

WASTE AS EXPERIMENTAL MATERIAL IN SCULPTURE: METAL-MORPHOSIS OF AKEEM MURAINA'S METAL ART

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ABSTRACT

Artists are creatively and actively involved in collection and management of waste in Nigeria. Several of these artists have addressed issues of the environment with natural materials found around them, others have made their contributions experimenting with waste metal materials. This study will create a proper report and documentation of Akeem Muraina's metal-morphosis experimenting with used and discarded metals to manage waste for self-sufficient, showing the technique, style and innovations that were made in the actualisation of some sculptures produced with brief analysis. The study is limited to the metal works of Akeem Muraina and the paper adopts both primary and secondary data collection through personal contact of field investigation, observation, interviews and taking photographs. Secondary data is employed where conference papers, journals and internet surfing were used, proving that waste is an experimental material in metal sculpture and of advantageous in managing solid waste. Invariably, suggestions were made.

Keywords: Artists, experimental, metal-morphosis, sculpture, waste.

INTRODUCTION

Waste constitutes one of the major environmental problems facing Nigeria as a third world country. This ranges between indiscriminate disposal of used and unwanted items by the citizens. Wastes are common within every human environment, they may be defined as “materials that people no longer have any use for, which they either intend to get rid of or they had already discarded” (European topic centre, n.d.). In different homes, people are faced with various kinds of wastes, ranging from kitchen litters to books, clothes, furniture, electronics and cars they have no use for. Waste can be classified into two

major types: the biodegradable and the non-biodegradable wastes. Wastes that can disintegrate naturally in the environment within a relatively short period of time are referred to as the biodegradable while those that cannot are the non-biodegradable. Non-bio degradable wastes can last for about 10 -50 years, or even more, before breaking down. And, of course, most of them pose serious health and environmental challenges in different ways to man. Over the years, societies have made efforts to device means of disposing non-biodegradable wastes. These sorts of waste materials are vast and may, among others, include industrial products such as plastic bags, aluminium cans, glass, metals and rubber. But,

the country lacks the technologies needed to manage these solid waste materials disposed on the streets, roadsides, drainage channels, etc.

In advanced countries, waste management is a serious business because these materials are seen as not entirely useless. Mostly, they are recycled or converted for different purposes like, industrial purposes, agricultural purposes, aesthetic purposes and more importantly, energy or renewable energy use. In a country like Nigeria with a population of over 200 million people, where unemployment has affected a lot of young graduates and youths, an entrepreneurial innovation, which explores the management and harnessing of solid waste for use as experimental materials in visual arts should be put in place.

Therefore, there are a variety of artworks that shows innovations in what is referred to as art in general and thereby bringing a new orientation to things in art. A new and wonderful approach has been introduced into sculpture by some artists who disengaged from the conventional and dogmatic way of expressing creativity. Instead, these artists bring different realities and techniques to art. These artworks such as sculpture are not just mere representation of forms; they are also expressed aesthetically. Metal sculptures both in relief and in the round with geometrical shape designs has many advantages and can even be appreciated by non-artists because of the elegant nature of forms represented.

In most developing countries, there is no reliable statistics on waste disposal as it is in the developed countries. People seem to dispose wastes anyhow and anywhere without consideration of the health or

environmental effects that they may cause. Granted, the spirit of recycling wastes is gradually developing in the country. Several people particularly the unemployed youths now pick and excavate metal scraps around for sale to metallurgical companies who recycle them or to metal sculptors who convert them to beautiful works of art. This metal scrap business has considerably helped in cleaning up the environment in a way. But some other non-biodegradable wastes such as plastic bags and rubber materials still litter urban spaces and countryside in Nigeria where they pose health risks. Unlike the metal scraps, people are yet to discover a healthy and lucrative way of recycling them and so they are scattered almost everywhere. However, several artists have sought ways to reuse wastes for creative works.

In Nigeria, for instance, Felix Udogwu, Adeola Balogun, 'Dotun Popoola and Akeem Muraina among others have explored different styles and techniques to experiment metal wastes for visual expressions. These artists give life back to such waste materials they use. Converting metal waste materials, especially in creating visual imageries, is one commendable way of resuscitating them from useless to useful. Before now, used and discarded metals are often found lying indiscriminately in the environment, posing various forms of environmental challenges. Credibility should be given to the metal sculptors who use metal scraps to create beautiful art forms to address waste management in the country.

BIOGRAPHY OF AKEEM MURAINA

Akeem Muraina is a Nigerian Contemporary artist, born April 10, 1966, Akeem, an indigene of Ibadan, Oyo State, combines sculpture work with teaching in

his early stage of practice. The artist who holds a Higher National Diploma in sculpture from Yaba College of Technology in 1993 and Post Graduate Technical Teacher Certificate at the Federal College of Education Technology, Akoka, Yaba, Lagos. Akeem had taught Art at different level of academic institutions. He is now a full time studio practice artist at No 3, Wale Alomo close, Iju-Isaga, Lagos State. Akeem yearned for self-expression, which he thinks he can do through converting waste as experimental materials into wealth, and to him this adventurous spirit has been achieved. Muraina love for representing animals through his work is unique.

He is keen on making a statement on arts. He had exhibited at the Niger-Delta Arts and Cultural Centre in Delta State, in 2000, the Harmattan Workshop organised by the Dr. Bruce Onobrakpeya Foundation, at Agbara Otor, Delta State, where he participated, and where the Header of Reindeer, one of his works became a cynosure of all eyes. Similarly, his last exhibition, Eden before Us (2012), held at the National Museum Onikan, Lagos, was a success story. When one engages Akeem, he talks on issues of art, carefully choosing and analyzing his words. He said that his going for the art has been a childhood passion. The studio artist is an ex-officio member of the Society of Nigerian Artists (SNA), Lagos State, and co-founder of Art Zero Group. Akeem, who had taught art to students and presented papers at seminars says “My philosophy is that man should first pay attention to what is lesser than him so that greater things will follow. And that is why I work on discarded materials. But when I work on them, they become a collector’s item”. The artist, who is a devout Muslim, said all religions should promote peace and the sanctity of life and not destruction. “One should see himself as a complete

part of humanity, so as to be part of humanity”. As a sculptor, Muraina has garnered awards such as the Distinguished Stewardship Award by the SNA, where he served as an executive member. His works have been collected by many dignitaries and has participated in several group and solo exhibitions and creative workshops. He reveals that the most projected aspect of his artwork is metal while he also has other works in bronze, fiberglass, concrete, wood, paintings and drawing. The artist stated that his first m metal work themed ‘The Flutist’ in 1989 was reviewed between 1995 and 1996 by Mr. Olu Amoda, Lecturer and Mentor Mr. Raqib Bashorun, Lecturer at Yaba Tech. lagos.

At different point in time he had isolated the animal sculptures from the rest indicating his stronger element in that direction. He said that, the critical or crucial experiences he had had at the third Harmattan workshop at Agbarah Ottor in 2000 further emboldened his steps towards wild life sculptures which he later titled metal-morphosis wild-life sculptures. This is reflected in his first solo exhibition in 2012 themed “The Eden before Us”. Muraina says, Metal scraps are what they are - Scraps are used metal pieces cast away by human beings, condemned to whatsoever fate the ecosystem may subject them to. But then steps in another class of human beings who do not disdain these metal junks; and of particular interest are the creative minds called Metal Sculptors, among who is the artist himself. Evoking the hidden beauty in scrap metals is the specialization of Muraina, he seeks out these metal scraps, conceptualize and create spectacular structures out of them. Muraina has works in various medium of arts but his strong bias for the environment and wildlife animals stands him out among his peers.

PHILOSOPHY OF AKEEM'S METAL WORK

Akeem Muraina adopts the philosophy of metal-morphosis in his metal works by paying attention to what is lesser than what is greater and this made him to explore more on wild-live. He is an environmental activist, and conservationist who genuinely concern with issues affecting our environment be it social, political, cultural, economic, or physical. Beyond his interest in recreating waste and aesthetics, his works are more of social commentaries.

THE WASTE EXPLORATION AND METAL-MORPHOSIS OF AKEEM MURAINA

Muraina's use of discarded materials like, metal junks, glass, wood, plastic etc. inspired by the gross decadence and degradation of our environment, is powered by aesthetic and artistic vision and not out of share necessity. According to Ademuleya's analysis of Akeem Muraina's metal works in his first solo exhibition. "The Eden before Us", 2012, he said that Muraina's smiteries can generally be classified into three. The first are the assemblages which are made of scavenged motor spare parts and discarded metal sheets that are creatively repurposed mostly into free standing figures, mainly of animal figures. This includes "*Wobia*" (Plate 4), "*Agbero*" (Plate 5),

The second are the flat surface negative space figural patterns. In this, Muraina used his self-created images, some abstracted and some idealised, as motifs, to create puzzled patterns. Like the typical puzzle game, the works in this category require some higher level of intelligence to comprehend. "*Afinju Eye*" (Plate 6) and "*Piri lo olongo ji*" (Plate 7) are all in this group.

The third category is the reliefs which in most cases are combinations of recreated flat sheets and discarded spare parts, that he called laceration technique. Example of this include "*Orekelewa*". These all attest to Muraina's capacity for metaphor and ability to see beyond the ordinary. Laceration is another technique being used by Akeem Muraina where by oxy-acetylene gas is used to burn works from sketches on metal sheets in linear cutting technique, example is, "*Afinju Eye*" (Plate 6), which is part of Akeem's innovations.

STYLE OF WORK

Art styles describe the way the artwork looks. Style is basically the *manner* in which the artist portrays his or her subject matter and *how* the artist expresses his or her vision. Style is determined by the characteristics that describe the artwork, such as the way the artist employs form, color, and composition, to name just a few. Another important factor in determining the style of an artwork is to examine the way the artist handles the medium, taking into account the method or technique that the artist uses. Generally, Akeem Muraina like all other metal work artists uses various styles in presenting their works such as Fedelis Odogwu, Adeola Balogun, and Olu Amuda among others. It is typically observed that Akeem Muraina adopts naturalism, stylization, abstractism and idealism in his metal works by using heavy metals and thick metal sheets to stabilize his works and give it strength to stand firmly on the base.

PECULIARITY OF HIS WORKS

The major peculiarity in Muraina's metal work concept is; he most often rendered the figures "frontal" means he works more on the head and a bit skeletal about the body forms by juxtaposing the energy using the visual elements of the scraps, he creates a communication between himself and the scraps, despite the usual focuses on the head, and a bit skeletal about the body forms, the message is still delivered. The other parts of the body may not be so detailed, it is being suggestive, and when one sees the head he gets the message. Good examples of these are; 'Agbefoba' (Task Force) *Prancing Horse*, 2003; 'Wobia' (Scavenger) *Wild Boar*, 2009 (Plate 4).

THE ARTIST'S MEDIA AND TECHNIQUES

Oftentimes, the matter of selecting the medium depends entirely on the artist himself. He normally selects the materials that can be handled with ease that would suit his work, and adequately bring out the qualities he wants to show. The artist must love, respect, and understand his medium to make it easier for him to expand his knowledge and improve his skill in his chosen area. Akeem Muraina depends solely on metal; Rolled Steel Plate, Twisted Rods, Lacerated Plate, Stainless Steel, Steel Pipe, and Metal Rods. Other materials he uses for experimentation and innovations in his junk and mixed media art are; Metal Scraps, Wood, Plastic and Found Objects.

The Catalan artist Julio González is credited as one of the earliest developers of welded sculpture. Akeem Muraina is not in the exclusion list of the metal artists, who are working currently in various

techniques to achieve their forms, meanwhile, Muraina uses the aforementioned techniques but his welding technique is through arch-welding and oxy-acetylene gas welding which he uses for cutting thick metal sheets and in laceration to produce his metal works. He is in the league of the modernists by experimenting into mixed media and metal junk as his foremost techniques. Laceration is cutting deep into metal sheet through motif already drawn on the sheet.

To Muraina, man's failure to properly manage his physical environment is as a result of the deficiencies he suffers in his spiritual and psychological "Eden" a reflection of the failure of man's immediate environment – his HOME. How many parents of today could really be called *Abiyamo - Aboja gboro?* (Plate 2) How well do parents tend their homes to avoid raising "Wobia" (Plate 4) who are never contented with whatever they have and no matter how rich they are, when placed in position of trust they still embezzle public funds. They could but best be described as psychologically imbalance and sick. Other works, which include "Akinkanju", "Olofofo yera" (Plate 3), "Adigboluja", "Ifura", "Eniba laya", "Okun Ebi" (Plate 1), run varied commentaries on social, political, cultural, economic, and physical issues thus, creating dialogue about environmental realities.

In repurposing waste and as expressed above by Halliday (2012), a material or use of material simply does not hold one value, connotation or significance; instead, any material holds a different value and characteristic depending on the context in which it is used". This is the same in the case of a metal work titled, "Agbero" (Plate 5). In "Agbero", for instance, while Muraina draws our attention to the

menace of the typical Lagos “agbero” - the miscreant, he also addresses the issues of noise pollution and environmental trauma.

In “*Eden before Us*” (2002). Muraina’s effort at converting waste is a strong medium of calling the public’s attention not just to the fact that the so called waste is “no waste” but ever useful, it is also to awake our consciousness to the fact that our natural environment could be saved from degradation and unanticipated calamities if only we could care more for the waste in its varied shades and shapes. This is a successful attempt at presenting art to the public as end product of research and a function of exploration. Muraina’s works are highly remarkable and one could perhaps say beautiful. The question then is what could be so pleasing in the waste for it to attract being said to be of beauty? The answer to this is found in the execution of his works, while the likes of the Agbero, Wobia and Olofofo of this world are desecrating and polluting the environment, we have in Muraina another artist who is helping to make the world cleaner and more beautiful through sculpture. “One man’s garbage another man’s art, Junk can be a beautiful thing, if only you have the eyes to see it.

ANALYSIS OF AKEEM MURAINA’S METAL WORKS

One peculiar aspect of Muraina’s works is that he gives almost all of them indigenous Yoruba names as titles. He noted that this is necessitated because of the need to stamp the African identity on his works and that it also explains his works better. This evident in his choice of his mother tongue, (Yoruba), for titles of his works can be viewed in two ways; first is to avoid his real message of being

misunderstood as no other language will drum home better his message than the one he could twist and turn at will. The second is his interest in the campaign for the preservation of our local languages. That our local languages are fast disappearing is nothing but a fact. He said language is the greatest means of connectivity between kith and kin. It can only be compared to umbilical cord that connects the mother (the community) to her child as well as the siblings to one another. To Muraina, this is the real “*Okun Ebi*” (Plate 1) that should not be allowed to “cut” nor run into extinction.

“OKUN EBI” (FAMILY TIES)

“Okun Ebi” (Family ties) features a set of three swan formed out of steel pipe. The pipe is intricately twisted into each other in such a way that it cannot be easily separated or cut. Akeem carefully arranged the curves and welded them together to form the body of the swans. Scrap pieces of metal sheets were carefully shaped to form the beaks and metal washers for the eyes to create an impression of the head. The 24” x 16” x 16” size sculptural piece is brought to life with waste steel pipe telling a story, using Yoruba as the title “Okun Ebi”, He emphasized that language is the greatest means of connectivity between kith and kin. It can only be compared to umbilical cord that connects the mother (the community) to her child as well as the siblings to one another. To Muraina, this is the real “*Okun Ebi*” that should not be allowed to “cut”. The work is left unpainted in its natural state, the rusting color of the pipe and the grinding of the joints give it brownish effect and the soothing texture.

**PLATE 1**

Medium: Scrap Steel Pipe. Title: “Okun Ebi” (Family ties) (2011) by Akeem Muraina.

**PLATE 2**

Medium: Rolled Steel Plate, Bolt and washer. Title: ‘Abiyamo -Aboja Gbooro’ (Baby Friendly) (2012) by Akeem Muraina.

“ABIYAMO – ABOJA GBOORO” (BABY FRIENDLY PARENT)

This work is titled “Abiyamo – Aboja Gbooro” that is, (Baby Friendly Parent). ‘Abiyamo – Aboja Gbooro’, is a sculpture of Kangaroo personified to represent mothers of the olden days in the African context who goes extra length in caring for their children. The question now is how many parents of today could really be called Abiyamo – Aboja Gbooro? It is a social commentary art piece that revealed the attitude of today’s women concerning the negligence of their motherhood’s duty post, the womb of blissful treasures thus collapsing a virile home culture. The influence of western culture has

made our women to carry their babies in a basket, trolley or pouch, so they can no longer be called Abiyamo or baby friendly that uses extra-large loin cloth to back their babies. Rolled Metal, Bolt and metal washers are used to produce this work in a naturalistic presentation of animal form by welding the parts together. The size of the metal work is 32”x19”x33”. The arrangement of lines complimented each other in the use of straight and curve lines with tick rolled metal that he cut with oxy- acetelyn gas and later wedded together. The piece was balanced on two legs showing the characteristic of a Kangaroo, voids were deliberately created to also compliment the balance. It was finished by painting and the rough edges of the lines were left unfilled to give it a satisfactory textural effect. It could be rightly concluded that the metal art piece depicts the real mood and attitude of a caring mother in passing messages to all African women.

**PLATE 3**

Medium: Steel Pipe, Plate, Bolt and Nuts. Title: ‘Olofofo Yera’ (off satellite) (2010) by Akeem Muraina.

“OLOFOFO YERA” (OFF SATELLITE)

‘Olofofo Yera’ (off satellite) is a metal composition of two giraffes conspiring towards an exploit through side talk by whispering to the ears of each other. This has become a common phenomenon in the society. The metal sculpture was produced by Akeem to discourage unnecessary small side talks, which may lead to suspicions and chaos. ‘Olofofo Yera’ was produced in 2010 out of steel pipes, plate, bolt and nuts in a stylize form by deliberately elongating the neck beyond the normal stretch of giraffe’s neck. Using a welding technique, Muraina carefully arranged the forms by paying more attention to the head where the message is, and being skeletal about the body. The giraffe heads were detailed with found objects and placed on an elongated thick metal plate with well-arranged perforated circles supported by four legs constructed of steel pipes. The surface quality of the sculpture was left unpainted. The artist has his reason of representing the legs so short and decides to stretch the neck out of proportion to the total body. Aesthetically the metal sculpture is well balanced and communicates effectively.



PLATE 4

Medium: Medium: Metal Plate, Pipes and Junk Title: “Wobia” (Scavenger) (2009) by Akeem Muraina.

“WOBIA” (SCAVENGER)

“Wobia” as the title implies depicts the people who are never contented with whatever they have and no matter how rich they are. When placed in position of trust they still embezzle public funds. They could but best be described as psychologically imbalance and sick. Steel and metal scraps are used to execute the sculpture in a stylized form and through welding technique. A peculiarity of Akeem’s metal art is frontal, he pays more attention to the head and makes the body skeletal. This is observed in ‘Wobia’, the head is more detailed to the body. Scrap metals are used to construct the head while rolled sheet is stretched and curved to form the skeletal lines of the body and the legs that complement the head to make the sculpture balance. The size of the sculpture is, 15”x19”x27”, no color is applied but the color of found objects and the steel gives it an interesting finish.



PLATE 5

Medium: Pipes, Vehicle parts, washer, clamps elbows. Title: ‘Agbero’ (Mass Transit) (2012) by Akeem Muraina.

“AGBERO” (MASS TRANSIT)

“Agbero”, for instance, depicts two horses pulling a chariot, it runs commentaries on social, and physical issues thus, creating dialogue about environmental

realities. The sculpture draws our attention to the menace of the typical Lagos “agbero” - the miscreant. It also addresses the issues of noise pollution and environmental trauma. Metal is the medium of production welded together to create the stylized form. The head of the horses were rendered with discarded vehicle parts and clamp elbows, the heads were more detailed in achieving Akeem’s principle of ‘Frontal’, metal sheet was cut to shapes creating big circles as voids, the box as the carrier represents the body was made of metal plate without detailing, pipes were used as exhaust and legs. It is observed that the front legs are four while the rear legs are two, this could be to balance the sculpture. Creative arrangement of the various elements gives the sculpture a balanced form. The piece is given an elongated form by the size, 28”x21”x52”. This sculpture is not painted, rather the original color of the parts were left naturally and vanished with lacquer. ‘Agbero’ as title given to the sculpture depicts the attitude and character of agberos’, viewing the sculpture from the side, the mouth of the two horses give an impression of how the agberos’ open their mouth to call passengers.



PLATE 6

Medium: Stainless Rods and Mild Steel. Title: ‘Afinju Eye’ (The Conscious) (2011) by Akeem Muraina

“AFINJU EYE” (THE CONSCIOUS)

The sculpture titled ‘Afinju Eye’ depicts an abstract form of an eagle pecking to get hold of something. The sculpture is a creative endeavor of Akeem representing a wing of the eagle by cutting the motif of flying birds and welded them on the wing, while the other wing is elegantly attached to a big lacerated circle metal sheet where motif of flying birds were cut out with the pupil of the eagle in the center, the lacerated circle plate represent the eye ball of the eagle housed by two curved rods to form head while eagles beaks something on the ground. This is a combination of laceration and welding with the lines creatively arranged to form a balanced sculpture. Touches of red and black is used to highlight the piece and lacquered.

HIS LACERATION EXPERIMENT



PLATE 7

“PIRI LOOLONGO JI” (WISDOM’S LIGHT)

Akeem Muraina is experimenting mostly on fishes and birds motifs to produce his laceration technique, ‘Piri Loolongo Ji is prominent lacerated piece that motifs were cut flying in all directions and a moon is dropped into the background, lacerated plate an arrangement of rods constructed as gates with a padlock, the circle stands for moon represents

wisdom light. Red oxide and lacquer is used to finish it.



PLATE 8

Medium: Mixed Media (found objects). Title: 'Ere Osupa' (Moon Light Tales) (2018) by Akeem Muraina

INNOVATION OF AKEEM MURAINA

“ERE OSUPA” (MOON LIGHT TALES)

'Ere Osupa' is a very recent innovation of Akeem Muraina produced in mixed media with materials like, metal plate, wood, aluminium, mesh, glass and junk. The size is 5"x8" rectangular shape; the various media are either screwed or welded. The compositions of sculptures are in series that narrates the story about children playing during the moon time, the work is continuous and it links each other to complete a story. It is an ongoing set of sculpture. There are three others to complete the series and the colors of the materials were retained. The sculpture depicts birds flying over the moon.

CONCLUSION

The problem of solid waste management is a historical one because man's existence is inextricably linked to the generation of waste. Problems in Nigeria Waste management simply

means the collection, keeping, treatment and disposal of waste in such a way as to render them harmless to human and animal life and environment generally. We buy, we use and when out-of-use or tired of use, we throw away, but it keeps coming back - just like a buried seed, it rots and spring back to life. When things are thrown away they are re-christened, they become waste, trash or junk attracting such adjectives as; useless, "not needed" or "unproductive"; uninhabited, or worthless and so on. Then in the hands of others, they begin a new life, made valuable and attractive - One man's junk, another man's treasure one would say. The timely removal of accumulated solid wastes require much more than our governments at all levels, but are presently engaging the artists who uses junk as a means of waste management in Nigeria.

Artists all over the globe, since the early 20th century have been exploring and experimenting with discarded items (waste) as medium for artistic expression, through a process generally referred to as "conversion", and the end products have not only been adjudged significantly impressive but beautiful. Conversion refers to the use of an item or material for another purpose different to its original functional purpose(s) (Filani 1999). The processes has been explored over the years by studio artists and teachers of art, who are daily carrying out various studio-experiment oriented researches into devising new medium, new ideas, new materials, new means or new creative processes, in confronting their ever changing needs, thus breaking barriers in the transformation of ideas into visual forms which results into waste clearing of junks from the environment. The impact of these artists are not being recognized, encouraged and commended by the stakeholders.

RECOMMENDATIONS

- Government should support the metal artists who use junk to produce their works in Nigeria.
- Subject like Art in Waste Management should be included into the school curriculum.
- Exhibitions of mixed media and junk art should be organized by government and private individuals at short intervals.
- There should be junkyards created by waste management stakeholders where artists can go and pick junks free of cost.
- Nigerian contemporary metal sculptors should be recognized, encouraged, and appreciated by sponsoring workshops and exhibitions of junk art.
- Exhibitions of “beauty through waste” should intermittently be organized by waste management stakeholders.

REFERENCES

Ademuleya B. (2012). The Beauty in the Waste: An Analysis of Muraina Akeem’s “Metal Morphosis” (The Eden before Us Catalog) pp. 11.

Ademuleya, B. A. (1999). The Use of Petro polystyrene as a Casting Medium in Sculpture” *Journal of Industrial Design and Technology*, (JINDEST), Federal University of Technology Akure, Vol. 1. No. 1 pp. 28 – 34.

Akeem Muraina. (2012). Exhibition Catalog of “The Eden before Us”. National Museum, Onikan, Lagos.

Craig H. (2012). One Man's Junk is Another Man's Treasure. Londong Think Africa Press <https://thinkafricapress.com/article/halliday/>

European Topic Centre (n.d.). "What is waste?" Retrieved from <http://scp.eionet.europa.eu/themes/waste>.

Filani, E. O. (1999). Trend and Experiments on Improvisation of Art Materials in Nigeria Recycling Wastes to Wealth. *Journal of Industrial Design and Technology* (JINDEST) Federal University of Technology, Akure, Vol. 1 No. 1 pp. 24 – 27.

<http://www.iiste.org/Journals/index.php/ADS/article/view/7568>

<http://www.visual-arts-cork.com/definitions/junk-art.htm> © visual-arts-cork.com.

https://en.wikipedia.org/wiki/Waste_management