemporary Nigerian art, several art schools have sprung up and are doing various things in the establishment, promotion, and propagation of the visual arts culture within and outside the shores of Nigeria. This art School, domiciled in the prestigious citadel of learning in the University of Jos and the faculty of environmental sciences, is doing exceptional things in the creative industry; while exploring new frontiers of engagements and developing the visual arts and tourism sectors. Scholars and students alike are creating works in various fields ranging from drawing, painting, textile, ceramics, graphics design, jewellery, sculpture, and other forms of the plastic arts which of course can be equated to works found in other climes of visual engagements.

Across the globe, several art schools were started based on certain philosophies by scholars who have students around them and these schools have led to the various “isms” in art which of course we study today. There and several new trends coming up with a tweak in the visual arts sector. Examples like the Araism movement started by Mufu Onifade and a team of artists, Onaism, Nogh Noghism, and Ulism just to mention but a few. These names were coined by the proponents to give significant meanings to the movements. These and many more started with a proponent or group of artists who break out from the stereotypes and thereby, advanced new styles and movements. These movements have ethnic flavours and deep-rooted philosophies which drive the production of works entrenched in the philosophy of natural synthesis. Jos as a city is known for creativity and the advancement of peace and tourism among other things. The vibrancy that is seen in the State through

various creative objects, corroborates the avant-garde outlook of the Jos creative industry as seen in the Jos art school. Research, experimentation, exhibitions, and the promotion of the visual culture are part of the unique hallmark of the Art School. It is important to note that, the arts as used is a generic term that ranges from the performing arts and also the visual or plastic arts which include but are not limited to drawing, painting, sculpture, ceramics, textiles, graphics, photography, and several other media of expressions which are emerging (Onoja, 2022). All of these are found in the expressions of the Jos art school. These media of expressions propagate the aesthetic nuances that are seen in this State while carrying messages in symbolism and poignant statements. What makes an art school unique one may ask? The collection of the sages and proteges/ proteges perhaps. The creative dreams, philosophies, experimental drives, insatiable quest for

knowledge and solving of quizzical design problems, societal engagements, and a myriad of problem-solving activities. Some may argue that the school is still a new kid on the block, however, this kid, through some proactive engagement is changing the narrative on the Jos Plateau through grants won by the staff and students to engage the society in peace discussions, various artworks commissioned by clients and collectors, working on community projects with established artists in the State like the Jos Secretariat roundabout mural project(Plate I) to give the State a befitting look executed by Mark Rwang and a team of artists. This mural has changed the visual narrative on the Jos Plateau and has become a known landmark in the state of visual arts activities. There are also several commissions in various offices and government agencies, homes, gardens, and parks which are attributed to the establishment of the Jos art school.



Plate I: Section of the Mural painting at the
J.D Gomwalk Secretariat Roundabout

The dynamic creation of works represented in the sculpture garden, vibrant gallery practice, entrepreneurially engaging press section, textile designs showing indigenous motifs and new media, interactive graphics, and the encouragement of transforming waste to wealth, in upcycling of materials, are all part of the sustainable diversifications from oil to the creative industry through upcycling and other experimentations.

Great masters are known early in their careers from the prospects they show, likewise, the Jos art school has several potentials from their earlier antecedents. This perhaps will become like the school of Athens producing great masterpieces which the world will pave a path to for visual arts tourism. By engaging

in visual arts tourism, the prospects of increasing the gross domestic product income of all the stakeholders and the country are high. More so, modern art traces its roots to Africa, and for Africa, Nigeria, Plateau State, the University of Jos, and the fledgling Jos Art School...the fresh sapling shot takes its nourishment from the root of age-long traditional arts and culture, thereby shooting out in strength. Like the *Iroko* tree which stands tall and unbendable in the storms, this growing school will provide aesthetic shade to all and sundry. There is, therefore, a call to engage actively with the periodic calls for exhibitions, make linkages and establish befitting gallery spaces for the display of masterpieces as engrained in the core value and philosophy of the Department and that of the National Gallery of Arts.

Early Start

The Department started in a small space at the Educational Media and Technology Studio of the Faculty of Education. The room served as

the office, classroom, and studio space (sometimes behind the Home Economics Laboratory restaurant) for the department. The few students admitted into the programme were resilient despite the somehow lack lustre look and poor available space of the department. The pioneer staff will always hang around in their cars as makeshift offices for privacy while awaiting lectures or attending to other administrative work. A makeshift studio space was subsequently given at the University Library complex. This new space provided additional space for work and cover from the rain as the backspace of the Home Economics Laboratory restaurant was exposed to the elements. However, there was an inferno that gutted the complex and several materials were lost bringing the department to a despondent period. These incidences, while they have the power to dampen the will of creativity and progress, the staff and students like the proverbial Phoenix, bunched back to

life with a new space at the Faculty of Environmental Sciences and an annex studio space at the Cafeteria of the Student Village Hostel which are the current places where the department is domiciled. These current spaces are by far a better improvement and advancement from the small room where the history of the department started and one can look back with a sense of nostalgia.

The Pioneer Head of Department, Staff and Students

The first substantive head of the Department was Professor Ema Ema who was appointed to pioneer and lead the affairs of the department from 2013 – 2017. His doggedness and plans to move the department forward were sometimes met with stiff resistance due to misinformation about the programme, paucity of funds, materials, and equipment, poor staffing, and a myriad of issues. Some of the staff who were moved from other departments in the university like Architecture, Science and Technology Education, Theatre and Film

Arts, and the Medical Illustration Unit to start the department came in with mixed excitement. Staff like Prof. Earnest Agoba, Mr. Babajide Lambo, Dr. John Oyedemi, Dr. Jacob Onoja, and Mr. Ephraim Dankyes were transferred from the aforementioned departments to pioneer the work after the resource verification exercise by the National Universities Commission (NUC). Other staff who joined the early pioneers include Prof. Habila Gukas from the University of Maiduguri, and Dr. Yohanna Datiri from the College of Education, Gindiri, Plateau State. These staff formed the hub of the pioneering work of the department. They researched, taught the various specializations, and actively engaged in exhibitions privately and collectively to bridge the gap in understanding of the visual arts in the university community. A good example

worthy of note is the “University of Jos at 40 Exhibition”.



Plate II: Some pioneer staff of the Department. From Left to right. Mr. Babajide Lambo, Prof. Ema Ema, Dr. John Oyedemi and Dr. Jacob Onoja.

The department started with 11 students through Unified Tertiary Matriculation Examination (UTME) in the 2013/2014 session and an additional 6 students through Direct Entry admission in the 2015/2016 session bringing the total of the first set to 17 students. These pioneer set after graduation have been making their marks in teaching and studio practices and handling various commissions.

S/no	Matriculation Number	Name
1	UJ/2010/ED/0690	AKPAN, ITORO ASUQUO
2	UJ/2011/NS/0305	MWAIBONG, DANIEL
3	UJ/2014/EV/0074	AGU, EMMANUEL CHIDERA
4	UJ/2014/EV/0080	SHEMFE, FAITH NENKIMUN
5	UJ/2014/EV/0082	UKENI, CHRISTIANA ONYINYECHI
6	UJ/2014/EV/0089	ONOCHE SYLVIA UCHE
7	UJ/2014/EV/0141	ANENE, CALISTUS CHUKWUBUKA
8	UJ/2014/EV/0208	FELIX, ELOHIMA LAR
9	UJ/2014/EV/0263	OTABE, JERRY
10	UJ/2014/EV/0272	EKPO, ITA ANDYNO
11	UJ/2014/EV/0306	NACHO, PHOEBE ADDAS
12	UJ/2015/EV/0052	KESWET, SAMUEL
13	UJ/2015/EV/0269	ADEBANJO, JAMES OLUSEGUN
14	UJ/2015/EV/0285	OLUWAWEMIMO, SHOLA VICTOR
15	UJ/2015/EV/0342	ROGO, NAOMI MINKE
16	UJ/2015/EV/0410	CHISHAK, GOMA LUKA
17	UJ/2015/EV/0441	KABRUK, CHIYIA DONATUS

Table 1. Students lists of the pioneer set.

The Three Eggheads of the Department

Prof Ema Ema

The Pioneering efforts of the affairs of the Department started with Prof. Ema Ema. The poor provision of start-off space and

infrastructure did not deter the dogged spirit of the pioneer Head of the Department. Several entreaties were made to the University authority and faculty without

commensurate responses. Some staff volunteered some help in terms of cash and other personal effects to move the department forward. During his tenure in office, there was the NUC resource verification and also the accreditation exercise afterward. The Department got partial accreditation from the reports of the NUC team. It is important to note that, despite the poor start of the department, Prof. Ema Ema was able to make linkages and collaborations which boosted the image of the department. Little wonder one of the pioneer students Mr. Samuel Keswet created the bust of Prof. Ema Ema (Plate I) as one of the first sculptures in the Sculpture Garden of the



Plate III: Bust of Prof. Ema Ema during the unveiling at the Sculpture Garden of the Department of Fine and Applied Arts, University of Jos.

Department. Other notable landmarks include periodic exhibitions by staff and students, workshops, and excursions to neighbouring educational institutions like the Ahmadu Bello University (ABU) Zaria, Abubakar Tafawar Belewa University (ATBU) Bauchi, The Federal College of Education Pankshin among others. These visits gave the students and staff a varied outlook on the various possibilities in the various specializations and a need to keep improving and creating synergies in the creative industry. Travel is indeed learning. Ema's diverse knowledge and exposure created an enabling learning environment for the staff and students even though with little incentives.

Dr Yohanna Datiri

After the tenure of Prof Ema Ema in 2017, Dr. Yohanna Datiri, an Associate Professor of Ceramics became the head of the Department, of Fine and Applied Arts, University of Jos. During his tenure, the

department experienced remarkable development. He fought for more facilities that could house the two-in-one department conveniently. One of the struggles gave birth to a new structure that was built exclusively for the department when Prof. Sabastine Maimako was the Vice Chancellor of the university. The new edifice provided ample studios for painting, graphics, textile, ceramics, and sculpture sections. 300-level and 400-level painting studios are in the second floor, and textiles 300 and 400 levels also occupy part of the second floor. 300 and 400 levels graphics are on the first floor, while sculptures 300 and 400 levels are on the ground floor. The ceramics use part of the ground floor but had more equipment in the annex studio outside the department complex in the Students Village Hostel Complex.

There are offices and stores within the new building. On the ground floor is a printing studio with a large flex printing machine and a Direct Imaging (DI) machine. This

equipment, which was bought during Datiri's tenure, has boosted the department in terms of entrepreneurship. The students of the department do print their projects in the department with subsidies and the quality is high. This has minimised the many mistakes that students' projects do have as a result of rush and lack of understanding of the type of scholarship by some business centres. On the same ground floor is a furnished seminar room befitting for multiple functions with state of the art interactive board and other things necessary for a befitting meeting room.

Datiri struggled with the university to provide equipment that are strange to some of them due to the peculiarity of the programme. At some point, they felt the department was consuming so many resources, however, with the presence of artworks that have started decorating the university environment in the Sculpture Garden and relevant offices, the university gave in and supported by releasing

money for such purposes. Under the supervision of the Head of the department, about a hundred donkeys and thirty easels were constructed. About fifteen desktop computers currently in the resource room/library, two interactive boards, four electric kilns, fifteen sewing machines, one large flex machine, and Direct Imaging (DI) were acquired among other equipment.

Several offices were gotten for staff who were either sharing offices or hanging in the Administrative Office as it was during the early days of the department. The offices can boast of adequate furnishings with Air conditioning systems and ceiling fans. During his tenure, the first two sets of students graduated; in 2018 and 2019 respectively. Each of the sets had final-year students' exhibitions that included works from painting, graphics, textiles, ceramics, and sculptures. Samuila and Gunok (2020) explain that "the Department of Fine and Applied Arts, University of Jos, had her

second edition of Final Year Students Exhibition from 29th January 2020 to 7th February 2020. Artworks were displayed in the Newly finished Fine and Applied Arts Edifice. About thirty-five students exhibited their works ranging from Sculpture, Ceramics, Graphics, Textiles, and Painting." Examples of some works in selected exhibitions include



Plate IV: Gwanjo Market, Oil on Canvas, 5ft x 4ft. Ngbako Shem. 2019. Photograph: Ezra R. Samuila



Plate V: Character Portraiture, Polyn Resin,
2ft high. Engom Nathan Otsa. 2019.
Photograph: Ezra R. Samuila



Plate VI: Yohanna Joshua's Sculpture
Project in the Sculpture Garden. 2020



Plate VII: Little Beginning, Oil on Canvas,
90cm x 100cm. Shantok Kromyon. 2020.
Photograph: Ezra R. Samuila

Dr John Oyedemi Joshua

At expiration of Dr. Yohanna Datiri's tenure as Head of Department, Dr John Oyedemi was voted into office in 2021. On arrival, the department got a new boast. He continued to pursue for more materials for the department. Dr. Oyedemi came into office at the time that the department was going for its full accreditation exercise as the initial accreditation was of partial status. He got the support of all the staff members to advance this common course for the system. In the process, the university gave more resources to the department and the new Head of the department made more purchases. He got new big gas cylinders for the ceramic kiln,

customised glass tables as painting palettes and reading cubicles for the departmental library. Dr. Oyedemi set up the new library, gallery and seminar rooms into use. It is important to note that, the team spirit of the Head, staff and students gave impetus to the academic progress of the department from inception to date.

Visual Arts Workshop

The visual arts workshop was one of the major programmes during his early period of administration in the department. This programme was organized by National Gallery of Art (NGA) in collaboration with the Department of Fine and Applied Arts, University of Jos. The Workshop which was tagged "Repositioning Visual Art Sector, Curriculum review, challenges, prospects and new media and contemporary Art Pedagogy". The workshop was packed with art issues and creative ideas. It suggested changes to

artistic perception of art and new media approach. Academic papers on art issues were presented by various lecturers like Dr. Blaise Gundu Gbaden of the Federal University Lafia and Prof. Earnest Agoba of the Department Fine and Applied Arts University of Jos respectively. The programmes were an artistic period of refreshing the creative ability of art teachers, and students both in primary, secondary and tertiary institutions. Questions were raised and well-articulated responses were received from the students in attendance. It is hoped that the communique reached will be implemented by the stakeholders respectively.

The Programme later ended with dignitaries viewing the exhibited works of the graduating students of the fine and applied arts department of the Institutions.

The Representative of the Governor of Plateau State, The Representative of Chairman, Plateau State Traditional Council of Chiefs, the Vice Chancellor, University of Jos was also represented by the Deputy Vice Chancellor (DVC) Academics of the institution. After which, the guests were taken to the departmental gallery as the exhibition was declared opened. The tenure of Dr. John Oyedemi Joshua came with a lot of academic programmes in the department, this has further exposed and advertised the progress of the Department to the global community. (see Plate VIII).



Plate VIII: The Curator of the exhibition Dr. Jacob Onoja discussed some works during the art fair 2022 to distinguished

dignitaries during the exhibition opening in the department of Fine and Applied Arts Gallery

Some Exhibits During the Art Fair



Plate IX: An Exploratory Study of Lamingo Dam Scene using Liquidized Technique in Painting, Acrylic on Canvas, 4 x 5ft. Nianglong Nyoimor Noel. 2021. Photograph: Ezra R. Samuila



Plate X: Terracotta, Faith Gagara. 2021. Photograph: Ezra R. Samuila



Plate XI: A Depiction of the Nsibidi Symbols on the Ancient Benin Traditional Mask in Painting. 4 x 5 ft. Acrylic on canvas, Emmanuel Onobun, 2021.

Synergies and Collaborations

The department has enjoyed a good working relationship with the Society of Nigerian Artists (SNA), National Gallery of Art (NGA), Ministry of Culture, Hospitality and Tourism, Banks and Financial houses, art connoisseurs and several other agencies and parastatals in the government and the private sector. These synergies through staff and students engagements, have helped to build and building a robust visual culture in Jos the Plateau State capital and environ. The Jos Joseph Gomwalk Secretariate Junction overhead bridge mural was successfully executed with students in participation as

ready skilled human resources while still learning. Periodic exhibitions within and outside the state like that of John Oyedemi Joshua's engagements in Lagos, Port Harcourt and outside Nigeria, the Landscape and More Series staged yearly by Jacob Onoja is becoming a melting point for the media and the society at large in visual arts based issues. This project which started modestly in the University of Jos, now has a flavour of town and gown meetings on a regular ongoing bases in the month of December annually. The NGA has often supported the show through the supply of exhibition screens and other professional inputs. The tourism potentials of the state have been eulogized since the colonial era, hence, gift shops and other souvenir points patronise the creative works of the Department thereby helping in boosting the economic outputs of the participants. Art clubs, therapy centres, art talks, workshops, seminars and symposia and several other

services which the department's staff and students are rendering is helping to institutionalise the Jos art School visual culture and appreciation in the society. While we look forward to greater synergies and collaborations with stakeholders, newer frontiers are still being explored for greater productivity. Perhaps, few years from now, the narrative will be different in terms of global flavours from the Jos Art School.

Conclusion

The Jos Art School has come a long way from the early days till now and is still metamorphosing. The tedium, drills and experimentations are bringing out a new stage of untold beauty like the butterfly

emerging from the cocoon. The various sages and their contributions which are invaluable and still contributing, is bringing the art school to the forefront of contemporary practice and modernity in the visual arts space. In the words of John Keats (1817), "The excellency of every art is its intensity, capable of making all disagreeables evaporate, from their being in close relationship with beauty and truth". Perhaps, the established axiom which links the nexus of the struggles will bring forth a history that posterity will applaud given the beauty projected and the truth amplified in visual allegories.

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DEVELOPMENTS IN THE VISUAL ARTS: A DOCUMENTARY FROM CRUTECH ART SCHOOL

ABETIANBE, A.G. & ENAMHE, B.

Abstract

This paper reports developments from the Visual Arts School of Cross River University Nigeria. Visual Arts in Nigeria has evolved through varied phases of growth with records of Technical, proficient, vocational, and self-reliant artists. Although art is as old as human existence, art schools are relatively new. Contemporary art schools are part of liberal art education. Multi-specialism is an added advantage to the arts and to economic and cultural advancements. The visual arts as a subject had suffered relegation, only a few students had interest in the course; parents even refused their children to study arts. However, the story is different as research has it that the art school has graduated a huge number of artists who are currently practising and own studios in their various specializations; such as graphics, textiles, painting, ceramics, and sculpture. Findings also indicate professional development in academic positions in various educational institutions and creative/cultural sectors. Consequently, the study adopts a qualitative research approach using interviews, observations, literature, and photographs. The study recommends research on emerging art studios, art galleries, and other art institutions in Cross River State.

Keywords: Art School, Development, Self-reliant, Professional, Artists

Introduction:

Art is an idea that belongs to everyone. It is found in every culture, whatever physical form it might take, whatever emotional, aesthetic, or physiological challenge it may offer, it is not separate from life, it is the very description of the lives we lead. As a process whose cumulative result is the art form, the content becomes what is been described (White, 2011).



Plate 1: 200 level students in a figure drawing class

Source: Abetianbe, Calabar,

Visual Arts in the Cross River University of Technology is overdue a comprehensive compendium of activities that designs and characterises its history. This study is flexible enough to transcend the features espoused in a single issue, and undertakes to capture relevant documentary, which revolves around the development, growth, and stature of the Art School in CRUTECH. According to history, local artists with no formal training who also worked with apprentices produced art objects. With the emergence of formal education, Art Schools emerged with very different academic orientations. This has witnessed a radical yet positive valve in visual arts activities in Nigeria; Egonwa

(2012) defines Visual Arts as “Visual Arts are about Visual Culture in our time. It is concerned with everything we see, have seen or may visualize painting, sculpture, movies, television, photography, furniture, jewellery, apparel; in short, all are aspects that communicate through visual means”. He explains further that; the visual arts discipline has its own language like other disciplines. Dot, line, shape, colour texture, and form are the building blocks of that language.



Plate 2: Visual Arts Department's Permanent Building CRUTECH

Source: Abetianbe, 2023

Visual Arts Department started in the Polytechnic of Calabar (POLYCAL) in 1998 as Fine Arts Department. It ran 2 years National Diploma programme for four years before being transformed into a department of visual Arts and Technology in Cross River

University of Technology (CRUTECH) Calabar in 2002. The Department was created for training manpower for the globalized dimensions of today's industrial professional and economic challenges (Ajibade, 2005). According to Ajibade, (2005) "CRUTECH's Visual Arts and Technology Department is different from the regular Fine Art Programmes obtained in other Nigerian Universities because firstly, it is broader in the sheer scope of Courses and areas of specialization, accommodating contemporary thinking about visual cultural practices in social, academic and industrial contexts. Secondly, the Fine Arts curriculum used in Nigeria's Universities is formalistic and geared toward the creative expression of the 'beautiful' as ornamental environmental appendages. However, the Visual Arts and Technology programme is designed to bring the broad spectrum of Visual Arts into the functional service of industry, economy and technology.



Plate 3: Studios in Visual Arts Department, UNICROSS
Source: Abetianbe, 2023



Plate 4: Studio Areas in the Department of Visual Arts, UNICROSS

Since Industry and Technology are pivots of the contemporary world, the Visual Arts and Technology Department aligns with the laudable process of social change. Accordingly, the current time is programmed to project Nigeria and African cultural

identities to protect indigenous visual idioms. The students are trained to explore new materials, concepts, and production methodologies, by interweaving theory with practice and adopting experimentation as a mechanism for creative interrogation. The Department runs a four (4) year Bachelors of Art (B.A.) certificate B.A in Visual Arts and is structured into five specializations; Painting, Sculpture, Ceramics, Graphics, and Textile Design. The Department is well equipped with workshops and studio spaces for students to explore their creativity to achieve the vision of the Department which is to train professionals in Visual Arts at all levels whose skills parallel artists from anywhere on the globe. The mission of the Department is to break away from conventional artistic studies and institute a broad-based study in Visual Arts through Research, learning in art, and Technology. This mission has been proven right, as the Department has graduated artists and developed academics with proficient, technical vocational and self-employed persons. Statistics from 2015 Admission was

68 students, 2016-recorded 63 students, 2017-recorded 170 students, 2018 set recorded 179 students, 2019-recorded 150 students, and 2020 recorded 86 students.

The Art School has inculcated good academic values, and transmitted valuable skills to students; who create art, think critically, and acquire valuable technical skills. From the above, it is obvious that there should be a proper documentary of the Art School in UNICROSS. By so doing, it would have initiated institutional research.

Overview of the Art School:

Visual Arts Department from henceforth shall be known and addressed as, the Art School, started off with eight (8) students in the year 2004. However, this should not be a problem, but judging from a society where art is rarely recognized, with parents refusing their children to study art as a course. Some primary and secondary schools do not offer arts. Visual Arts was relegated to the background and obviously became a source of concern to art scholars. The neglect runs across primary, secondary, and tertiary

institutions (Enamhe, 2001). According to the findings from a research undertaken by Ajibade, Enamhe, and Oloidi (2011) titled, "Is Fine Arts Inevitable Requisite for Bachelors Degree in Visual Arts? Notes from the Admission Policy of a Nigerian University". There was a dearth of students for the B.A. programme in the university due to the lack of Fine Arts at the secondary school level and this was a requisite for admission. It became expedient for the Department to establish a flexible entry requirement, which was to admit students without a Fine Arts background. This flexible entry requirement yielded positive results by increasing the number of students admitted to the Visual Arts Department. From the research, it was discovered that students coped well even without a Fine Arts background as far as the curriculum and training conditions are right.

Recorded on the self-study form B document of National Universities Commission (NUC) 2021 for accreditation that, the department has graduated over 1000 students and that the graduates have gone on to excel in the arts

and creative industries in Nigeria, Africa, and beyond. The department has enjoyed full accreditation and just concluded one in 2021, which recorded full accreditation. The department started postgraduate studies in 2011, offering Master of Arts, Master of Fine Arts, and Post Graduate Diploma programmes in all the studio specializations. Doctor of Philosophy full-time programmes commenced in 2021. The Department has graduated over 97 candidates with Master of Arts, Master of Fine Arts, and Post Graduate Diploma degrees. According to Akpang (2018), the then Head of the Department in the post-graduate handbook affirms that postgraduate content should be framed in both creative and analytical philosophies. In view of this, the teaching courses in the five specializations are to provide students with the opportunity to explore new materials, concepts, and production methodologies, by interweaving theory with practice and adopting experimentation as a mechanism for creative interrogation. The above assertion has created an art school in Calabar with a broad contemporary, hybridism, inter-

culturalism, and globalism, irrespective of socio-religious, political, or varied kinds of contemporary art lexicon. Notwithstanding the fact that artists strive to assert their individuality and originality, as well as foster a group style or identity. From the numerous exhibitions held in school, which is a requisite for graduation at all, levels of scholarship, an art school recognized by the imperative of a proper transformation of art that has determined this paper's content.

Understanding of creative ideology, appropriation of media and experimentation. It is important to know the materials, techniques and diverse influences and subjection by the artist to certain modes of experimentation. This leads to historical reconstruction to account for the developmental sequence of artworks. As art lovers, there is believe that technique has an important place in art.

Nsukka art school is known for Uli motifs and designs; UNICROSS art school explores the rich potentials of Nsibidi and Ekpe motifs to promote the cultural revivalism. The cultural interface and appropriation of

ideographs and graphic designs are recontextualized into a new kind of aesthetic hybridism from different conceptual and contextual perspectives. Pertinent to this study is to feature the Art school, artists and artworks explanatory principles for understanding the nature of art, which is never static.

Ugiomoh (2012) argues that the character of an age can be seen as reflections in the artworks they create within its time, and art reflects the past, present, and future of a given space. As an Art School, there are creative practices that become common to members of the group. An inter-human element in cooperation and manifestation characterize the age, allowing for Cross-Cultural ideas, knowledge, and materials, which become a style. Consciously and unconsciously, because they occupy a common space, and work together, a relationship is formed with a dominant influence from the union. The Art School is designed by style and common practices.



Plate 5: Visual Arts Gallery, UNICROSS
Source: Abetianbe, Calabar, 2022

The Artists may design contemporary Nigerian Art differently but share common ideologies, which speak of styles and aesthetics, rendered in individual creative capacities. As Artists trained to attain professional competence that fits them into the competitive art economy, it behoves on them to showcase professionalism by demonstrating visionary creativity from experimentation and explorative knowledge, having spent some years together, studying and practicing, they exhibit cultural willingness and inspiration which cannot be separated from their artworks. Consequently, subjecting artworks created by the artists from UNICROSS to interpretation constitute

a platform through which the art school has developed a medium of expression and interpretation, which has birthed an artistic cultural enterprise in style, growth and status. The training in the department has produced graduates into the needed skills and techniques as well as professionalism to excel in various career paths in the creative industry. They are tasked in various areas including research projects, which is an independent creative investigations, seminar presentations and industrial practices. The evidence is seen in the participation of artists in the yearly Calabar Carnival costumes, floats, props and other paraphernalia of the Carnivals.

For over twenty years, the Art School has graduated artists, with excellent entrepreneurial skills, doing well in different fields of art some self-employed and others employed in secondary and tertiary institutions. In the University of Calabar (UNICAL), ex-students are employed in Fine and Applied Arts Department, in the Faculty of Arts, which was established in 2014. They are Jeremiah Unimke (Ceramics), Elemi

Enya, and Ugbe Gabriel (Sculptors), John Agbor (Painter), Bismark Odey and Anthonia Adie (Graphics), Joy Mbang, Elizabeth Ushie, Ngozi Chukwuma (Textiles). Some of the artists mentioned above are very innovative, striving hard to assert their artistic prowess equipped by their creative synergy and launched into contemporary artistic circuit of members of the prestigious Art Incubator, comprising of a group of Artists in Cross River State. They exhibit annually since 2017, across different fields of the visual Arts.

Ecoma (2021), describes Art incubator as connectively derived from the point of view of an artistic condition propelling audience reaction of which art is used to excite reaction as an instrument of change. Clarifying the issue, he emphasized that, Art incubator also refers to the artistic hatchery to birth and to encourage young and budding artists as a sort of culturing process and a support for art development. It is an exhibition that continues to celebrate and promote healthy dialogue between the past arts traditions of Cross River region and the contemporary

national art performance on a scale that is admirable.

Akpang (2021) while addressing people in the art incubator Exhibition declared that the array of works on display visually adduced to the growth that Calabar art scene has witnessed over the years is largely promoted by the Art incubator group. It also reflects the emerging aesthetic idioms in the paradise city, one that creates new visions of cultural forms through appropriation and restaging of Cross River Cultural heritage.

At the University of Cross River State, some artists who performed well after graduation are retained to lecture. Clement Akpang (Sculptor), Okon Ayi (Painter), Nkami Eval Elemi (Graphics), Joy Moko Eroma (Textile), Peter Agba (Ceramics), Ambang Ekong, Abetianbe George, Christian Inyang, Anwan Inyang (Graphics) and Freedom Odum (Painter),

The emerging studios and art shops are not left out. Ex-students have started serious art practices, pursuing vigorously the creative

agenda of the contemporary historical epoch
for understanding studio

Experimentation. Arguably, here is the fact
that creative themes, media, techniques, and
forms provide the basics for developing a
useful framework for studio practice. Some
of the artists include Michael Ekperikpe who
is an indigene of Calabar, and one of the
pioneer graduates from the Art School who
had his Bachelor's degree, and MFA in 2006
and respectively. 2011. He owns an Art
studio called "Mic Natural" along Marian
Road in Calabar. He also trains and mentors,
young artists during their Industrial Training
period from the Department. In an interview
with the artist, he stated that, the CRUTECH
arts school has helped and reshaped his
approach in studio art practice over time that
he still implements what he learned".



Plate 6: Michael Ekperikpe in his
Graphics Studio
Source: Abetianbe, Calabar, 2022

Aloma Matthew Ezeji from Ebonyi
State is a sculptor by specialization but
practices virtually all areas of Arts. He
graduated from the CRUTECH art school in
2015, and owns a Studio named "Alotex Art
Studio" located along Target Road, Calabar.
He also trains and mentors art students on
internships from the Department. According
to Alaoma, art has been his means of survival
since he graduated, and through art practice,
he has been able to marry his wife and build
a house in Calabar.



Plate 7: Mr. Alaoma Mathew in his Apprentice
Source: Abetianbe, Calabar, 2022



Plate 8: Sculpture by Aloma Matthew Ezeji
Title: Rescue Mission
Place: Sculpture Garden
Source: Abetianbe, Calabar, 2022

Jeremiah Unimke is from Obudu in Cross River state, and graduated in 2012 from CRUTECH art school. He is currently an academic staff in UNICAL, and combines studio art practice. His studio "Jerry Unik" is

located along Ekong Etta Street of Marian Road, Calabar. In an interview with him, he stated that through studio art practice, he was able to fund his master's degree (MFA) before he was employed. Therefore, he sees studio practice as a means not only to make money but also to mentor and train upcoming artists. Dorcas Bassey graduated in 2013 and had MFA in 2019 from CRUTECH Arts School, specialized in Graphics design. She owns Ankara fashion studio along Marian and is a member of Art Incubator Calabar exhibition group.

Victor Agba is a sculptor by specialisation and the organizer of the annual Ediye Calabar Arts exhibition. He is currently the personal assistant to the Chief of Staff to the Governor of Cross River State on creative media and publicity, Lawrence Okon graduated in 2019, specialising in Graphics design, and owns a studio called "Art Box" along Marian. For development in academic positions in the University, the Department has had the following Heads of Department: Victor Ekoma, now a Professor was head of the Department from 2002 to 2004. Ben Ekanem

2004 to 2006, Prof. Chike Aniakor 2006 to 2011, Chris Echeta 2011 to 2012, Dr. Wole Oloidi' 2012 to 2013, Dr. Babson Ajibade now a professor 2013 to 2017. Dr. Clement Akpang from 2017 to 2021. Prof. Bojor Enamhe 2021, while the present acting Head of Department is Mrs. Emekpe Omon. Senior Academic Staff in CRUTECH Art School. Prof. Chike Cyril Aniakor is a contract staff and very valuable to the Department. He is described as the grand art historian, one of the great scholars in Nigerian arts. A painter and scholar of Igbo architecture, a poet (Francis Beacon), a creative inventor of the Uli paintings. A prolific researcher whose contributions shows a mastery of the art and art history. His paintings and drawings reveal the indigenous root of the modern world. His students are greatly influenced by his drawings, whereby his style is seen all over the students' artworks (Enamhe, 2016). Aniakor's book "Reflective Essays on Art and Art History, 2005, explores the various dimensions of the creative consciousness, the nature of art objects and a visual idiom of form and the inevitable contextualization of

art forms in the social and historical conditions that impact on artistic creations, and which in turn they reshape.

Prof. Babson Ajibade is currently the Director of Academic Planning at Cross River University of Technology (CRUTECH). He has been the Dean of Faculty of Environmental Sciences, and the Head of Department. A professor of African Visual Culture, one of the editors of the book "Creative Media Arts; A practical source book (2014).

A team of staff headed by Prof. Ajibade under the sponsorship of Tetfund IBR research funding produced Industrial throwing wheel and pug mill, involving the fabrication of metals and other mechanized elements to produce Equipments that reduces the human energy application in the production of ceramic wares.



Plate 9: Industrial Throwing Wheel and a Pugmil for Ceramics
Constructed by: Staff and Students of Visual Arts
Source: Babson Ajibade, 2023

This is an indication that the Art School is significantly taking its place in the socio-economic space. The Art school has extended its boundaries to include designs and fabrication of design-aided equipment for studio utilization. According to Enamhe and Ekpe (2012), "Art empowers individuals with skills that widen the base of participation in the society, create jobs and decentralize the economy. Prof. Bojor Enamhe is currently

the Director of Centre for Educational Services at the University. One-time Director of Academic Planning also served as the Director of Quality Assurance. She is Professor of Art History/Art Management. Her research focuses on facilitating artistic mobility, encouraging art enterprise and young and budding artists, as the art of culturing process and support for art development. She is the originator of the Art incubator Calabar, birth in 2017. With her art management background, she has since 2017 held annual exhibitions in Calabar, Cross River State with alumni of the Department for the promotion of visual arts in Cross River State, Nigeria.

Dr. Wole Ololdi is an Associate Professor. A painter and one of the pioneer staff of the Department. He has served on several committees at the University. He is currently the coordinator of certificate verification for the newly admitted students in the Faculty of Environmental Sciences, an assignment he has been doing for over ten years now. Dr. Clement Akpang is a sculptor, Art Theorist, and designer. A fellow of the Royal Society

of Arts (FRSA) England. A contemporary post-colonial Avant-gardist, an Author of two books, “Analyzing Art, A Short Guide to Art Appreciation, Criticism and Research in Visual Arts, and Nigerian Modernism 1900 – 1965, 2019.

Dr. Sukanthy Visagapperumal Egharevba is a painter and was appointed Postgraduate coordinator in 2016 - 2021. She is of Sri Lanka by birth and a Nigerian by marriage.

Dr. Frank Uti is a Graphic designer and illustrator, teaching graphics in the Art School. Dr. Jame Etikudoh is an experimental Ceramics and studio-based artist. Omon Emekpe is currently the acting Head of the Department and a sculptor. Umana Nnochiri is a textile and fashion designer. A very strong personality in the Carnival Calabar Passion 4 Band. She owns and operates a studio where she designs and constructs garments, costumes, and textile fabric production. A brief interview with her explains some of her ideas in the field of textile and fashion design. She believes in the grooming of young art enthusiasts who may take over in the future. Outside academic

commitment, she practices and owns a studio called “Studio 08” located behind Industrial court by Murtala Muhammed High Way in Calabar where she trains students on internship and handles contracts from clients within and outside Calabar; she is also the Chairperson of the Society of Nigerian Artists (SNA), Cross River State.



Plate 10: Textile fabric production in the Department of Visual Arts by Students

Source: Abetianbe, Calabar, 2023

Others in the academic profession are Ayi Okon, Nkami Babatope George Abetianbe, Esu Ayi, Peter Undie, Justin Obong and Joy Moko Eroma. So far so good, the Art School is becoming a maker of influence, crucial to many narrations because of the number of students churned out every year. A need arises for further research on emerging artists, art studios, art galleries, and other art institutions in Cross River State. It is imperative to note the remarkable resiliency and ability to survive in spite of the many

adverse conditions in which the art school finds itself across time and space.



Plate 11: Visual Arts Department
Sculpture Garden
Source: Abetianbe, 2023

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DOWNTREND OF CERAMICS PRACTICE IN NIGERIA AND EFFORTS AT ITS RESUSCITATION

ABDULSALAM, S. & ANTO, P.A

Abstract

The ceramic industry in contemporary terms has undergone strategic transformations thereby making it a prospective catalyst for the potential growth and development of the Nation's economy. The basic rudiments of ceramics development, which are raw material research, identification, characterization, exploitation, and formulation of bodies and glazes, are necessary for contemporary ceramics practice. Nigeria has some deposits of solid mineral resources that could hasten the growth of ceramics activities largely but there are constraints in the attainment of the set goals. Technical and managerial knowledge to adopt, replicate and simplify imported processing technology by the functioning ceramic industries seems to have no end in sight. The market potentials of ceramic products such as tableware, electrical insulators, refractories, and tiles (wall and floor) are very promising. The upgrading of the existing ceramic plants in order to achieve cost-effectiveness and competitiveness in terms of quality and reliability is a much-needed factor. Therefore, the gap in refractories and advanced ceramic production can be harmonised. Concerted efforts should also be geared towards the revamping of ailing ceramic industries by provision of funds and material processing technologies within their reach to ensure the much-anticipated growth.

Keywords: Contemporary Ceramics, History, Development, Ceramic Industry

Introduction

Pottery products in Nigeria before the introduction of modern pottery were only fired to earthenware temperature and yet served the purposes for which they were made. Before the introduction of modern ceramics in Nigeria, the art of stoneware ceramics was neither practiced nor known to

any potter at that time. Traditional clay potters, therefore, had limited techniques for the use of their abundantly available clay resources. Therefore, their wares were produced for low-temperature firings and their present economic needs.

In the 1980s, the ceramic industry was a strategic enabler of growth, innovation, and

sustainability. Ceramic manufacturing enterprise was among the earliest achievement of Nigerian entrepreneurs to take a sneak peek. Our contemporary ceramics in modern times incorporate design and innovation as strategies for meeting our contemporary needs for ceramic utilities and fittings.

Contemporary ceramics practice is bedevilled with a myriad of challenges ranging from a shortage of skilled manpower and facilities to processing raw materials needed for the production of ceramics in the country. This situation has led to stunted growth witnessed so far in the ceramic sector. This situation has forestalled the creation of millions of job opportunities through direct or indirect jobs targeted at the unemployed youths on the streets, who would have had a source of income from the ceramics business to keep them afloat and contribute to Nation building.

Origin of Contemporary Ceramics in Nigeria

Michael Cardew was a promising scholar who studied Classics at Oxford University in 1919 and graduated with a first-class, a feat, which was gradually positioning him to pursue a career as a professor in Classics. Rather than pursuing his ambition, he rather opted for his passion, which is pottery practice, inspired by Williams Fishley pottery in 1921 at Braunton, North Devon. Cardew went to St. Ives to join the prolific potter of the 20th century, Bernard Leach in 1942 as an apprentice. Cardew was then invited by the head of the Achimota College in Ghana in 1942. The head of the Achimota School in Ghana is a man by the name of Herbert Vladimir Meyerowitz, a sculptor and wood carver who conceived the idea of total unity of art and technology.

Vladimir insisted that technology is simply the making of things. He further posited that things properly made are beautiful by nature

and the time for unifying art and technology is long overdue. After the First World War, development and local industries became accepted and respectable currency in the world of colonial administration. The then Nigerian Colonial Government advertised a position for a potter in 1949 and Cardew being a civil servant came to Nigeria in 1950. He wrote a proposal on pottery prospects in Nigeria for the Department of Commerce and Industry.

After successfully convincing the colonial Government, Cardew was awarded the job of a potter, serving the Government. In April 1952, the Abuja Pottery Training Centre was opened with its first six trainees. Although the history of contemporary ceramics in Nigeria will not be, complete without mentioning the efforts of D. Roberts who attempted to introduce modern pottery at Ibadan in 1904 and met a Waterloo in his attempt due to two reasons. Firstly, he attempted to train the men folk whereas

pottery tradition rests in the hands of the women. Secondly, the trainees were unable to cope with the technological complexities of pottery production.

Introduction of Contemporary Ceramics in Nigeria

The coming of the colonial masters to Nigeria has made many Nigerians to be aware of many additional techniques and uses of their locally available clay materials. It has also led to other discoveries such as new methods of making clay products that are very appealing to the eyes as well as serve certain professional needs.

Ewule (1988) stated that the first contact that introduced the art of high-temperature firing of pottery products in Nigeria was in 1918 by one Mr. Robert D. at Abeokuta. According to him, the second contact was in 1951 with Michael Cardew at Suleja (Abuja). Based on a geological survey conducted by Cardew, Nigeria has abundant ceramic raw materials. Cardew operated his Suleja pottery

comprising both male and female trainees in an attempt to vilify his view that abundant local materials suitable for contemporary ceramics and glaze preparation are existent within the locality.

Similarly, O'Brien (1984) revealed that Cardew in his 1950 request to the then Northern Nigeria Government for the need to set up the modern pottery centre at Suleja states that, "setting the pottery centre in Nigeria is meant to serve the rich and rising middle-class civil servants who have abandoned their traditional lifestyle and adopted western customs". The foresight and effort made by Cardew to see that there was a need to train Nigerians in the art of modern pottery were not in vain. It has opened the way for many Nigerians to use the abundantly available raw materials for the production of many of their needed utensils for both socio-religious purposes. Nigeria has since included the teaching of modern ceramics in the tertiary education curriculum.

Some Areas of Ceramic Application in Nigeria

Our structural infrastructure would have been in a state of comatose today without the intervention of ceramics. In an attempt to assess the impact and contribution of ceramic production, foresight is needed beyond only the production stage. The long lifecycle of ceramic products shows their durability, resistance to heat, and other properties which contribute to energy and resource efficiency throughout the lifespan of the product and during its use in other phases for several applications. Ceramic products are built to last a long period of time, durability, therefore, is one of the key benefits compared to several similar materials in the market. Investigations have shown that the average lifespan of a brick building is put at a minimum of 150 years.

Ceramics also covers a wide range of applications in the electrical sector. It can be used as an insulator, semi-conductors, super-

conductors, and piezoelectric. Ceramic components are also used in automobiles, boat engines, lawnmowers, cell phones, computers, and several other electronic products. Ceramic high voltage insulators make it possible for the safe transmission of electric current to residential and industrial areas with low risks of electric hazards.

Advanced Ceramics

We have another class of ceramics called “advanced ceramics”. It came onto the scene in the 20th century as the materials became more refined and special compounds and processes were developed for structural and electronic applications. These advanced ceramics are distinguished by their high chemical purity, careful processing, and high values of useful properties. Advanced ceramics, also known as engineering or technical ceramics refer to materials which exhibit superior mechanical properties.

The future success of both the traditional and advanced ceramic markets and developing

non-traditional United States of America’s markets depend on factors such as increasing the quality applied, and reliability of the finished products improving the cost-benefits ratio of ceramic components, increasing research and development, increased supply of domestic, high-quality raw materials and overcoming designer and end-user reluctance to use ceramics. The consideration of scientific, artistic, and creative aspects of those processes and products are important for the functional requirements for the economic development of society.

The development of new materials and applications will eventually touch the lives of everybody. In this era of rapid change in art, design, and technology, there is a need to consider the creative and functional aspects of producing products for the benefit of society and for developmental purposes. Ceramists need to exploit the raw materials and adopt production techniques of modern industries to boost the diversification of our

industrial sectors for economic improvement and development.

Constraints Confronting Local Manufacturers in the Industry and Ways of Addressing Them

Unemployment at the moment is one of the most critical problems facing our Nation from the National to the grassroots level. As was earlier established, the ceramics industry is a major employment generation and wealth creation sector. But the viable and running ceramic industries are not able to contribute significantly in this direction because of the following constraints: a shortage of skillful ceramic practitioners, difficulties for people wishing to pursue a career in ceramics to do so, shortage of experts in the ceramic manufacturing business, confusion in the aspect of training programs for career paths in ceramic science, ceramic engineering and ceramic technology in universities, polytechnics and colleges of education across the country, insufficient knowledge on chemical and mineralogical compositions

and nonexistence of ceramic raw materials processing plants to feed the local ceramic establishments.

Since ceramic production involves the extraction of clay and other minerals, a long-term framework to ensure steady raw material supply and investment in the sector by philanthropists should be encouraged. It is pertinent as a means of maintaining balance and promoting biodiversity that excavated sites should be refilled and restored to their natural state. In this regard, therefore, a supportive and reliable legal framework will be essential to mobilise the human and financial resources needed to implement the essential breakthrough technologies. The Nigerian Ceramic industry operates in a competitive global market similar to other sectors of our economy. Therefore, it is essential that adequate legislation should be mapped out to create a level playing ground for the domestic and foreign ceramic products so that the one does not overshadow

the other thereby creating a balance in the system.

Problems of Ceramics Practice in Nigeria

I. High-Rate Mortality of Ceramic

Industries: The importance of teaching lies in the fact that knowledge must be passed from generation to generation. Ceramics are our oldest and newest solids. In the 1970s to 1980s many ceramic block industries sprang up in Nigeria, today they are no more. Almost all of them have folded up. The high mortality rate of Nigerian ceramic industries is due to a lack of specialised service industries. In Europe and America, such specialized service industries exist.

II. Lack of Awareness: The study and knowledge of ceramic and its technology are simultaneously the oldest and the newest technology. Many people are not aware of the importance of ceramics. Not much attention has been given to this discipline in our primary, secondary, and tertiary institutions of learning.

III. Processing of Ceramic Raw Materials:

Processing of ceramic raw materials is the most difficult aspect of the production of ceramic products. Processing is the most difficult aspect because all the raw materials require beneficiation before use. Take for example clay and Feldspar.

Resuscitation of the Ceramic Industry as a Catalyst for Diversifying the Economy

The transition from a non-productive to a resource-oriented economy posits a compounding challenge for the Nigerian ceramic industry. Given the strategic importance of ceramic products and services, a competitive climate is essential to ensure the industry attains the desired global attention. Nigeria is rich with enormous deposits of mineral resources, which can raise the ceramic sector to another goldmine in place of crude oil if the mineral resources are properly utilised for the expected development.

There is therefore an emergency in aspects of adequate, stable and sustainable solid mineral development strategy essential to National security, economic wellbeing, and industrial production of ceramic products to meet domestic consumption and for export.

A step in the right direction is for the Nigerian Mining and Geosciences Society to provide technical support to the ceramic industry through the following:

Mineral intelligence should be provided to potential investors to familiarise them with the locations of ceramic minerals and possible locations to situate ceramic industries in observance of proximity to the source of raw materials. There should also be a mineral policy development action plan that can stimulate the identification and use of ceramic mineral wealth and establish rules of engagement for the mineral market through measurement of the environmental impacts of the mineral sector on National development.

The Need to Look Inward

The time to look inward and utilize what is available became imperative when the Government discovered it was spending a huge amount of foreign investment on things whose substitutes were locally available in the country. The Federal Government then commissioned the Zingg consultants, A.G. of Switzerland to carry out some test analysis of the clay deposits in some selected areas in the country. The measures that were taken by the Government afterward had far-reaching revelations. Part of the measures was the establishment of the Federal Institute on Industrial Research at Oshodi (FIIRO), National Steel Council (NSC) Jos, and Project Development Agency (PRODA) Enugu. These research centres have greatly helped ceramic researchers who work with clay and saw to the setting up of some fired brick industries in Jos, Kaduna, Kano, Ibadan, Akegwe-Ugwu, Maiduguri, and Lagos.

Gukas (1985) stated that through the outcome of the research centres set up by the Government, the ceramic industry received a boost in production and was positioned to compete favourably in terms of its products with the imported ones. The Richware Pottery industry, Lagos was able to replace the use of imported kaolin clay with the local Lisabi clay as well as using the Abeokuta Feldspar and quartz for all its products.

The Government then took a decision on the matter of importation of some items into the country and passed a communiqué stating that, “ Government would not continue to allow a situation whereby industries accept the importation of raw materials whose local substitutes could be development’”. The Federal Government then directed all her universities and other institutions of higher learning to look inward and conduct research into the use of the locally available raw materials.

Summary

Due to the difficulties of getting the needed equipment’s for the steady expansion of modern ceramic industries and studios and the crude nature of the locally made ones, many of the ceramic industries and studios had to fold up. This trend has made Nigerian ceramics practitioners continue to use locally fabricated equipment, which requires a great deal of effort before wares can be produced with their use and the slow pace of the entire production process. Cardew (1990) observed that the only discernible line of development in Nigerian pottery is in economic rather than technical direction. This, therefore, means that for Nigeria to be able to develop her ceramic sector, Nigeria needs to look inward into ways of developing her needed ceramic resources for self-reliance and the development of the ceramic industries that are on the verge of redundancy through the provision of funds aimed at resuscitating them and to carry out a total overhaul of the

policy documents drafted with the aim of sustaining the ceramic industrial sector from reaching a state of comatose.

Conclusion

Contemporary ceramics in Nigeria has in its effort to march to maturity employed a lot of diverse elements both local and modern. In fact, what started as a mere celebration of Western ideas in the mid-20th century has at the end of the century grown into a revolutionary struggle to achieve and maintain an enduring and more lasting

identity. This fact is borne out of the diverse views and techniques of production anchored in the concept of the synthesis of the old and new as amplified in the works of this generation of potters. It can therefore be affirmed that contemporary ceramics in Nigeria has grown and will continue to grow in harmony with the goals, which the creative potters have set for themselves and the society.

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ADAPTATION OF SARS_COV-2 MICROSCOPIC IMAGERIES INTO ABSTRACT PAINTING

UZOJI, J.E & AVAV, J.A

Abstract

Corona virus disease (COVID-19) is an infectious disease that has been a global health concern since 2019. It is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS_Cov-2) and the microscopic images of this dreaded virus adorn the screens of many mass media worldwide. These images are a dichotomy of the harmful and deadly nature of the virus. They appear aesthetically fascinating and display interesting patterns; motivating the researchers to carry out this study. This study, therefore, attempts to adapt the images to create painting compositions. Such has been attempted by artists like David Goodsell who composes microscopic data of viruses mostly for scientific advancement. The study adopts the notion of biomimicry. It also adopts the concept of abstract expressionism as derived from the works of Nigerian artist Gani Odutokun. The practice-based research methodology was employed for the study and data was garnered from secondary sources such as the Internet, journals, and magazines. The study concludes that the microscopic world has been explored marginally for artistic innovations and adds that studies such as this can narrow the gap between art and science and result in unique ideas.

Keywords: Corona Virus, SARS_Cov-2, Adaptation, Abstract, Painting.

Introduction

Nature possesses a plethora of inspiring themes and phenomena. Both artists and scientists have continued to explore and exploit this subject without end but with unswerving new discoveries. Natural sceneries, the human form, plants, and animals are among the numerous themes in nature that have inspired artists across the world.

There is yet a part of nature that is beyond the periphery of the eyesight. Such is the world of minute entities like viruses and bacteria. This natural space, though around us, can only be reached through the magnifying lenses of a microscope or through a scientific technology called microscopy. According to the University of Edinburgh (2018), “Microscopy is the technical field of using microscopes to view samples and objects that

cannot be seen with the unaided eye (objects that are not within the resolution range of the normal eye).” Microscopy thus enables viewers to explore the world beyond the scope of their eyesight.

Scientists are particularly acquainted with the microscopic world; the eclectic essence of art has paved the way for artists to also tour this realm of unseen entities. As far back as the 17th century, artists mimicked microscopic revelations for scientists since the microscope at the time could not capture images (Avramouli et al., 2017). Modern microscopes are now combined with a camera making it possible to record and publish microscopic revelations. This has made the microscopic realm more accessible to a wider audience through the wealth of information that is made available.

Amusingly, more artists are interested in this theme and are interrogating it not just for scientific gains but for artistic innovations like this study. An instance is the American

artist, Jen Stark (b.1983) whose installation works are inspired by microscopic patterns. Similarly, British painter Rosemarie O’Leary is inspired by the aesthetic possibilities of the world under the microscope. The artist explores the cell structures of plants and the microscopic life in fresh water. There are also collaborative efforts between scientists and artists that have made endeavours to display visual marvels of the microscopic world. Examples are the Olympus Bioscapes and the Nikon Small World Exhibitions

Though microscopic imageries are nothing other than data to scientists, for artists they manifest a wealth of opportunities for creative explorations. These images are often inherently colorful and display interesting abstract patterns while evoking an aesthetic experience. They can be explored artistically in many directions; in terms of their formal components, visual appeal, and metaphorical offerings among many other directions.

Coronavirus disease (COVID-19) is a novel infectious disease causing a pandemic and making headlines globally since its advent in the year 2019. The disease as stated by the World Health Organization (WHO) (2021) is caused by a virus called “Severe Acute Respiratory Syndrome Coronavirus 2 (SARS_Cov-2)”. With about 462 million cases around the world corona virus disease is also responsible for over 6 million deaths as Dong et al. (2020) affirms.

The microscopic images of SARS_Cov-2 have become an icon of COVID-19, adorning several mass media. The vibrant colouration as well as the interesting rounded forms observed in these imageries provides motivation for creative expressions, although they camouflage the harmfulness of the virus. This study, therefore, strives to leverage the microscopic images of SARS_Cov-2 in order to create paintings that find bearing in abstraction.

The Problem

Since the SARS_Cov-2 was discovered in 2019, there have been more text on it than visualizations of it. Scientists have provided microscopic imageries that describe what the virus looks like. Some artists such as David Goodsell (b.1961) have also made depictions of the virus through paintings though largely for scientific advancement, this climaxed at representational portrayals thus creating a gap for non-objective interpretations. Hence, this study aspires to provide abstract representations of SARS_Cov-2 as enthused by available microscopic imageries of it. On the other hand, SARS_Cov-2 microscopic imageries appear invigorating and consist of formal elements such as shape, line, and colour that provide motivation for creative exploration such as the context of this study. This study also seeks ways of exploiting these opportunities to develop ideas in painting.

The aim of this study is to create abstract painting compositions through the adaptation of SARS_Cov-2 microscopic images. While the objectives include exploring the creative and aesthetic potentials of SARS_Cov-2 microscopic imageries in painting; creating abstract paintings inspired by the SARS_Cov-2 microscopic imageries; to document the systematic processes of adapting SARS_Cov-2 microscopic imageries in painting.

This research is significant because it creates additional awareness about the corona virus disease. It also shows that there are creative opportunities in the microscopic realm of nature. Since the research relies on scientific information, it promotes interaction between art and science thereby narrowing the gap that exists between them.

Conceptual Framework

This study hinges on the concept of Biomimicry. According to Marshall (2013) “Biomimicry is a form of innovation which

uses the science of biology as the primary knowledge base for inspiration and development.” It is a practice that relies on nature to spur innovation as the case here. For example, Damien Hirst (b.1965) is an artist who derives inspiration from nature. He uses actual specimens of dead animals for his installations. This study also leverages on an aspect of nature and hence adopts the concept of biomimicry.

The study also hinges on the idea of abstract expressionism. Abstract expressionism is an art movement that flourished in the United States around the 1950s and 1960s. It emphasized spontaneous artistic self-expression and non-representational imagery. This study leans on the dynamism and non-representational qualities of abstract expressionism. It borrows from the non-representational painting styles of Gani Odutokun (1946-1995).

The earlier mentioned two concepts, which this work leverages on, are key to the realization of this paper.

The review of the literature for this paper is divided into two parts. First, the researchers look at SARS_Cov-2 in terms of its historical background and visual characteristics and the concept of biomimicry. In the second part, the authors examine some selected works of art consisting of works that adopt the concept of biomimicry, works inspired by microscopic imageries, and abstract works. The review relied on information garnered from the internet, books, dissertations, and catalogues.

Visual characteristics of SARS_Cov-2

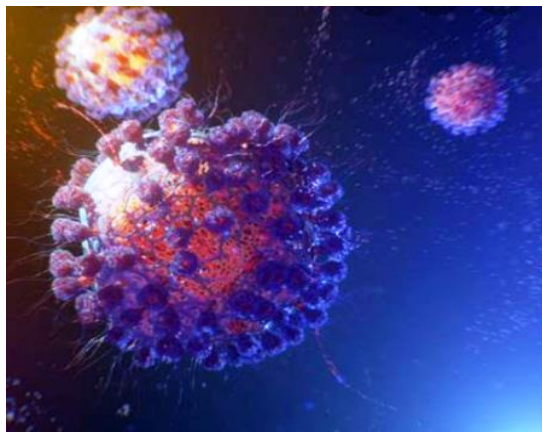


Figure 1
 Figure 2
 Corona Virus Disease 2019 (Covid-19)
 Corona Virus Disease 2019 (Covid-19)
 Source: <https://www.shutterstock.com>
 Source: <https://www.ecdc.europa.eu>

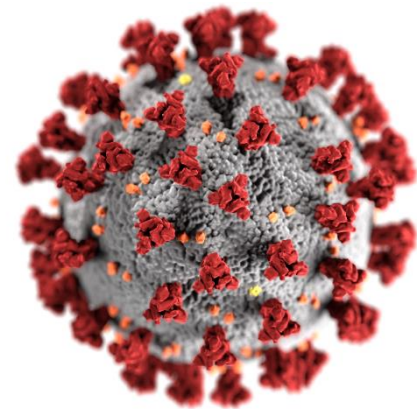


Figure 3, An illustration of SARS_Cov-2 by Centres for Disease Control and Prevention (CDC)
 Source: <https://phil.cdc.gov/Details.aspx?pid=23312>
 Photo credit: Alissa Eckert and Dan Higgins

Works of Some Selected Persons

Corona Virus by David S. Goodsell (b. 1961)



Figure 4, David S. Goodsell, **Corona Virus**, 2020, Water Colour, 33.02cm x 25.4cm

Source: https://doi.org/10.2210/rcsb_pdb/goodsell-gallery-019

Figure 4 is a watercolour painting by David Goodsell. It is a symmetric composition that has a similar appearance from all four sides. The painting is vibrant and generates an aesthetic experience. It is composed of intricate colourful patterns that have a radiate organization. The patterns seem ornamental. They are repetitive, enabling rhythm and balance in the work. The painting as the title suggests is a depiction of the novel Corona virus portrayed flamboyantly. The artist, who is also a biologist, is renowned for his

detailed illustration of viruses, which he creates by composing microscopic information to give scientists an intuitive picture of them. The painting as appealing as it appears is embedded with information that can spur scientific innovations. It signifies the need for collaborations between the arts and sciences. The painter does not attempt to create abstract renditions of the corona virus but rather creates an actual picture of it.

Scabiosa crenata by Rob Kessler (b. 1951)



Figure 5, Rob Kessler, *Scabiosa crenata*, 2013, hand coloured scanning electron micrograph (SEM), dimensions variable

Source

<https://www.phaidon.com/agenda/arts/articles/2016/november/23/the-art-of-the-plant-rob-kessler/>

“Scabiosa crenata” was created by British artist, Rob Kessler (b. 1951) who is a Professor of Arts, Design, and Science at Central Saint Martins College, London. Rob Kessler uses the microscope which is a scientific tool to magnify seeds, pollen grains, and other plant materials. Like David Goodsell, he makes detailed illustrations of them. Describing Kessler’s working process, (Compton, 2016) avers that the artist uses a high-magnification scanning electron microscope (SEM) that magnifies objects up to 50,000 times to produce black-and-white images of specimens. The images are then painted instinctively to illuminate the intricate form and features of the specimens. Kessler’s painting in Figure 5 displays a striking solitary motif against a bare and quiet background. While enjoying its aesthetic appeal and contemplating on what it might suggest, the researchers are reminded of a wildflower that grows around their environment. Using both complementary and

harmonious colours, the artist distinctly portrays the delicate structure of the object. Observe how the tiny yellow lines in the painting appear conspicuous because of the purple and black colours complementing them. Contrast and emphasis are the dominant art principles used by the artist in this work. The painting indicates the diverse possibilities of the invisible biological world. It is akin to this paper as it also relies on microscopic data. While the artist aims at illustrating microscopic data in a manner that does not change the core facts about them, this paper makes distortion and abstraction of the microscopic imageries of SARS_Cov-2.

Algae Stars-Actinastrum by Rosemarie O’Leary



Figure 6, Rosemarie O’Leary, **Algae Stars-Actinastrum**, 2018, Acrylic on Canvas, 20cm x20cm
Source

[:https://www.rosemarieoleary.com/images/GALLERY/art-from-microscope-studies/water-world/algae](https://www.rosemarieoleary.com/images/GALLERY/art-from-microscope-studies/water-world/algae)

Rosemarie O’Leary is an American painter who is inspired by the microscopic world. She explores the cell structures of plants and the microscopic life in fresh water for their aesthetic potentials. The artist’s abstract painting “Algae Stars-Actinastrum” above is characterized of several overlapping lines that form geometric patterns. As one would observe from a microscope, the painting has an aerial perspective, distant objects are portrayed with a cool monochrome enhancing depth. The painting appears simplified; it also does not seem to symbolize anything tangible. Unlike the preceding works, the artist is not interested in revealing specifics but demonstrating creatively through painting, the aesthetic potentials of these microscopic entities. Like the painting, this paper attempts to create non-representational paintings inspired by microscopic imageries, however, the themes vary.

The Process

According to Sullivan (2005), creative works undertaken by artists is a form of research. Outcomes of such work can be incorporated into a research process using the practice-based research method. This paper relies on studio practice to inform the researchers and gain new knowledge. It, therefore, employs the practice-based research method. Candy and Edmonds (2018) posit that “practice-based research is an original investigation undertaken in order to gain new knowledge, partly by means of practice and the outcomes of that practice.” They also expound that in practice-based research, the research (a systematic investigation that leads to new knowledge or understanding) and practice (innovating by means of requisite methods) work as a pair, complementing each other. Data for the study was sourced from only secondary sources. This emerged from the images of SARS_Cov-2 gotten from the internet and journals. The key instrument

used for data collection included sketchpads and papers of varied sizes.

Procedure for the Creation of Works

Images of SARS_Cov-2 were carefully observed after which the researchers created several sketches that served as preliminary notes. These sketches were later developed and translated into finished paintings. Plate I and II below are examples of the preliminary sketches.

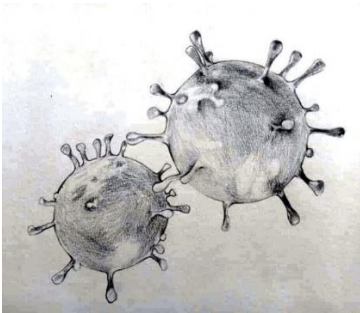


Plate I, Jennifer Uzoi, **Angry Heads**,
Plate II, Joshua Avav, **Outburst**,
2020, Pencil on Paper, 35cm x 24cm
2020, Pencil on Paper, 24cm x 35cm

Analysis of Selected Paintings Created

To show the systematic process of abstracting SARS_Cov-2 microscopic images, the paintings created were grouped into two main categories, the representational and non-representational stages.

i. Representational Stage

In this stage, the researchers focused on creating representational portraits of SARS_Cov-2. Attempts were made to depict its physical attributes in painting. The works created here also laid the footing for successive investigations.



Plate III, Joshua Avav, **Twelve spikes**, 2020,
Gouache on Paper, 24cm x 34cm

The painting above is an attempt to mimic the microscopic image of SARS_Cov-2 especially as shown in Plate I. It simply

exhibits two main visible features of SARS_Cov-2 that describe it, that is the rounded shape and spikes which results in a symmetrical composition. The composition also appears rigid and static symbolizing the shutdown and anti-socialization that came with the Covid 19 pandemic. The spikes which are 12 in number also are a reminder of a clock, however, the clock has no hands telling the time. This symbolizes the uncertainties Covid 19 pandemic came with.

ii. Non-Representational Stage

This stage had to do with activities that entailed a deviation from the representativeness of SARS_Cov-2, to achieve the aim of this study, which is to create abstract paintings from SARS_Cov-2 microscopic images. This non-representational stage was further grouped into two (2) sub-groups namely, the stylized and illusion stage.

The Stylized Stage

The thrust here was to distort the subject of study by either simplifying or exaggerating certain features of it. The paintings created here appear expressive.



Plate IV, Joshua Avav, **Washed In**, 2020, Gouache on Paper, 25cm x 35cm

In Plate IV the rounded shape of SARS_Cov-2 remains recognizable but the spikes were transformed into free flowing lines creating rhythm and variety in the painting. A close look at the painting suggests something alien lying on a seashore connoting the sudden advent of the corona virus disease. Unlike Plate III, a more colourful palette consisting of complementary colours is used here in

drawing attention and balancing the vigour expressed in the composition. The painting is an example of the multiple creative designs that can be created from the study.

The Illusion Stage

This stage records paintings that are completely withdrawn from the subject of study.



Plate V, Joshua Avav, **Flora**, 2020, Gouache on Paper, 23cm x 34cm

In “Flora” it is difficult to link the painting to SARS_Cov-2. Here, only a cluster of the tulip looking spikes (protein) on the virus was explored. It was also modified and made to diffuse into the background of the painting

through the use of liquefied pigment. The researchers found the process of creating this painting interesting as it was spontaneous and resulted in a simple aesthetic design.

Findings

The following findings were made in the course of this studio work:

- i. SARS_Cov-2 microscopic imageries appear colourful and appealing. Their rounded structure is also interesting. These qualities provide opportunities for creative engagements in painting;
- ii. abstraction can be achieved from SARS_Cov-2 microscopic imageries as portrayed through the paintings created.
- iii. the following processes enabled the researchers to adapt the SARS_Cov-2 microscopic imageries; stylization and simplification of form.

Conclusion

The microscopic world provides a plethora of themes that can inspire the creation of art and this has only been explored marginally for artistic innovations. Many of the artists who have attempted to explore the microscopic space did so to aid scientific research. Art is an open-ended discipline with no clear-cut boundaries so, artists should therefore be

open to the numerous creative opportunities embedded in phenomena tagged as scientific and the like. This will not only develop creative influences but also will straddle the line between art and science and also result in ground-breaking ideas. It is the researcher's hope that this study will fuel new thinking in the direction of the study.

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CHALLENGES IN ART EDUCATION PROGRAMME IN NIGERIAN INSTITUTIONS OF LEARNING: AN OVERVIEW OF ITS DEVELOPMENTAL CHANGES BEFORE AND AFTER THE 18TH CENTURY

RABI'U, A.B

Abstract

Art Education programmes in Nigerian institutions of Learning have experienced a number of changes since the inception of modern education in the late 18th century. It is on these bases that educational developmental changes started. The changes, therefore affected the characteristic features of the programmes. The changes came with different educational policies, innovative methods of teaching and learning, as well as curriculum innovation and implementations. Thakur and Ezenne in Mbahi 1999 affirm that “Educational programmes started with Islamic education from the North and Christian education from the South”. Prior to these periods, the system of education practised in Nigeria was the African type, which is known as traditional education. The formal education programme started with the introduction of Western Education in Nigeria from 1842 to 1948 of which the Formal art education curriculum was designed and developed, respectively, to favour the Western culture. The changes were necessitated when the issue of the modern education system was presented and discussed at different periods in Nigeria. During those periods, the major issue that was in the mind of the then educationists and policymakers, according to Imonikebe (2012), there was the need for changes in Nigerian art education.

Keywords: Challenges, Art Education programme, Nigerian institutions of Learning, Different educational policies, Innovative methods of teaching and learning.

Introduction

Art education programme, in the context of this paper, implies all the plans of action for handling the educational system; and the programme that was suggested for running the art teaching and learning activities in schools at basic levels of education. Art education programme, as Imonikebe (2012) indicated, is a set of

systematic plans of instruction that controls all the teaching and learning of art in school systems. The Educational Programme was designed under the Universal Basic Education (UBE) scheme in Nigeria; and, existed for a decade in all the states across the country.

The art education programme has been given administrative considerations as it is

contained in Sections 3, 4 and 5 of the National Policy on Education in Nigeria. The art programme was introduced as a compulsory subject in all the schools at basic levels of education all over the country as presented in the National Policy on Education (N.P.E) in 2004. The Programme, especially, at the basic levels of education was designed and implemented in such a way that it could effectively help in closing the gap between the previous and the present art educational programmes. Art education programme, from time to time, is reviewed with a view to improving the quality of the art curriculum.

Three significant educational developments existed before Nigerian independence. The educational developments gave rise to several changes in art education programmes that progressed from 1914 to the present day. History of education in Nigeria as

presented by Fafunwa (2004) and Thakur and Ezenme, 2010, revealed the Lugard's Policy on education from 1914 to 1919; the Clifford's Policy and educational codes of Conduct of 1929; and how the world economic depression from 1930-1940 affected the developing educational policies in most parts of Nigeria.

Art education programmes during these periods, according to Fafunwa (2004) and Thakur, *et al* (2010) were organized under three (3) major aspects of formal education, thus: Government Policy and Administration; Curriculum and Instruction; and Teaching and Learning Activities. However, different art educationists ascribed suggestions and recommendations for assessable art educational programmes for the Nigerian institutions of learning. Oloidi (2003), Palmer (2004), Azeez (2007), Mamza (2008), Umar and Osamudiam (2009), Mbahi (1999) and Tijani (2011), are some

of the prominent art scholars who hold the view that the direction of art education in Nigeria should go through a sustainable educational process.

Formal art education programme, according to Onuchukwu (2001), started in Nigeria with the introduction of Western Education from 1923-1963. Art curriculum was designed and developed to favour the Western culture. The earlier art teachers during those periods were the expatriate teachers, Such art teachers were K.C. Murray, H.E. Duckworth, J.D. Clarke and D. Duerdan, who taught art from the backgrounds of their experiences and environments.

Art was taught in Western styles until 1927 when art was considered a subject to be taught in schools with the effort of the first Nigerian Artist: Aina Onabolu, who is popularly known as 'The Father of

Contemporary Art in Nigeria'. According to Azeez (2007),

Although a Nigerian, Onabolu's teaching in some schools focused on the use of Western techniques and materials. The purpose was to provide a point or to disabuse the minds of the then-Europeans who thought that no African could dabble into art of figure drawing and painting. He was equally supported with some foreign art teachers who were also trained in Western art styles.

As a result of their efforts, many Nigerians who were interested in art studies and practice were encouraged to further their studies. The first set of the Nigerian art pioneers who popularized art as an academic subject were Ben Enwunwu, J.B. Akolo, Udo Emma, Uche Okeke, and Bruce Onabrakpeya. Art subjects were taught in schools in accordance with a set academic programme and curricular activities. Different art education programmes were constituted as a result of the changing situation of Nigerian systems of education.

Prior to 1970s, and to the recent educational systems and developments that the time-honoured, there was a 7-4-1/2-3-4 educational scheme that was practised. Such systems of education were organized and implemented under the then Central Primary Schools (CPS) system of education. The 6-3-3-4 system of education was a scheme under the Universal Primary Education (UPE) that was introduced in 1977 with the aim of achieving the National Objectives by the year 2015. The system was organized and was provided in the National Policy on Education (NPE) of 1977, Section 3/15 and 16.

The 9-3-4 system of education under the Universal Basic Education (UBE) was presented and replaced the Universal Primary Education (UPE) scheme in 2007. The scheme was initially launched in 1999 with the view of achieving the Millennium Development Goals (MDGs) by the year

2015. The educational systems designed under these schemes were geared towards the inculcation of skills that would enable the young learners in Nigeria to become self-reliant in their different societies. The schemes were introduced in line with the provision of the earlier and the current National Policy on Education in Nigeria.

This paper is significant because it provides information on the status of art education programmes at basic levels of education in Kaduna, Katsina and Zamfara states. The paper provides a framework for future planning and implementation of the art education programme. The study which is pertinent to educational development, can serve as a training manual of the (U.B.E.) 9-Year Basic Education, UBE Commission, Abuja.

The three (3) basic levels of education that constitute the 9-Year Basic Education, according to Mbahi and Nkom (2016), are

Lower Basic Education (Primary 1-3), Middle Basic Education (Primary 4-6) and Upper Basic Education (J.S.S. 1-3). The age intervals of the 9-Year Basic Education ranged between the age of ten (10) and sixteen (16) years, that is, primary 1 to J.S.S. 3 school periods.

A lot has been written by different authorities and researchers on the different systems of education in Nigeria. Etuk (2012) presented a paper on “Sociological Analysis in Nigeria’s Universal Basic Education (UBE)”. Palmer (2004), also, authored a book titled “Art Education for Tertiary Institutions”. Mbahi and Nkom (2016) recently made a publication on “Cultural and Creative Arts in 9-Year Basic Education”. Furthermore, Mohammed’s (2014) thesis was on “The Implementation of Cultural and Creative Arts Programme and Performance of Students in Junior Secondary Schools in Borno and Yobe states”.

In the same vein, Umar & Osamudiamen (2009) presented a paper on “Cultural and Creative Arts (CCA) Curriculum for 9-Year Basic Education: Challenges Ahead and the Way Forward”. Despite the contributions of such art educators, much has not been elaborated on the conditions of art education programmes at the basic level in any part of Nigeria, particularly in the area of this study. Art education programmes have been established in all the schools at basic levels of education in Kaduna, Katsina and Zamfara states.

The dilemma of this paper emanated from the fact that appraisal processes by means of differential paper presentations have not been considered, most of the time, in assessing the expected structural changes in art education programmes in the Nigerian institutions of learning. Consequently, the art education programme has not achieved substantial development by consideration of the

statutory documentation and provisions from the National Policy on Education. I strongly feel that it is not appropriate to bring in your submission under the introduction. You have not given any detailed presentation of your issues; yet, you jumped into presenting your view. This section will be appropriate if it comes under your recommendation or conclusion.

For example, the current art education programme under the Universal Basic Education (UBE) structural feature appears the same as the art education programme under the former Universal Primary Education (UPE). Despite the contributions of some notable art educators and historians; much has not been elaborated on the state of art education programme using the evaluation process. So, the paper sorts to narrate the art education programme through its historical and developmental changes in

Nigeria from 1914 to the present time using the appraisal process.

Issues Arising from the Educational Development

This paper is required because it is based on the policy statement made in the National Policy on Education (NPE) of 2012 and on the status of the art education programme at basic levels in Nigeria. The paper is, as well, necessary because it is in line with some of the recommendations and suggestions made by some researchers and policymaker on what to be done in order to achieve the objectives of the developmental changes of art education programmes at all levels of education in Nigeria. It is also important for the development of the current art education programme in Nigerian institutions of learning.

The cultural and creative programme is a synthesis of Fine/Applied arts, and performing art. The cultural and creative

art programme was introduced in order to attain the Millennium Development Goals (MDGs) by 2015 and the critical targets of the National Economic Empowerment and Development Strategies (NEEDS) Federal Government of Nigeria (FGN 2004). The objectives of this policy can be summarized as value reorientation, poverty eradication, job creation, and wealth generation.

According to Mohammed (2014), “....it became imperative to review and restructure the curriculum to ensure relevance to the dynamic human society and culture, and to respond to the global reforms so as to meet the demand of the present generation.” Another reason for the review was the need to achieve Universal Basic Education in training future generations of Nigerians in promoting the rich cultural heritage and creativity; and to properly equip young Nigerians with manipulative skills which

will make them self-reliant and job creation.

Over the years, the standard of art education has deteriorated. There are no sufficient art teachers, art rooms or even art materials for art practices. This has greatly contributed to children’s lack of interest in art. Up-till now art is not regarded as important as other school subjects like Mathematics, English, Social Studies and Science subjects. The paper, therefore, argues that:

1. Inappropriate use of art teaching methods in schools. Inadequacy of art teaching methods or lack of knowledge of teaching methods by primary school teachers has greatly hampered children’s creative abilities. Consequently, the children are not encouraged and motivated to enjoy the art lesson.

2. Time allocated to art lessons is too short and insufficient for proper teaching and learning to take place.

3. Materials are not enough for art teaching as such children cannot express their feelings properly through the use of local art materials.

In most schools, the content of art programmes was not made relevant to the needs, experiences and environment of the children. Oloidi (2003) puts it, thus:

Ideal curriculum should cater for the need of the individual child followed by the preparation for the world of work, the fostering of social development of the child and the stimulation of cultural awareness. It also mentioned that the curriculum should cater for the individual needs, the child's strength and weakness, likes and dis-likes, the individuals' interest and consideration for his possible future schooling. Therefore, preparation for life or future schooling is attached to the needs of the child.

The researcher agreed that, even now, the problems of art teaching do not differ from what it was before this time. Maru (2011) ascertained that educationists who agreed with art curriculum should possess artistic

ideas on how children learn and how the art-teaching process is made.

Nigerian Policy on Education supports Art Education (art and crafts) but in practice, it is always among the first component of the curriculum to be neglected during budgeting and implementation. Art Education in public schools being neglected by policymakers may be because research in art education has not convincingly demonstrated that it contributes to the academic performance of art students.

On curriculum issues, several scholars in art education have come up with related issues. Mbahi (2004) indicated that there was no approved syllabus for art in Nigeria prior to the 1973 seminar. Mbahi observed that despite the huge amount of financial resources expended on different curriculum workshops "the Nigerian Educational system has produced

individuals with little or no skills for National Development. Also, on National Policy on Education under the Chairmanship of Chief S. O. Adebayo around 1974, narrated the adoption of the British curriculum, which does not augur well for the Nigerian educational system. That was because its adoption was the mere transfer of curriculum that does not reflect progressive changes that took place within the societal context but rather of the British societal context in Nigeria. Fafunwa (2004) noted, "There has been a lack of continuity in curriculum development especially in art and crafts in Nigeria. Jean (2018) also emphasized that there should be a close relationship between the objectives of art teaching and the teachers' methodology and that what was responsible for the innumerable problems of art teaching in the contemporary time is the lack of clarity of

stated objectives the process and the methods of implementation.

Mbahi (2004) concluded that the major problem affecting curriculum implementation, among several issues today is that which they noted as a serious art education problem. Tyler's four ingredients of the curriculum are the objective, content, method and evaluations. It was believed that teachers must be exposed to what Akolo in Fafunwa (2004) has written. However, he noted that the content must be related to the culture of the child. Issues regarding the problem of curricular planning and implementation alongside educational funding and staffing, are still manifesting. There is a need for a close relationship between objectives which must be clear. The writer agreed that there is a lack of continuity in the curriculum development. There is, therefore, the need to review the existing art curriculum in schools.

Irivwieri (2009) described the attempts made in Nigeria by art educators, especially during conferences of art teachers to resolve art problems in schools.

Such conferences were held in 1970 and 1972 and recommendations were made to the Federal Government of Nigeria on how art education programmes can be effectively improved. Among others, the following recommendations were made:

1. that, adequate facilities and staff should be provided to facilitate the teaching of art at primary school levels;

2. that, art should be made compulsory in all schools at the primary and teacher training colleges;

3. That, the primary school teachers are taught techniques of improvisation to utilize basic teaching aids. Art teacher specialists are to be appointed by State and Federal Governments to supervise such art programmes as consultants in schools;

4. touring exhibition of artworks were also recommended to go around schools for comparative experience and aesthetic appreciation:

5. the subjects to be taught in art programmes in school are to include:

- i. drawing and painting;
- ii. pattern – making and design;
- iii. three-dimensional works such as wood carving and so on;
- iv. Light crafts – basketry, ma making and so on.

Irivwieri (2009) explained that art programmes in Nigeria originated in order to perpetuate such fundamental objectives of education as well as to inculcate into children basic skills such as “the skills for seeing, touching, hearing, feeling and the development of taste through their manipulation of colour and other art materials.” In addition to other creative media such as musical instruments and so on. Irivwieri (2009) went further to state that “if the recommendations of previous art education conferences were effected the situation of art education in school would have been improved”. Many

scholars have conducted various related studies concerning the nature of art education in primary and post-primary institutions.

Existing literature in educational psychology reveals that teachers and their teaching methods have a tremendous effect on the child's learning process. This challenging job, according to Eke (1992), has often met with failure due to what he describes as "inappropriate curriculum and lack of adequate tools" Many schools do not have the required number of teachers and there are no teaching aids to facilitate successful teaching and learning. Faced with such depressing problems, teachers often find themselves in a superficial relationship with their pupils. It is necessary for the art teacher to be acquainted with children so that the children will acquire creative art experience. This according to Eke (1992) is because the art teacher needs to know

the ways that a good programme would positively influence the overall development of the child. This is with the aim of achieving both immediate and long-term objectives. Eke (1992) supports the above expressed view that in any functional programme, the curriculum and objectives should centre on the needs and aspirations, or problems of the society in question. This is because; the school is established to cater for society as such the objectives of the school must be tailored towards meeting the need and aspirations of society.

Summary and Conclusion

The discussion summed it up that art education should be concerned primarily with the development of understanding, appreciation and abilities pertaining to art itself. In addition, it should take into account the personal and societal, social objectives of general education as far as these ends are capable of being realized

through the experience of art. The author further author that the nature of art education in secondary schools is to further the growth of individuals in an effective and rich environment. This is with the aim of encouraging them to create a society where such living is possible for all.

The expressed views and suggestions of the author is, art instruction should not be devoid of our heritage, past and present experiences which need to be embraced. Art should enhance the universal realm of value as well because “art should not be seen as a mere self-expression but also a discovery. Ideas and feelings could be merged with concrete materials through the means. Art instruction should not be focused only on developing skills for leisure activity alone but also on the general enrichment of experience. These experiences will enable the learner to develop aesthetic tastes that will affect his

or her daily living. The author emphasizes that; art should be a means of promoting artistic heritage in Nigeria. This can be achieved through inculcating artistic skills.

The various results showed that the teaching strategies employed were not only unrelated to the national aspiration but also ineffective. Iriwieri further mentioned that there is the need for constant review of the content and methodology of the existing art curriculum in schools so that art content will not only be directed to suit the challenging needs of Nigeria but will also suggest alternative methods and materials for the successful teaching of art education. However, despite these recommendations, the problems in schools persist.

Art education is not a process of making artists out of everybody. It is more of an exercise which trains the eyes to see in

greater detail, the ears to hear in even greater depth, the hands to cut and shape things exactly and in a confident manner and the mind to extend the dimensions of texture of the natural world or plan in innovative varieties for this art education course should become a compulsory subject in primary schools. Studies in the

area of art education have pointed out the flaws that art education is necessary not only for creative development but for preparing students for their place in society. Art education caters for the material well-being of students through their aesthetic experience, and contact with ideas, symbols and art forms.

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EFFECTS OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ON TEACHING AND LEARNING OF GRAPHIC DESIGN

IDOWU, K.O, SANGOTOWO, A. O. & OLABIYISI, M.O

Abstract

The indispensability of a new technology to teaching has necessitated the use of a new approach in our current educational system, for efficient and effective outcomes. The teaching and learning of graphic design for instance cannot be effectively administered and achieved without the use of information and communication technology (ICT). Similarly, utilization of such ICT equipment/apparatus is often determined by the status of individuals, and policymakers which is entirely the role of government in power. Therefore, this paper examines the technological effect of Information Communication and Technology on the teaching and learning of graphic design. It further reveals the concepts of both graphic design and information communication technology, significance, and challenges and proffers possible solutions to the identified challenges.

Keywords: ICT, Teaching, Learning, Graphic Design

Introduction

Information Communication Technology (ICT) is very essential and paramount nowadays to the teaching and learning of graphic design. Teaching and learning is the process of imparting and receiving knowledge from one source to another in a

given period of time. It may be in a traditional setting, non-formal, or in a formal setting of education. In view of the above, one could ask what education is. Education is the most important agent of change and the bedrock of

industrial development as well as the socio-economic growth of a nation. Education can also be regarded as the greatest investment a nation can make for the quick development of social, economic, political, technological, and human resources. Most nations of the world give education a high priority in their developmental agenda. For instance, countries like the United States of America (USA), Britain, including Japan among others have embraced and recognized technology as a means of realizing economic independence and self-reliance.

The teaching and learning of Graphic Design in all tertiary institutions in the past and present (Digital Era) are incomparable because during the seventeenth, eighteenth, and nineteenth centuries; the methodology adopted in the teaching of graphic design was rather archaic (Old). Since the 20th century, Information Communication Technology (ICT) brought and served as an agent of change in the way we live, teach, learn, and a

host of others. According to Akindolu (2002) in Mohammed (2013), the first time computer appeared in Nigeria was in 1963 when it was used to process the national census data. He stress further that some companies started the use of computers from that time. In recent time, teaching and learning has gone beyond the way people see it because new technologies have evolved and this has brought innovation in teaching and learning through the development of Computer (Software and Hardware). If one wants to consider fields like Banking, Engineering, Architecture, and Visual Arts in which graphic design is one of the major courses; the effect of ICT across the past two decades has been enormous. The way the above mentions fields operate currently is quite different from how things were in the past. Looking at graphic design, ICT seems to have a great impact and change the teaching and learning of graphic design. Adeyefa, (2012), opined that the educational

system cannot change in a desirable way unless the teachers introduce technology devices into the teaching and learning process of technical and vocational education courses in which Graphic Design is one of the courses. In view of this assertion, it's pertinent for a teacher to be computer literate so that the expected gadgets will be used to impart knowledge to the learners.

Concepts of Graphic Design

Graphic design is the art or profession of visual communication that combines images, words, and ideas to convey information to an audience, especially to produce a specific effect, Jordan, (2018). In other words, graphic design is a communication design that conveys ideas through visuals and designs. These definitions present graphic art as an interdisciplinary branch of design that deals with and revolve around the definition of the problem and the determination of objectives for decision-making through creativity, innovation, and lateral thinking

using digital tools and transforming them for proper interpretation. This activity helps in the optimization of graphic communications.

Graphic design can be used to perform different tasks in the same area of practice regardless of areas of application or utilization. This includes Branding, photography, three-dimensional modeling (3D), animation, programming, signage, and a host of others. All these can be used during teaching and learning to enhance the presentation of subject matter to the learners. Graphic designs help in effective communication with the populace as visual aids are better at communicating ideas to the public. A creatively designed, informative graphic or picture when compared to only words, can communicate ideas and information more effectively and graphic designs are mainly to communicate. Primarily, graphic design is a visual communication; it entails typography, images, and colours to represent certain ideas

or messages. It blends photography, illustration, and motion graphics together to create appealing designs which can capture the attention of the viewers (Velocity Consultancy 2020). According to Interaction Design Foundation (2002), graphic design is defined as a craft where professionals create visuals to communicate messages by applying visual hierarchy and page layout techniques, designer uses typography and pictures to meet users' specific needs and focus on the logic of displaying elements in interactive designs to optimize the user experience.

Jackson (2019), opined that graphic designing also known as communication design is a skill that focuses on interpreting the message visually. It can be physical, digital, or anywhere in between. He further explains that it is the art of achieving certain objectives with the use of images, symbols, or even with words. It helps in communicating visually and expressing

concepts and ideas aesthetically using various graphic elements and tools. Nediger (2020) expatiated that graphic art is a visual communication that involves the use of visual elements to convey messages, inspire change or evoke emotions. It is on one part a communication design, that is, creating a message that educates, motivates, and engages, and on the other graphic design, using design principles to communicate that message so that it becomes clear and eye-catching. Nediger explains further that effective visual communication strategies include using data visualization to show the impact of work, using shapes and lines to outline relationships, processes, and flows and among others, using desirable colours to indicate the importance and draw attention.

Meggs (2005) buttressed the notions of Nediger (2020) and explained that the creative minds that create graphic images make use of colours, textures, contours, and shapes that communicate not just messages

but also emotions, attitudes, experiences, lifestyles, and concepts. Like art, graphic representation has the power to reach beyond language, class, sex, education, geography, and age so as to reach a much larger audience. They proved further that graphics are also easily identifiable and memorable, often leaving a lasting impression on viewers that words alone are unable to compete with. In view of the assertion, graphic art as a means of communication could be described as visual communication and it's a form of communication that relies on or has to do with visual cues to transmit a message to people.

Graphic arts design is the art and profession of selecting and arranging visual elements such as typography, images, symbols, and colours to convey a message to an audience (Meggs, 2005). It can also be expressed as visual communication. It emphasizes its function of giving information to users. There is no gainsaying, therefore,

that graphic arts design is a collaborative discipline that involves the use of photography and illustrations to produce a desirable design. The American Institute of Graphic Arts cited in Malvik (2020) sees graphic arts as the art and practice of planning and projecting ideas and experiences with visual and textual content. This explanation stresses the fact that graphic design communicates certain ideas or messages in a visual way. These visuals can be as simple as a business logo, or as complex as page layouts on a website. In light of the above definition and functions of graphic design, one can conclude that designing graphics without the use of either the computer or its software/application will be very difficult to produce befitting and aesthetic artworks that catch viewers' attention.

The above assertions cannot be easily made without the use of Information Communication Technology equipment (Computer software and hardware) and

before effective teaching and learning of graphic design can take place, the ICT apparatus is needed to be in place as a tool for teaching and learning in other to complement the explanation given by the teachers with the concrete example thorough demonstration, manipulation and the use of different tools in a computer such as keyboard, mouse, cursor key etcetera. In view of the aforementioned, if the ICT were not put in place; teaching and learning of graphic design may not be communicable. In line with the view of Ononogbo (1990), Information and Communication Technology is considered a revolution, which has penetrated almost all fields of human activities, thus, transforming our economic and social life. ICT in this sense refers to the use of skills such as the Internet, PowerPoint, and Microsoft Word, in arranging communication and information processes and devices to obtain, analyze, store, recall, and transmit accurate

information at a very high speed from one place to another.

Concept of Information Communication Technology

The concept of information Communication and Technology was explained by different scholars with different points of view. For example, Ademulegun (2006) describes ICT as the item of equipment (hardware) and computer programme (software) that allow us to access, retrieve, store, organize, and manipulate information while Akinde and Adagunodo (2000), asserted that ICT are mechanisms by which a wide group of audience can be reached especially with information that can make meaningful contributions to form decision making in government, banking sector, Oil Company, manufacturing, commerce and education sectors.

Thomas and Ranga (2000), opines that application of computer and other communication technologies in education is divided into categories: Pedagogy through

the application of ICT has the advantage of heightening motivation, with more effective learning with the aid of various components of ICT, also helps to recall previous learning, providing new instructional stimuli activating the learner response. Ikelegbe (2007), categorized the different kinds of information communication technologies into five basic types:

1. **Sensing Technology:** These are devices that help to gather information from the environment and translate the information into a form that can be understood by the computer. Examples are data collection devices such as scanners, computer keyboards, fax machines, computers, and mouse. These are technologies that tie together and facilitate communication between the various kinds of technologies.
2. **Communication Technologies:** Facsimile machine, landed cellular

telephone, computer networks. A network is a group of devices that are linked together, example is the private branch exchange (PBXB) which is also known local Area Network (LAN) which covers several floors within a building or an entire building or even a campus in case of the school environments. The Wide Area Network (WAN) covers a larger geographical area and uses telephone lines, microwaves, and satellite communication networks.

3. **Analyzing Technologies:** The computer hardware and software come with this category. The computer takes information from sensing and communication devices, then stores and processes the information.
4. **Display Technologies:** These are essential output devices, they make processed data available to humans

for use either through loudspeakers, printers or display screens like photocopy machines.

5. **Storage Technologies:** This is another important category of ICT that helps to store large quantities of information in a form that can be easily accessed. This is made up of secondary storage devices such as magnetic tape, magnetic disc, optical disc, Read Only Memory (CD-ROMS), VCDS, and Video Compact Disc

In recent years there has been an increased emphasis on individualized programmed instruction and Information Communication and Technology to enhance and facilitate teaching and learning at various levels of education. The feasible application of microcomputers in the Nigerian classroom for teaching and learning is gradually recognized as a result of its importance and educational appropriateness.

Significance of Information Technology in the Teaching and Learning of Graphic Design

1. It serves as the link to accessing both the local and globally relevant and current information in the teaching and learning of graphic design for both teachers and learners.
2. It can be used to enhance the creative ability of artists to create designs using a computer-aided system with accuracy.
3. The use of computer software like word processing, desktop publishing, Corel-draw, Adobe Photoshop, and others software makes the creation of graphic design easier and faster than before.
4. Provision and use of interactive teaching packages available for different functions during teaching and learning make teaching and learning more interesting.
5. Through the ICT/Computer system, messages pass across to

- learners are clearer and understood due to the availability of the visual/picture representation rather than word alone.
6. It allows the teachers to pass on information to a larger number of learners within a given period of time with the use of different applications.
 7. It encourages and makes virtual teaching and learning possible without being under four wall of the classroom

Challenges Facing Teaching and Learning Graphic Design through Information Communication Technology (ICT) in Nigeria Institutions

With all the benefits of Information Communication Technology to education, there are hindrances to its utilization in achieving the aims and objectives, especially in the teaching and learning of Graphic Design. These hindrances are the following:

1. **Poor Funding of Vocational and Technical Education:**
Any Nation that is focused on (technological) development must be ready to invest greatly in vocational and technical education which serves as an umbrella to Graphic design. Efforts also need to be made for adequate provision of adequate, effective, and current teaching materials for both teachers and learners.
2. **Inconstant Power Supply:** Poor and unstable power supply can damage ICT programmes, the adequate and stable power supply is vital for Information Communication Technology facilities/equipment to be functional and have a positive impact on teaching and learning.
3. **High-Cost Rate of Information Communication Technology Equipment/Exchange Rate:**
Nearly all ICT equipment is imported from overseas and this

makes it difficult for average or poor teachers and learners to afford due to high cost in price.

4. **Unavailability of Professional Technicians:**

Most ICT equipment malfunctions and is damaged because of the epileptic power supply in nature and without a professional technician to handle and give proper maintenance to the ICT equipment. In line with this fact, many ICT equipment became scrap.

5. **Poor Maintenance Culture:** Both teachers and learners are subjected to take proper care of the ICT equipment made available to them, but due to carelessness and uncared attitude of the user, many pieces of equipment are exposed to dust, high-temperature condition, flipping of water and many more.

6. **Possible Solution and Recommendation**

1. Government needs to pay adequate attention to education in general through adequate funding, provision of necessary current ICT equipment, and seminars/workshop/training for the teachers on the use of ICT gadgets, there is a need for the establishment of monitoring team/personnel to ensure that funds are been used adequately and effectively.
2. Constant Power Supply: Nigeria's power sector needs to be revived so that the rate of damage to ICT gadgets will be minimal. This call for the attention of the government to put an end to the epileptic power supply.
3. Cost Subsidizing of ICT equipment should be made by the government and non-governmental agencies to promote the teaching and learning of graphic design.

4. Philanthropists and non-governmental agencies should assist the government to focus and finance Graphic Design education with the provision of ICT equipment, seminar/training, and other relevant assistance to both teachers and learners because Vocational and Technical Education is the bedrock of a nation.
5. Professional Technicians need to be in place: Government needs to employ professional technicians to handle and fix any problems that may occur, so to assist both teachers and learners to be safe from losing their ICT gadgets to the hand of trails and error technicians.
6. Teachers and Learners of Graphic Design need to acclimatize with the new technology of ICT to enhance both the teaching and learning of Graphic Design in Nigeria Institutions.

Conclusion

Information Communication Technology (ICT) resources are essential in education and necessary for all professions specifically in the teaching and learning of graphic design. No matter what career one decides to take up in life, there is an almost inevitable need to adopt ICT as a teaching resource to understand the subject matter being taught or learned. This will enhance and boost the standard of teaching and learning of graphic design as opined by Jordan (2018) that graphic design as an art or profession of visual communication that combines images, words, and ideas to convey information to an audience, especially to produce a specific effect. Conclusively, ICT is key for conveying ideas through visuals and design, at the same time making use of digital tools to transform the ideas for proper interpretation.

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EXAMINING THE CAPABILITY AND CHARACTERISTICS OF TWILL WEAVE FABRIC WITH DIFFERENT WEAVING MANUFACTURING

RISHANTE, P. S

Abstract

This examination was carried out to advance the fabric structure for the array regarding the capability and properties of fabric woven on a sword carry-less weaving machine by utilizing twofold yarn with twill weave patterns. Add up to seven unique sorts of weaves viz. plain, 2/2 matt, twist rib, 3/1 twill, herringbone twill, satin, and crepe were concentrated to research the solace and different properties. Cotton yarn was utilized as a part of the twist for all weaves. Cotton, polyester/cotton, and bed-look polyester yarn was utilized as a part of the weft to research the impact of weft material on fabric properties. Completing therapeutics like burning, desizing, mercerizing, fading and pitch completing were done on the fabric. All the fabric examples in the dark and in a completed state were tried in standard climatic conditions for capability attributes. Subsequent to testing acquired outcomes were dissected utilizing Minitab factual programming. It was discovered that a list of interlacements assumes an imperative part in changing fabric properties. Completed plain weave fabric with P/C mixed weft will offer ideal execution regarding the durability and serviceability of the array.

Keywords: Capability, Twill Weave, therapeutics, and Polyester/Cotton mixed.

Introduction

Fabrics are a vital piece of human life. The essential part of the attire is to frame a layer or layers of obstructions that ensure the body against unacceptable physical conditions. This insurance of the body satisfies a number of capacities, such as keeping up the correct warm condition to the body, which is basic for its survival, and keeping the body from being harmed by scraped spots, radiation, wind, power, concoction, and

microbiological substances. Nassi (2012) stated that, elements of attire unmistakably demonstrate that it assumes a critical part at the interface between the human body and it is encompassing in deciding the subjective impression of the solace status of a wearer. Today, clothing fabrics are relied upon to meet all prerequisites identified with comfort, and medicinal services and handle simple care properties, and in addition execution. This has driven analysts to grow new

materials to furnish fashioners with cutting-edge devices for their particular plans. The present pattern in the industry is towards enhanced wear comfort. Various reports have demonstrated that the greater part of the questions gotten by the technologist from the purchasers are connected somehow, to the solace parts of the substrates and thus normal intentions are traveling toward assist enhancements.

According to Anderson (2007), numerous specialists are growing new crude materials that improve the capability of fabric. Woven textiles are intended to meet the necessities of their end users. Their quality, thickness, extensibility, porosity, and durability can be differed and rely on the weave utilized, the string dispersing, that is the number of strings per centimeter, and the crude materials, structure (fiber or staple), direct thickness and curve components of the twist and weft yarns. From woven fabrics, higher qualities, and more prominent strength can be gotten than from whatever other fabric structure utilizing interweave yarns. Structures can likewise fluctuate to create fabrics with broadly extraordinary properties in the twist and weft headings. The property of any fabric created relies on the constituent strands of

material, yarns, and the fabric structure and how every one of these variables collaborates with each other. A definitive point of any clothing fabric is to fulfill the wearer and make him feel great (Hulle 2014). Consequently, with regard to the above, it is worth examining the solace properties of various woven fabrics. This investigation focuses on the various comfort, and characteristics of different woven structures, woven using double yarn with twill weave patterns, and a shuttleless weaving machine. A total of 7 different types of weaves viz. plain, 2/2 matt, warp rib, 3/1 twill, herringbone twill, satin, and crepe were studied to investigate the comfort and other properties. Cotton yarn was used in warp for all the effects of weft material on fabric properties. Finishing treatments like singeing, de-sizing, mercerizing, bleaching, and resin finishing were carried out on the fabric. All the fabric specimens in grey as well as in finished condition were tested in standard atmospheric conditions for properties like crease recovery, abrasion resistance, and tearing strength. After the testing was obtained, results were analyzed using Minitab statistical software.

Materials

Warp and Weft Yarns

100% cotton yarn was used as warp for all the fabric specimens and the same yarn was used as one of the weft. 100% cotton (same yarn that was used in warp), 80:20 blended cotton/polyester, and 120 denier cot look polyester multifilament yarn was used in the weft. Raymond Zambaiti LTD. Kagal provided 100% cotton and P/C blended yarn and cot-look polyester yarn was procured from Reliance, Ichalkaranji. All weft yarns were selected such that their linear density is nearly equal. Characteristics of these yarns were tabulated in Table 1.

Methods

Chemicals

Chemicals like Alpha amylase enzyme, wetting agent, sequestering agent, and deformer were used for the de-sizing of fabric. NaOH was used for mercerization. H₂O₂, peroxide stabilizer, and soda ash were used for the bleaching process and Saralink ULF Resin, Acetic Acid, Extra soft Silicon softener, Expocil CEL Antislipping agent, Macl₂, Sarasoft EP Tear improver, and JET-B Wetting agent were used for finishing treatment of fabric. Raymond Zambaiti LTD. Kagal provided all these chemicals.

S/no	Yarn Characteristics	Cotton	Cotton/Polyester	Polyester
1.	Count (Ne)	42.14	42.3	44.29(120D)
2.	Tensile Strength (g/tex)	16.82	24.65	26.37
3.	Elongation (%)	3.45	7.57	14.95
4.	Hairiness Index	3.1	4.54	-
5.	Unevenness (U%)	7.63	10.82	-
6.	Twist per Inch	27.2	22.3	-

Table 1: Characteristics of Yarn

As mentioned earlier 100% Raymond Zambaiti LTD. Kagal provided cotton and P/C

weaves. Cotton, polyester/cotton, and cot-look polyester yarn were used in the weft to investigate blended yarn and cot-look polyester yarn was procured from Reliance, Ichalkaranji. All these yarns were double yarns. After procurement, all yarns were tested for different properties such as linear density (count), single yarn strength, hairiness, unevenness, and level of twist. After testing, fabric with double yarn in warp and weft and ends/picks having a 2:1 set ratio was manufactured on a shuttle-less weaving machine with different weaves. The gray fabric was processed and finished. Testing of gray as well as finished fabric was carried out to find out different fabric properties.

Fabric Manufacturing

Weaver's beams were prepared on Suzuki 4 NAS-M6 warping machine running at 800 mpm. After getting weavers beam, fabric samples with double yarn in warp and weft having 2:1 set ratio i.e. 120 ends and 60 picks

were manufactured on the Sliver Vamatex rapier weaving machine. The variable factors were fabric weave and weft yarn. Fabrics with seven different types of weaves were woven on the rapier weaving machine. Weaves include the basic weaves like plain, 3/1 twill, and satin along with their derivatives like 2/2 matt, warp rib, herringbone twill, and crepe. Fig. 1 depicts the different fabric structures, which were woven. The 100% cotton yarn was used in the warp for all the fabric specimens. 100% cotton yarn, 80:20 blended cotton/polyester yarn and cot-look polyester multifilament yarn were used as weft for all the weaves. Each weave was woven using all three types of weft yarns separately. With every possible combination, 21 fabric specimens were manufactured. After manufacturing the fabrics, finishing treatment was given. In brief, the finishing treatment was explained in the following points. All the grey, as well as finished fabric specimens, were characterized for different properties. All the fabric samples were manufactured in M/S Raymond Zambaiti LTD. Kagal.

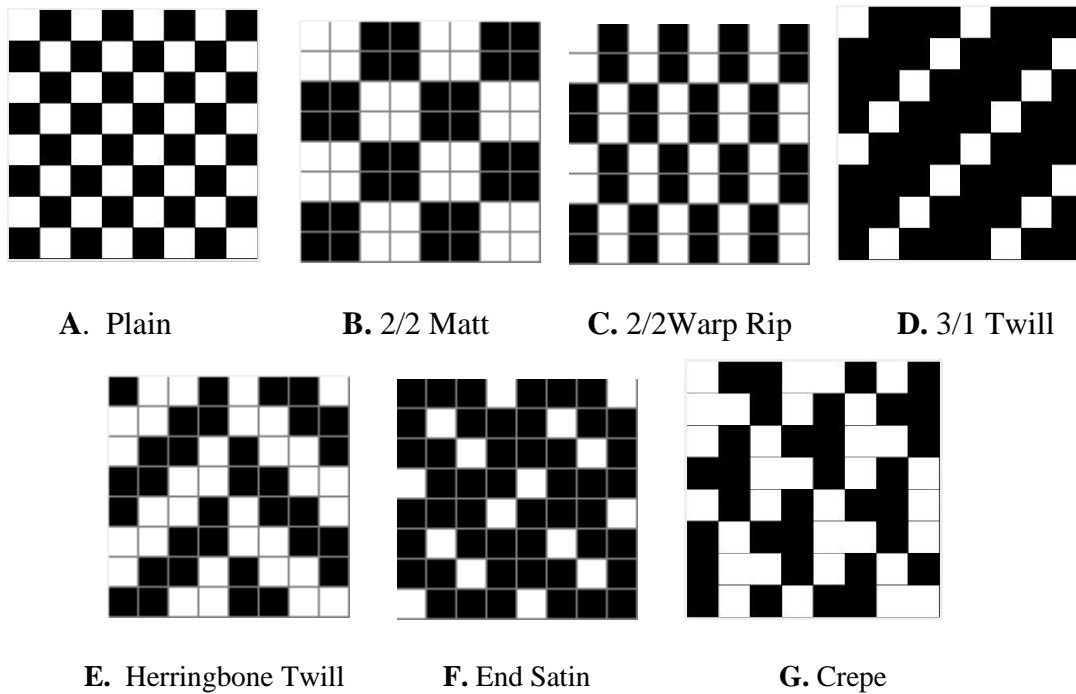


Figure 1: Structural Woven Patterns.
Source: Rishante P. S.

Fabric Processing

After manufacturing the fabric with all possible combinations. All the manufactured fabric samples were subjected to finishing treatments like singeing, mercerizing, bleaching, and resin finishing. Singeing was done by gas singeing method at 80 m/min with 12 bar flame intensity. After singeing, scouring of fabric was carried out. Scoured and dried samples were mercerized using NaOH under tension and 5-6 hot as well as cold wash was given and fabric rolls were kept rotating to achieve uniform

mercerization. Peroxide bleaching was carried out on mercerized fabric at 85°C for four hours and a resin finish was applied. Resin finishing was carried out by the Pad-Dry-Cure method using a stenter at 60 m/min speed. The finishing temperature was set to 140°C while padding dry-cure. Details of bleaching and finishing were reported.

Testing

Strip Strength

The raveled strip tensile strength test of fabric was carried out according to ASTM D5035-

11 on Instron- 5565. Following a suitable sampling technique, warp and weft strips were cut using the given template. Strings from both sides of the fabric strip were raveled to get a piece of precisely 5 cm in width. At that point, raveled strip was tried on Instron pliable testing machine with 20 cm gage length and at 300 mm/min test speed.

Tearing Strength

The tearing quality of the fabric was tried on a falling pendulum sort Elmendorf tearing quality

analyzer as indicated by ASTM D1424-09 standard test strategy. Constraint required to spread a tear beginning from a cut in a woven fabric was measured by getting a handle on fabric (300×60 mm in measurements) with a mobile clip on one side, and by a settled brace on the opposite side, with the fabric split focused between the two cinches. At that point, as the pendulum was discharged, the example was torn at the part. The tearing power, in grams, was perused specifically off the graduated scale on the pendulum.

Abrasion Resistance

The abrasion resistance of fabric was assessed utilizing Martindale's abrasion resistance analyzer and tried by ASTM

D4966. A round fabric example of 38 mm measurement was rubbed on zero number ordinary clean paper by the multidirectional development of the example holder against the grating surface. Every example was stacked consistently for appropriate rubbing activity. A weight of 9 Kpa was connected to every example.

Crease Recovery

Wrinkle recuperation of fabric was tried on Shirley wrinkle recuperation analyzer as indicated by IS6359. In this test, the examples of measurement 40 mm × 15 mm product collapsed in two, the finishes being held by tweezers. A large portion of the examples were collapsed up close and personal and half of them were consecutive. The examples were then set under a 10 N stack for 5 min. The following 5 minutes example was kept for unwinding (recuperation) in emptied condition for 5 minutes and after that quickly exchanged to the example holder of the measuring instrument. One leg of the example was embedded similar to the stopping board of the example holder and another end was free and permitted to fall under its own particular weight. The instrument was balanced constantly to keep the free appendage of the

example vertical. The wrinkle recuperation point was measured, by perusing the scale when the free appendage was vertical. The higher the wrinkle recuperation point higher will be the wrinkle recuperation of the fabric.

Result and Discussion

Tensile Properties

The tensile behavior of woven fabrics is known to be influenced by their sett and development (Jeon et.al. 2003). In this examination, malleable properties of woven fabrics were portrayed by fabric breaking burden and prolongation.

Strip Strength

Tensile strength has been acknowledged as a standout among the most vital qualities of woven textiles. Tensile strength is characterized as a most extreme load that a test example will continue when subjected to uniaxial tensile stacking. Nassi (2021) noted that, the strength of a fabric depends on the strength of constituent yarns, as well as on the yarn and fabric structure and numerous different components. The elements, which have an impact on the tensile strength of fabric other than yarn strength, are yarn material, yarn fineness, number of finishes and picks per unit length, and weave plan.

The impact of weave, weft sort, and compound process on warp and weft way strip strength of fabric as shown in fig. 2 and fig. 3 separately. It can be plainly construed frame Fig. 2 and Fig. 3 that weave structure profoundly affects fabric breaking load. In all cases, plain structure and its subsidiaries demonstrated the most noteworthy breaking load taken after by fabrics with crepe, twill weaves, and satin weaves separately. Satin weave set its position at the base of the rundown of tensile strength. At the point when the fabric is extended in, one course i.e. at the point when fabric was subjected to a uniaxial stack, at first the pleat toward that path decays. Fabric is generally simple to extend amid crease measurement. From that point onward, the yarn material starts bearing the heap that would trim down the expansion of the fabric. Henceforth, the more pleat in the fabric, the higher will be the fabric's strength. Having a higher record of interlacement and lower coasts, plain weave fabrics are more tightly and minimized, having the most extreme crease which is the principal explanation for the high tensile strength of plain weave fabrics. The yarns are not held immovably in twill, crepe, and satin weave structures as in the plain weave. The tensile strength of satin fabrics is minor than

crepe and twill weave, this is principally because of bigger buoys in the weave structures. Kaynak (2008), noted that; polyester weft fabrics are having a most noteworthy tensile strength in contrast with cotton and cotton/polyester fabrics. This is on account of the characteristic strength of polyester multifilament yarn being higher than that of cotton and P/C mixed yarns. However, if there should be an occurrence of polyester weft, in all different cases, the warp path strength of fabric was observed to be

more than that of weft way strength. As 2.1 was kept setting the ratio of warp and weft, in the fabric development the nearness of closures is more than the picks. So more load-bearing segment was available in warp heading. Consequently, fabric strength in warp course is more than that of weft bearing. In any case, the strength of polyester and P/C mixed weft is higher than that of cotton warp. Thus, weft way strength must be more prominent yet the impact of denser warp is more unmistakable for the situation.

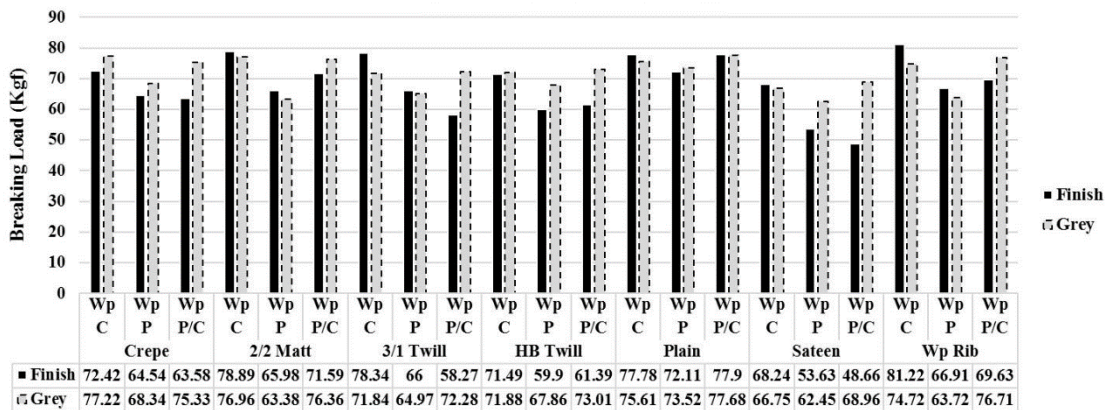


Figure 2: Effect on warp way strip strength

Source: Rishante P.S

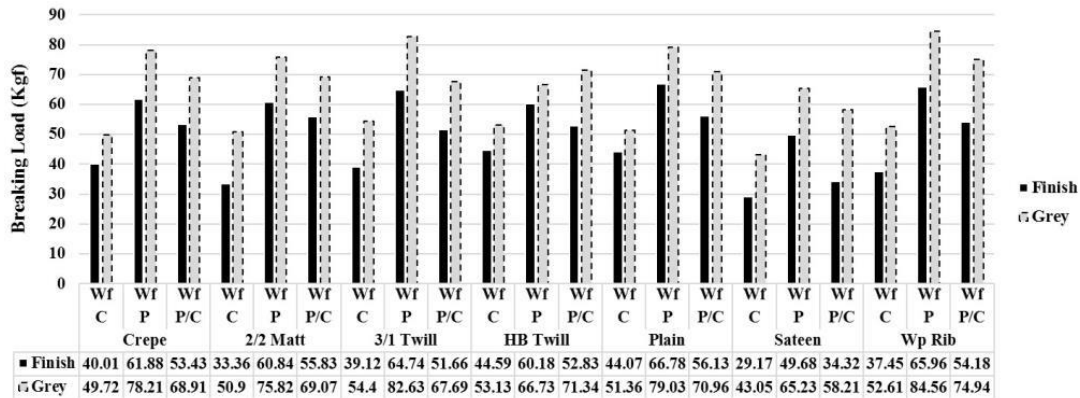


Figure 3: Effect on weft way strip strength

Source: Rishante P.S

Elongation

Extensibility alludes to the degree to which a fabric will increase in length under pressure. Diverse weaves have distinctive degrees of extensibility. The measure of pleat inside the fabric development assumes a part in deciding the extensibility of a fabric. At the point when the uniaxial stack was connected to the fabric, the fabric begins de-pleating first. Fabric is generally simple to extend/stretch in its pleat measurement. From that point forward, the yarn material starts bearing the heap that would stop the expansion of the fabric. The higher the number of interlacements per unit zone, the lower will be the buoys, and the more noteworthy will be the crease. Likewise, higher pleat prompts higher prolongation. As

a rule, the more drawn out the buoys inside the development the less extensible the fabric will be. A plain weave has the best number of interweaving focuses and most minimal buoys in a given region, and in this way has the most elevated level of the crease. Consequently, fabrics with plain weave structures are related to higher breaking lengthening taken after by crepe, twill weave, and glossy silk weave individually (Hulle 2014). A similar pattern was found in all cases. From Fig. 4 and Fig. 5, it can be obviously observed that in a large portion of the cases, polyester weft fabrics have the most noteworthy breaking stretching taken after mixed weft. Fabric with cotton weft indicates most minimal stretching esteems. The higher stretching of polyester weft

fabrics can be attributed to the higher lengthening of polyester multifilament weft. The intrinsic prolongation of cotton weft was lower than that of polyester and mixed weft. Subsequently, their fabrics have demonstrated lower breaking stretching. The breaking expansion of fabric up weft bearing was more in all cases than that of warp course. This is on the grounds that the polyester and P/C mixed weft yarns have fundamentally higher breaking prolongation

than that of cotton warp. Preparing treatment increases the breaking prolongation of fabric. Pollutions like earth, wax, and so forth were expelled from fabric in the wake of completing treatment. Which increases the portability of strands and yarns in fabric structure. Which might be the purpose for the increased augmentation of completed products. Notwithstanding, this impact is not noteworthy.

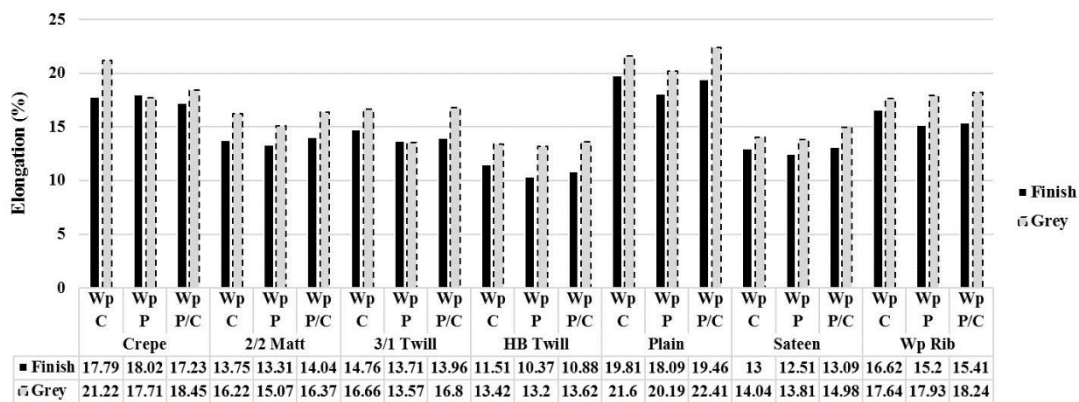


Figure 4: Effect of warp way elongation

Source: Rishante P.S

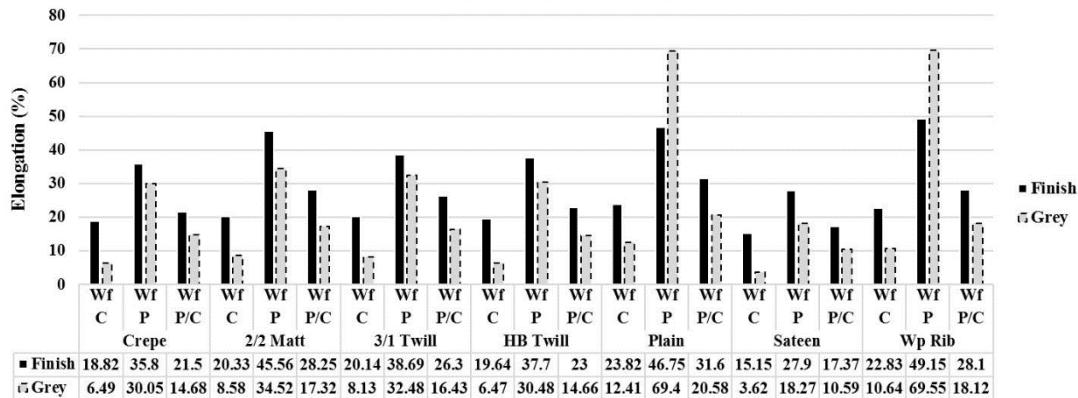


Figure 5: Effect of weft way elongation

Source: Rishante P.S

Tearing Strength

Tearing is a standout among the most well-known sorts of disappointment in textile fabrics and decides the durability of fabrics. The tear resistance is the strength parameter, which portrays the textile item for its imperviousness to external mechanical powers. The impact of weave sort, weft sort, and compound preparing on warp way and weft way tearing strength of the fabric was as appeared in fig. 6 and fig. 7 separately. The simplicity with which a fabric tear is reliant on two factors: the measure of yarn slippage or versatility of the yarns inside the fabric development and the number of yarns, which will bear the heap.

These two factors are dictated by the record of interlacement. The more noteworthy versatility or the straightforwardness with which the yarns can move, the harder it is to tear the fabric. The higher the record of interlacements, the lower will be the buoyancy and the lower strength of the fabric. What's more, silicone conditioners give better tear strength to the fabric. In the vast majority of cases, tearing strength will be the portability of yarns, which prompts bring down the tearing strength of the fabric. Higher tearing strength was related to satin weaves taken after by twill, crepe, and plain weaves individually. Celik et.al (2010) observe that, higher tearing strength of satin weaves might be identified with the more drawn-out pads in

this kind of fabric, which make yarns to be free of tearing burden. Out of every one of the weaves under examination, a plain weave will tear the least demanding.

A plain weave is a tight development having a minimal measure of inside slippage or yarn portability. What's more, just a single yarn bears the heap when the fabric is torn. Satin and herringbone fabrics have looser development. The looser development will be harder to tear since it will take into consideration more inward versatility or yarn slippage. The tearing strength of polyester weft fabrics was observed to be higher, trailed by P/C mixed weft and cotton weft fabrics. The purpose for the higher tearing strength of polyester fabrics might be related

to the higher tensile strength of polyester weft. Free of weave sort, weft, and handling, tearing strength in warp bearing was essentially higher than that of in weft course. This is a direct result of the 2:1 setting ratio of warp and weft. In a given region number of finishes are more than the number of pics consequently more prominent the number of yarns will bear the heap in warp heading, and subsequently it is harder to tear the fabric in warp course. It was discovered that the substance preparation had a constructive outcome on the tearing strength of the fabric. The activity of the Sarasoft EP tear improver utilized while completing the treatment of the fabric enhanced the tearing of the completed fabric was essentially higher than that of dim fabric.

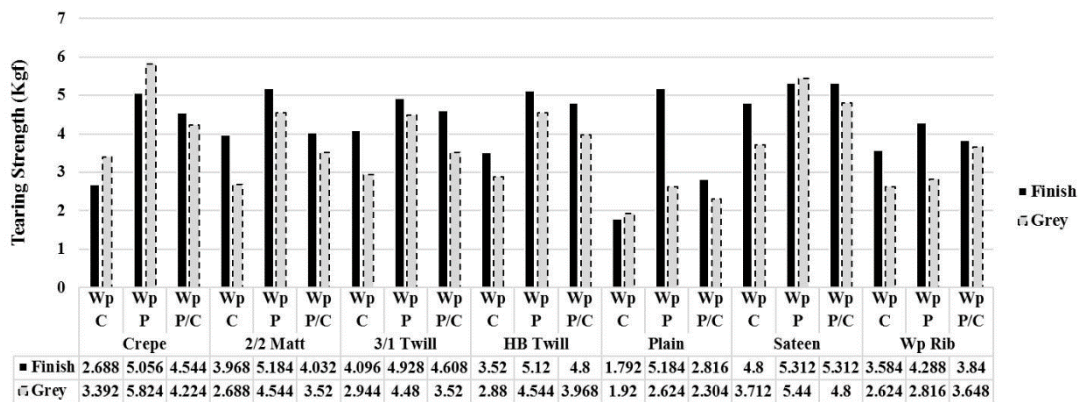


Figure 6: Effect of warp tearing strength

Source: Rishante P.S

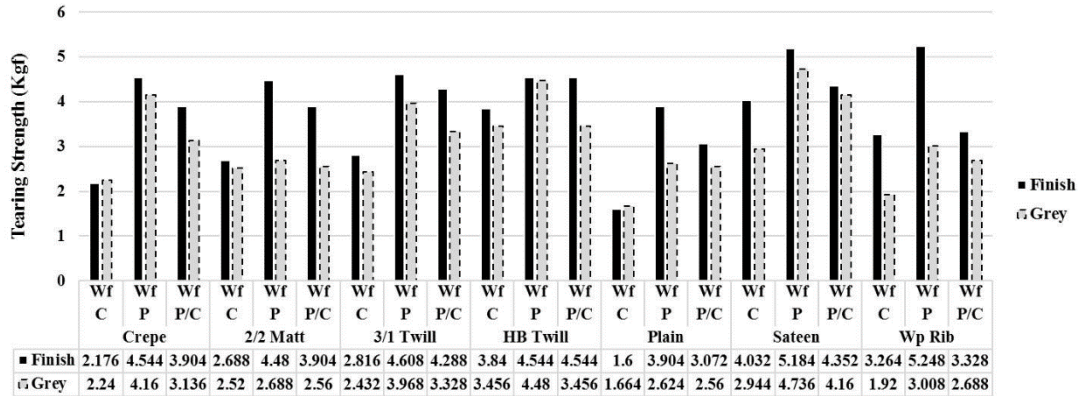


Figure 7: Effect of weft way tearing strength

Source: Rishante P.S

Abrasion Resistance

Abrasion is the mechanical deterioration of fabric parts by rubbing them against another surface. Abrasion ultimately brings about the loss of execution attributes, for example, strength additionally influences the presence of a fabric. The abrasion resistance of textile materials is affected by numerous factors like fiber fineness, yarn number, yarn sort, weave, and so on (Adamiak 2012). In this examination, abrasion resistance of the woven fabric tests was assessed by the rate of fabric weight reduction. The lower the weight reduction of the fabric after the test, the more prominent the abrasion resistance of

the fabrics. Weave sort significantly affects the abrasion resistance of the fabrics. On the off chance that one arrangement of yarns is overwhelmingly at first glance, at that point this set will wear most. Long yarn coats and a low number of interlacements cause ceaseless contact with scraping surfaces. This encourages the yarn to lose its frame all the more effectively by giving simpler development in light of the rubbing movement. The longer the buoys, the higher will be the abrasion. So long, glides in a weave, for example, satin structures are more uncovered and rub quicker, for the most part, causing breaking of the yarns and expanding

the mass misfortune. In the event of long buoys, upon abrasion, holding the filaments in the yarn structure ends up noticeably harder and the expulsion of fiber ends up noticeably less demanding. In any case, the fabrics that have brought down buoys, for example, level plain weave fabrics have preferable abrasion resistance over different weaves in light of the fact that the yarns are all the more firmly secured structure and the wear is spread all the more equally over the majority of the yarns in the fabric. After satin weave herringbone twill has, higher buoys taken after by 3/1 twill, crepe, matt, and warp rib. Subsequently, the diminishing pattern of abrasion resistance as far as the weave is: plain, warp rib, 2/2 matt, crepe, 3/1 twill, herringbone twill, and satin. A similar pattern was seen in all cases. Weft sort likewise significantly affects the rough conduct of the fabric.

Cotton yarns are more inclined to rough wear and bristliness cotton yarn has a negative impact on the grating conduct of fabric.

Because of shagginess, fabric has a more prominent propensity of pilling and along these lines weight reduction. Fabric woven with polyester weft has the most noteworthy abrasion resistance. Being a multifilament yarn, polyester yarn can endure more rough wear and because of nonattendance or hairs on yarn structure, there are fewer odds of fiber misfortune. P/C mixed weft fabrics indicate direct abrasion resistance. From Fig. 8, it can be surmised that in all cases, dim fabrics have higher abrasion resistance contrasted with completed fabrics with similar development. Silicone conditioner treatment causes a decrease in the abrasion resistance of the fabrics. It is the plausible after-effect of fiber portability inside the fabric, which is increased by silicone conditioner. Additionally, as a result of the cross-linking instrument while sap completing, the abrasion resistance of fabric decreases

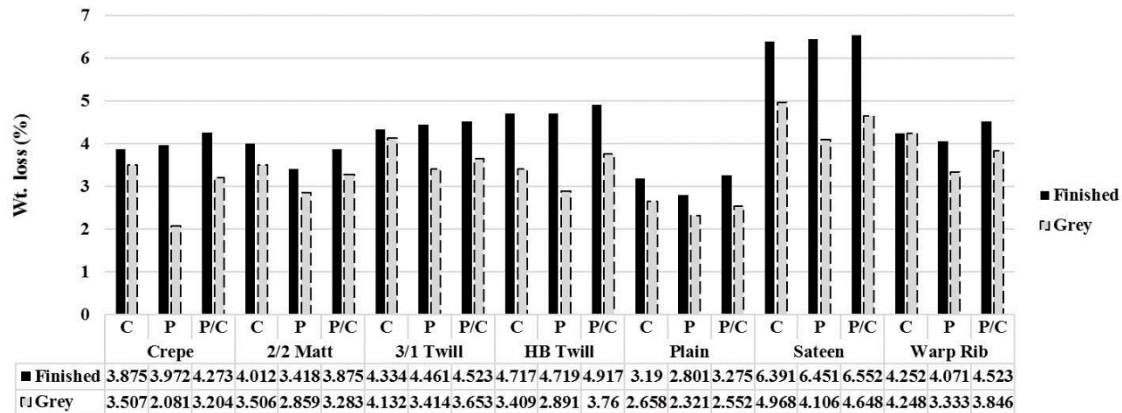


Figure 8: Effect on Abrasion Resistance

Source: Rishante P.S

Conclusions

1. Index of interlacement plays a vital role in changing fabric properties.
2. Fabrics with the highest index of interlacement like plain and plain weave derivatives have better abrasion resistance and tensile properties.
3. Fabrics with a lower index of interlacement like satin, and herringbone twill result in loose fabric structures that have high tearing strength and wrinkle resistance.
4. Due to the 2:1 setting ratio tensile and tearing strength polyester is higher in warp direction.

5. Twill and crepe weaves have shown temperate properties in all cases.
6. Polyester weft fabrics have better durability and serviceability characteristics.
7. Cotton yarns are more prone to abrasive wear due to protruding hairs on the yarn surface.
8. Finishing treatment softens the fabric, and improves fabric crease recovery.
9. Finished plain weave fabric with P/C blended weft will offer optimal performance in connection with the durability and serviceability of apparel.

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