

# PROCESSES OF ADDING ACTUAL TEXTURE IN MIXED MEDIA PAINTING USING WOOD SHAVING WASTES AND CAM WOOD PIGMENT ON LOCALLY WOVEN SUBSTRATES

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## Abstract

In painting, aside from colour, texture is one of the elements that arouses interest, sustains attention and as well contributes in making meaning especially in mixed media. To create or add actual texture, flexibility in contemporary painting has accommodated the inclusion of diverse media such as wood wastes and the likes. Unfortunately, the exploration of wood in art from available evidences has been largely a sculpture affair despite its abundance within the local environment. This study is a derivative of Marthin Heidegger's theory on perception and phenomenology which argues that basically any object exists as a perception of the mind. This studio engagement is deliberate in showing the processes involved in exploiting the textural potentials of wood chips in combination with cam wood pigments to produce actual textured abstract expressions using mosaic technique on woven substrates as grounds. The paper recommends among others, that artists should return to pick from their cultural roots that are rich in both content and materials. The explorations have exposed more alternative materials available to the painter, and broadened the scope of the media for expressions in painting through re-contextualization and conceptualization of abundantly available materials which before now were known to be only waste and craft respectively.

**Keywords:** Cam wood, Mixed media, Texture, Wood chip wastes, Woven substrates, Texture

## Introduction

Mixed media in visual art is a work that combines diverse media or materials into one piece. It is a stylistic evolution in art birthed by the freedom granted in the use of art materiality. Tracing its root, Harrigan in Kalilu and Abodunrin (2015:30) recounts that mixed media or combines is "...a concept that was developed in the twentieth century when postmodern artists began to bend the traditional rules associated with each of the medium used...it is indeed an open form that allows the artist an amazing degree of freedom in terms of techniques and materials". Mixed media covers all those works that defy the traditional use of material and methods, combining two and three-dimensional approaches in executing a single work of art (Hobbs,1985). Okonkwo (2023) submits that it has no specific material and it uses different substances and objects as material to produce a work of painting with a very good visual effect.

In mixed-media painting, despite the media combinations, pictorial elements such as dot, line, colour, texture, form and shape when orderly and effectively manipulated in adherence to the principle of art, unite to create a harmonious visual appeal that help in drawing and sustaining attention and consequently provides a

platform to negotiate meaning in painting. Among the essential visually aesthetic components inherent in mixed media art that deserve attention are the tactile surfaces of the combined materials. This is to say that texture is one of the important elements that characterize mixed media painting and mosaic arts, and it captures interest when well handled.

Texture from the latin word *texo* meaning texture, is the surface feel of an object of sight (Egonwa,2011:3). It is the visual or tactile quality of a surface. Beyond having rough and shiny surface qualities as actual or true texture, there is also simulated or represented texture. Smooth and rough or plain and patterned are basic textural character of mixed media painting. Real or actual textures can appear on physical surfaces that have both two- and three-dimensional features. Beside other techniques, various forms of texture can be achieved through impasto which is the layering of thick paint to create interesting visual expressions; application of sand, saw dust, serviette, jute fabric on wet and gummy surfaces. Other approaches embody the use of texture gel, texture paste and other improvised mixtures that can be sticky and retain their shape and patterns when in their wet state. Also to be noted are popular techniques like, mark-making and visible brush strokes in thick paint. In most cases, like colour, the textural effects in painting play important supportive role in drawing attention, explanation and conveying of the expected messages. Preble et al. in Chidi-Duru (2023) emphasize that “texture is one of the elements that can be manipulated to make art and design more innovative and interesting and heighten an emotional impact on the observers”. This suggests that texture can be used to create the focal point in a painting.

Available evidences seem to show that emphasis on texture and wood as a material for arts have been majorly explored by sculptors. This is testified by Kleiner (2011:7) when he asserts “...texture is of course a key determinant of any sculpture’s character...textures are often intrinsic to a material, influencing the type of stone, wood, plastic, clay, or metal sculptors select.” Mbawuiké (2013) also agrees that, “African carvers for thousands of years, have worked with woods for its warmth, colour, grain and easy manipulation”. He explained that among the outstanding sculptors in Nigeria who have worked extensively with woods, mastering its nature and techniques of manipulations are El Anatsui, Ndidi Dike, Uche Onyishi, Iyke Okenyi, Eva Obodo. Also, with less emphasis on texture, extant studies in painting seems to have been dominated by themes, biography of painters and styles, colour symbolism, among a few other art forms as affirmed by Kalilu and Abodunrin (2015). In the same vein, the popular use of conventional colours such as oil and acrylics on canvas tends to be overshadowing other materiality platforms that can enhance the contents and significance of a painting through the exploration of texture as an art element.

In contemporary painting practice, the dexterity in manipulation of wood wastes in their different states (pulverized and fragmented chips) as material for textural effects in mixed media can heighten the appreciation of the aesthetics in texture as an element of art. Unfortunately, except for wood dust, inclusion and exploration of certain waste materials of texture like wood shaves seems not to be popular in painting despite the availability of the material and the broadness of material inclusivity offered through mixed media art. From the foregoing therefore, this paper is intentional in deliberately widening the scope of actual texture creation

by exploring the potentials and aesthetic qualities inherent in the tactile surfaces of deconstructed and flattened locally woven hat and cane tray substrates, using a combination of cam wood organic pigment and wood shaving wastes which seem not to have been explored fully in mixed media painting for textural effects. The paper suggests that painters and scholars of visual art generally, may consider manipulatively experimenting with materials with some distinctively characteristic textural effects to boost their creative practices, draw the needed attention and contribute in meaning-making to their works.

### **Exploring Textures from materials within the local environment**

In contemporary times, exploring the potentials in organic media will tend to expand and widen the range of tactile surface qualities that can be created using non-pigment or non-paint objects. These can be locally sourced from the environment and can appear in solid forms using found objects. To a large extent, the sourced materials can be symbolic in nature and when deliberately combined, can communicate and make deep meaning in the various contexts as presented in this research. The metaphorical materials or found objects that can be experimented include shells of snail, oyster, periwinkles, Gympie seed shells and cowries, wood, charcoal, corn stalk, textures of locally woven baskets, raffia hats, hand fans, cane tray, woven mats among others. Affirming the above position, Ukwa (2016:1) assures that assemblage of coloured and textured materials from their accustomed backgrounds and arranging them in pictorial composition will reveal the aesthetic value inherent in isolated materials that were initially not considered appropriate in artistic expressions. This is proven by Cosmas Mbawuike's *Ozonku* (2013) as well as Eva Obodo's *Conversion of St. Eva* (2003). Obodo gathered and composed tiny square, rectangular, and irregular pieces of woods horizontally. Attention are drawn with the introduction of colourful fabrics and sometimes pigments which comprises of blue, red, white and black on selected areas and sew them together using metal wire. More recently, Obodo has directed his focus on fibre and charcoal as conceptual media,



**Plate 1:** Evaristus Obodo, *Conversion of St. Eva*, , Wood, fabric and metal wire, 52x124x28. 2003. Photo by Evaristus Obodo

### **Creating textures through Mosaic technique**

Several techniques have been employed as enumerated above in creation of texture in mixed media painting, however, this research is largely inspired by mosaic art. Beyond the use of coloured liquid organic pigments or synthetic substances on surfaces for artistic expression, the arrangement and gumming of coloured pieces together to form pictures or designs has been in existence in different places and at

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different times in history. This advancement according to De La Croix and Tansey (1970) and Gombrich (1989) in Abokede (2021) could be associated with the reign of Constatine when they observed that; “Ornamental mosaics with sparkling tesserae of reflective glass was used as a medium of expression to advertise, instruct and edify believers on the new faith in Christ during the reign of Constantine and his successor”. In the same vein, Janson and Janson in Abokede (2021) also state that revolutionary effect of Constantin’s declaration of Chrisianity as a state religion of Rome on architecture in turn gave birth to the early Christian mosaic painting. Medium of expression identified are small cubes of coloured glass known as tesserae. Mosaic is a picture or pattern made by placing together, small pieces of glass, stone and so on of different colours according to Hornby (2006). Waage (2014:1) asserts that in art, decoration of a surface with designs made up of closely set, usually variously coloured small pieces of material such as stone, mineral, glass, tile or shell is called Mosaic.

In relation to mosaic as a technique for achieving texture in artistic expression, contemporary artists from 19<sup>th</sup> century have continuously sought for new materials as a means of expressing themselves in mixed media arts; they call on every imaginative device to convey how they feel. Galton (2002) credited the emergence of collage in 1912 to Pablo Picasso (1881-1973) when he contextualized and adapted a piece of cloth on his painting canvas to represent a caned chair seat. He further explained that subsequently other cubist painters notably Braque (1882-1963) followed suit by attaching newspaper pieces, stamped envelopes, theatre tickets and wall paper on their paintings.

In Nigeria, textural mosaic technique in painting has influenced some contemporary painters, among whom is Jacob Jari’s pointillism with organic materials of corn stalk. Drawing from Okeke (1995)’s narration on the impacts of Zarian art society in modern art in Nigeria, he states that:

In painting expressions, while Jerry Buhari strives to create new forms through the manipulation of the painting process, Jacob Jari’s interest is in finding an alternative painting medium. Earlier Jari had taken part in experiments with colour and technique led by Gani Odutokun. But he gradually redirected his search towards a different goal, developing a cheaper, newer painting medium, something different from oils and acrylics. He devised cornstalk mosaics...



**Plate 2:** *Jacob Jari, Mosaic consisting of six works, 1993. Corn stalks on board, 165 x 153 cm. Photo source: Seven stories art exhibition catalogue, White chapel Art gallery, London*

Okeke further explained that Jari's true textured mosaic works convey an advancement of purely personal, modernistic iconography in his search for a convenient eloquent medium. This suggests that as an experimenting artist, he objected and protested against confining himself in the representations of indigenous African art form or concept, neither are they response to the tradition or local material, rather he considers the universality of the language of arts. Like the researcher, his works are comprised of colours, shapes, pattern and repeatedly gummed objects. Also, in similarity, he creates alternative platform for painting, however in contrast, the existential environment of his materials or its metaphorical implications seems not to be a point of consideration and does not contribute in his artistic meaning-making. All these accounts have revealed beyond doubts that art media in the world over, have over the years continued to evolve and can be adapted from diverse sources within the environment and used as colour and texture among others. Abodunrin and Oladiti (2015:193) on the emergence and what informed this ideology in the African contemporary art scene generally as well as Nigeria in particular state that:

Artists from 1980s started developing experimentations with local materials and forms, thus defying the harsh economic realities of the time to produce artworks which are quite unique and distinct. Their interest was to produce artworks that would be more of African in content. Naturalism continued to be expressed using isolated materials that were initially not considered appropriate in artistic expressions to create forms which have aesthetic value.

The above discussion positions local materials as not just alternative media but a calculated move to incorporate cultural content using materiality. Egonwa in Abokede (2021) in his analysis identifies Jimoh Buraimoh (b.1943) and Nsikak Essien (1958-2020) among other contemporary Nigerian artists who have worked extensively with non-paint textured mosaic media. According to him, Jimoh Buraimoh was inspired by the traditional Yoruba's beaded crown. He used beads, pieces of broken bottles, sea shells and tiles to mention but few. Nsikak Essien combines saw-dust, epoxy, resin; metal and several non-descript media.

Focusing on texture as one of the elements that strive to draw attention to a work of art, Chudi-Duru (2023:163) explains that texture is an important element of arts and design. She maintained that it is associated with a sense of feel, which draws all the viewers' physical and mental attention to the artwork. She concludes that it plays with the eyes and brain evoking thought-provoking views and ideas. On a wider scope, exploration of the environment as potent creative sources of ideas, materials and forms is not restricted to one geographical zone or race. In the west, contemporary artists are enjoying the freedom of repurposing materials to suit their needs which this artistic era presents. Amongst them is Jane Perkin's transformation of found objects into something new such as portraits and other art works. Despite having a bias for Textile Perkins explores with plastic bits from broken Toys, Buttons, Beads, Shells, Jewelry and so on in recreating colourful classic and old master art works with a contemporary flavour and approach.

She uses these alternative materials exactly as they are found, this is to say that she doesn't add colour to the Canvas or to the objects. Some of her works

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includes recreation of *Girl with a pearl Earring* by Johannes Vermeer and *Queen Elizabeth II*, In her words ‘I started making richly decorated brooches in my final year, using broken jewelry, plastic toys, and other small found objects. Inspiration came from festival headdresses from Ecuador, discovered while researching my thesis on art from recycled materials. The headdresses, covered with all kinds of shiny and odd things, are bizarre and quirky, yet beautiful –I love them, she concludes (Perkins, n d). Also in the fold is Zac Freeman as cited in Jobson,(2010) of incredibly detailed portraits constructed from thousands of tiny found objects among others .



**Plate 3:** Jane Perkins, *Queen Elizabeth II*, broken plastics, jewelries. Photo source <http://www.womenyoushouldknow.net/artist-remakes-famous-portraits-and-paintings-using-found-objects>

In similar vein, the researcher realizing the textural beauty inherent in local craft and wood waste, has out of his commitment and passion choose to marry both in order to give it a different name in a different context creating room for the material’s hydra headed uses. This multi-dimensional approach was echoed by Halliday (2013:1) where he said that a material or use of a material holds a different value and characteristics depending on the context in which it is used. This is however clearer than in African artists’ re-use of everyday bits and pieces.” He concludes.

#### **Literature Review**

Seeing aesthetics in what is termed waste is fast becoming trendy in contemporary artistic landscape as it is not only intentional in combating waste, but also creating room for artistic contemplations. Objects or materials in the class of wood chippings and the likes, though recognizable as waste by the physical eye, can turn out to be something else when observed using the artistic eye. This work therefore is derivative of Marthin Heidegger’s theory on perception and phenomenology with the ideology that basically any object exists as a perception of the mind. In affirmation, Mbawuiké (2013) opines that valuable works of art can be created from various discarded objects and materials offered by the environment. He explains that various sources can offer these wastes like fabrics, natural objects, wood and agricultural produce.

## **STEPS AND PROCESSES IN THE STUDIO EXPLORATION**

### **Ideation**

The first stage in this exploration is the generation and formation of ideas that can embody the woven substrates and the wood chipping wastes as well as the camwood pigments. This led to translation and transformation of the mental and abstract imagination into visible linear pictorial records on paper using ink. The cyclic woven patterns of the local raffia hat, the circle shaped physical structure of the woven cane tray and their tactile surface qualities all combined to inspire the drawing for the works.



**Plate. 4:** Drawing for painting to be executed on woven substrate.  
Photo: Ukwa, Job (2020)

### **Materials appropriated as grounds, pigments and found objects.**

#### **Shades of wood chippings**

According to Oxford Dictionary, shavings are the thin pieces cut from a piece of wood using a sharp tool. Wood shavings are by-products of wood cut from pieces of wood using a sharp tool, especially a plane. The shapes of these shavings are usually cut unintended and unplanned shapes since they are termed waste. Different sizes of wood chippings are generated as a result of different sizes of planning machines used. The shavings vary in sizes, some are long and coiled while some are short. These can be produced from seasoned or wet wood. Mbawuiké (2013:2) observes that wood shaves and chips are usually regarded as wastes from the carpenters and sculptor's work-benches and are often destined for bins and fire places. He continues that wood shavings have colours ranging from yellow, red and brown to velvety black (depending on the colour of the wood they are from).

#### **Colour Selection**

.Just like conventional colours, the wood shavings were selected and arranged according to their different colours, shapes, sizes and textures.

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**Plate 5 :** Different shades of wood chippings.  
Source: Job Ukwa N.(2020)



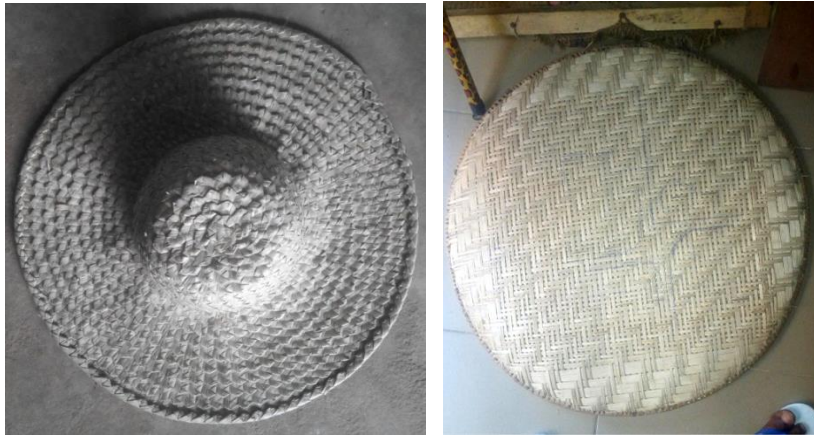
**Plate 6 :** Long strip wood fragments.  
Source: Job Ukwa N.(2020)



**Plate 7:** Varied sizes and colours of wood chipping.  
Source: Job Ukwa N.(2020)



**Locally Woven Raffia Hat and Cane Tray as Substrates**



**Plate 8:** Woven raffia hat and cane tray substrates. Source: Job Ukwa N.(2020)



**Plate 9:** Deconstruction of raffia hat. Source: Job Ukwa N.(2020)



**Plate 10.** Reconstruction of woven local raffia hat in progress. Source: Job Ukwa N.(2020)

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In other to create a wider platform for the painting exploration, the woven raffia hat originally meant to give shade and protection against the scorching rays of the sun is deconstructed and enlarged using adhesive and thread.



**Plate 11 :** Deconstructed raffia hats. Source: Job Ukwa N.(2020)



**Plate 12:** Enlarging the raffia support. Source: Job Ukwa N.(2020)



**Plate 13:** The deconstructed and enlarged raffia hat ready to be worked upon. Source: Job Ukwa N.(2020)



**Plate 14:** Placement of the supports on the board as platform and nailing it to hold and strengthen the work. Source: Job Ukwa N.(2020).



**Plate 15:** Arrangement and nailing of the appropriated materials on board Source: Job Ukwa N.(2020).



**Plate 16:** Gumming of the wood chippings on the painting support to create varied textures. Source: Job Ukwa N.(2020)

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The cubes of wood chips are arranged and gummed with adhesive on the woven substrate.



**Plate 17:** Traditionally prepared balls of Camwood pigments (edo) ready to be crushed and mixed with binder Source: Job Ukwa (2020)



**Plate 18:** Traditionally prepared balls of red camwood pigments (uhie) ready to be crushed and mixed with binder. Source: Job Ukwa (2020)

Camwood (*Baphia nitida*) is described by Adunni (2021) as

... a tree predominantly found in West Africa, commonly known in different geographical planes of Nigeria, as Iyerosun in Yoruba, Majigi in Hausa, Ekui in Cross Rivers State and Uhie in Igbo. It is a hard, durable and heavy wood which has been used to make drumsticks, pestles, mortars, knife handles etc. It is traditionally mixed with shea butter and applied as an ointment used to treat stiff joints. The powder can also be used to brighten up the skin, and as an anti-aging and detoxifying treatment. It is typically, sold in local herb market as small balls of ground fibre. In colonial times, before the advent of chemical dyes, it was heavily exported to Europe for use as a dye for wool, cotton and silk...

In the rural markets in Ebonyi state, it is sold in powdered form or in ground ball dried paste. In the traditional front, camwood are used also in some traditional ceremonies like preparing bride-to-be, boys' initiation into adulthood like *ikpu isi ugwu* in Ikwo, Ebonyi state



**Plate 19:** Acrylic gum used with top bond as pigment binders. Photo source: Job Ukwa (2020)



**Plate 20:** Top bond adhesive mixed with saw dust was used in fastening the appropriated materials. Photo source: Job Ukwa (2020)



**Plate 21:** Experimentally mixing camwood pigment, oxide, acrylic gum binder and water. Source: Job Ukwa N.(2020)



**Plate 22:** Painting with camwood mixed with oxide and gum. Source: Job Ukwa N. (2020)



**Plate 23:** Creating plain or smooth textural effect using brush with camwood mixed with oxide and gum. Source: Job Ukwa N. (2020)



**Plate 24:** *Evolution, mixed media, (camwood pigment, woven raffia hat, cane tray, wood), 239cm X 135cm. Source: Job Ukwa N.(2020)*

**Evolution: Advancement and Deterioration**

In the employment of the assistance of materiality to comment on socio-cultural, environmental, political and other related issues, the authors seek to use *Evolution* to draw attention to advancement, development, civilization, aspirations, growth, progressiveness, unfolding of potentials, changes in states, building up,

boost, enlargement, flowering, maturation, the rigors in expansion in its multiple dimensions. *Evolution* stresses on man's ever inquisitive and insatiable nature which has resulted to rapid technological development and other notable feats, however, despite the high level of advancement, the level of moral decadence and deterioration is equally on the rise. The cyclical forms align with the ideological theory of continuity that believes in the cyclical nature of life. That is, birth-growth-death; formation, progressive advancement and maturity, thus the cycle continuous. Similarly, to further negotiate meanings, the researcher employed different tactile surface qualities and colour tones, from well ground powdery state to very tiny particles and larger coarse rotten particles of wood to symbolically depict signs and levels of moral decadence, economic deterioration, insecurity, rising inflation and its attendant hunger associated in these ever-evolving and unsteady shifts in Nigeria



**Plate 25** *Beyond boundaries*, 2018, 160cm x 183cm, Different shades of wood and woven can tray.

*Beyond boundaries* has dual connotations, the positive and the negative implications. On one hand, the artist metaphorically uses the work to expose the importance of breaking boundaries and choosing to be different, being original, striving to succeed against all odds. Viewing the work through the negative lens, the artist dramatically created tensions and struggles with the texture and gloomy colours. Through this conceptual frame, *Beyond boundaries* explains the insecurity and economic downturns that have necessitated migration in droves by Nigerians especially professionals (Japa syndrome) due to bad leadership

## **Conclusion**

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The fundamental resolve of this paper is to explore the steps and processes in texture creation through the manipulation of woven hat and cane tray substrates as support using wood chippings and camwood pigments respectively to create mixed media painting.

The paper has practically demonstrated that using certain materials for texture creation in painting can convey mood and feeling. While smooth and plain surfaces convey a restful mood, a contrasting rough surface can convey hardship or busy mood. It can equally be used to represent evolving or rhythmic mood as was successfully explored in this paper. Also, a creative use of texture as an art element can be employed to convey a sense of distance in painting. This research has equally opened up many creative possibilities in texture creation thereby encouraging artist especially painters to explore on locally woven crafts and materials within the environment since they are readily available, less costly, accessible and can present multiple choices for painters.

The research recommends that artists should return to pick from their cultural practices that are rich not only in content but in materials. The explorations have exposed more alternative materials available to the painter, and by that broadens the scope of expressions in painting through re-contextualization and conceptualization of abundantly available materials which before now, were known to be only waste and craft respectively.

It has added to scholarly accounts in studio practice in painting as it contributes meaningfully to knowledge by advancing mosaic as techniques in material manipulation for artistic expression thereby inspiring young artists to explore further other available materials within their environment and come up with their own styles..

#### **References**

- Abodunrin, J.A. and Oladiti, A. A. (2015). Growth and Development of Styles of Painting in Contemporary Nigeria Research on Humanities and Social Sciences, 5 (5)190 -198 retrieved from [http:// www.iiste.org/journals/](http://www.iiste.org/journals/) on 16 November, 2021.
- Abokede, O.O.(2021).Use of Non-Paint Media by Artists In Southwestern Nigeria. International Journal of Progressive Sciences and Technologies (IJPSAT) Retrieved from <http://ijpsat.ijsh-t-journals.org>,on 6 October, 2023 Vol 30 no.1ISSN: 2509-0119 .pp. 677- 689.
- Adunni organics. Camwood benefits for Skin (2017, February 23) Retrieved from <https://adunniorganics.com/camwood-benefits-skin> on March 12th, 2022
- Chudi-Duru, C.C. (2023) Surface Design Texture: An Indispensable element of Design for African Printed Fabrics. Retrieved February 5, 2024 from <https://nigerianjournalsonline.com/index.php/Feschchrifts/issue/view/438>
- De la Crox and Tansey (1970) Art through the Ages fifth edition, Harcourt, Brace and World, Inc New York
- Egonwa, O.D.(2011) Nigerian Art: Introductory notes. Ababa Press Ltd, Sango Ibadan, pp xv, 193
- Garlton, J. (2002), The Encyclopedia of Oil Painting Techniques, South New York, Sterling Publishing Co. Inc.
- Gombrich E. H. (1989) The story of Art-15th Edition, Oxford | Phaidon Press.



- Halliday, C. (2012). One man's junk is another man's treasure. Retrieved from <http://www.thinkafrica.com/>, on 4 March 2022.
- Hornby A. S. (2006) Oxford Advanced Learner's Dictionary, Oxford University press
- Hobbs J. (1985) Art in context, Harcourt Brace Jovanovich publishers
- Jari, J. (1993), Mosaic consisting of six works. Seven stories art exhibition catalogue, White Chapel Art gallery, London
- Jobson C. (2010). Found Objects Assemblage Portrait by Zac Freeman Retrieved from <http://www.thisiscolossal.com/2010/11/found-object-assemblage-portraits-by-zac-freeman>) on 7 December, 2021
- Kalilu R.O. R. and Abodunrin, J. A. (2015) Typology of Painting in Nigeria. Journal of Art and Design Studies, Volume 32. Retrieved January 17, 2024 from [www.iiste.org](http://www.iiste.org). pp 30-31
- Kleiner, F. S. (2011) Gardener's Art through the Ages. A global history. Boston, Clark Baxter
- Mbawuiké, C. N. (2013) Exploring wood shavings as a medium and idea for sculpture, an unpublished thesis submitted in the Department of Fine Applied Arts, University of Nigeria, Nsukka.
- Obodo, E. (2003) Conversion of St Eva (Mixed media sculpture) 11 Early exponents of Pyrography from Nsukka Art. Retrieved from [oer.unn.edu.ng](http://oer.unn.edu.ng) on 9 June, 2020
- Okeke, C. (1995), The Quest: From Zaria to Nsukka (a story from Nigeria) Seven Stories: An exhibition by the White Chapel Art gallery, London about Modern Art in Africa.
- Okonkwo, C. G. (2023) Preparatory Steps and Processes for Mixed media and other painting genres Retrieved February 5, 2024 from <https://nigerianjournalsonline.com/index.php/Feschchrifts/issue/view/438>
- Perkins, J. (n.d). Queen Elizabeth 11. (Painting) Artist "remakes" famous portraits and painting using found objects. Retrieved from <http://www.womenyoushouldknow.net/artist-remakes-famous-portraits-and-paintings-using-found-objects> on 9 January, 2022
- Waage, F. O. (2014). Mosaic Art. Retrieved from <http://www.britannica.com/art/mosaic-art> on January 5, 2022
- Ukwa, J. (2015), The Adaptation of Local Craft and Materials as Alternative in Portrait Painting, An unpublished MFA Thesis, Department of Fine Applied Arts, Faculty of Environmental Science, Nnamdi Azikiwe University, Awka
- Ukwa, J. N. (2020) Materiality Advancement: Adapting local woven craft as support in contemporary painting using local pigments and non-pigment materials an unpublished Ph.D dissertation in the Department of Fine and Applied Arts, Nnamdi Azikiwe University, Awka.