ECO-AESTHETICS IN SCULPTURE PRACTICE: A STUDY ON WASTE METALS, PLASTICS AND FIBRES

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THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY (Ph.D.) DEGREE IN STUDIO ART (SCULPTURE) OF THE DELTA STATE UNIVERSITY, ABRAKA.

JULY, 2017

DECLARATION

I declare that this is an original research work carried out by me in the Department of Fine and Applied Arts, Delta State University, Abraka.

_____ _____

Antonia Okogwu **Date**

CERTIFICATION

We certify that this thesis is an original research work carried out by OKOGWU, Antonia Asikabulu and that the study meets regulations governing the award of the degree of Doctor of Philosophy, Faculty of Arts, Delta State University, Abraka, for its contributions and it is hereby approved for the award of Ph.D in Studio Art (Sculpture).

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Prof. Diakparomre, Abel Mac Ofejiro
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Date:_____

Dr. Edewor, Uyoyou Nelson

Supervisor

Date:_____

DEDICATION

This work is dedicated to God Almighty alone.

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My supervisors, Prof. Abel Mac Diakparomre and Dr. Uyoyou Nelson Ofejiro Edewor have been so wonderful in breaking down my limitations in academics. All my teachers in Delta State University, Abraka especially Prof. Osa Egonwa and Prof. Mrs. Grace Ngozi Ogwu. I thank my colleagues Prof. Ugiomoh, Prof. Agberia, and Isaac Ohene Boi for their constructive criticism. I sincerely appreciate Almighty God for his provisions and protection throughout the duration of the course.

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ABSTRACT

Churning out of mass produced goods ushered in by industrial revolution since 1760 has led to quantum wastes and discards in the environment globally. This continuous and continuing mass production of manufactured goods in metals, plastics and fibres origin has led to indiscriminate liter of solid wastes in the environment. Eco- aesthetics in Sculpture practice locates a problem in the present global ecological crisis (Adams, 2014). This menace recognized in the twenty first century studies has engaged this problem from different angles as stated by a Russian philosopher, Rebeshchenkova as eco-ethics, eco-esthetics, eco-psychology, eco-philosophy, eco-history, eco-politology, and eco-ethnology. In Nigeria, economic growth and urbanization has led to the generation of wastes in several places within the country which are equally causing environmental hazards. A new purpose of engaging the wastes becomes pertinent. It is in the light of this that this study tries to investigate in the sculpture studio solid non-degradable waste materials of metals plastics and fibres that are a menace in the Nigerian environment and re-engaging same in the spirit of pro-environmental behaviour which is sensitive towards man and his relationship with nature . The qualitative and exploratory module of investigation is engaged which are further explained within descriptive monologue as the methodological design. More so theresearch is two pronged; the theoretical philosophy and sculpture studio led practice.Within these the study equally engage studio practice methods of welding, casting, assemblage, weaving, knotting, stringing and dicing. This research has explored on these three waste materials of metal, plastics, fibres in over thirty pieces of sculptures (both in relief and in the round). New sculptures are attempted underlined with Dada philosophy and Gadamer aesthetics in projecting Eco-sculptures as “Daga” sculptures.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The house chore of emptying the dust-bin arouses the interest of a variety of wastes, when emptied in dumpsites. This enormity of increasing waste in our society poses environmental challenges as seen in its' management that has not been effective in Nigeria. It is not only in my little corner in Nigeria that was experiencing the fall out of industrial revolution, it is universal phenomenon so this state of global ecological crises remain incessant and unstoppable due to the exploitation of nature (Popov, 2015), there are various kinds of wastes and they can inspire and suggest diverse human initiatives as well as agenda that have social, cultural and economic values. Underlying these initiatives is the useful idea that inspires aesthetic re-engagement of societal discards.

Wastes of various origin including metals, plastics, and fibres abound in the Nigerian environment in such significant quantum that cannot be ignored. These abound in homes, the gutters, the streets and various dump sites. These wastes in their sizes, types and quantities catch the attention of any passerby, and often strike a negative note on the majority of the populace. On the contrary, this supposedly negative reality has the potential to become a source of artistic inspiration. Over time, the recognition that wastes can be utilized for art gave rise to the initiative known as Eco-aesthetics or "wastethetics" as described by Jansen (2011).The different areas of Art such as the visual arts, creative writing, architecture, and poetry are involved in wastethetics.This study situates its' waste research in Sculpture which has been in the forefront in the utilization of solid wastes. Rebeshchenkova,(2014) in recognition of the need of eco-studies reiterates in his abstract below, on *Humanitarization of the Ecological Education as a Function of the Ecological Expert Training System*,

> *Ecological crisis is the essential part of the total crisis of the modern civilization. It is the consequence of the number of the causes, including dehumanization of society, moral*

> *decadence, loss of need in the beauty and so on. These processes are the special danger for the young generation. For the neutralization of the negative processes it is necessary to combine the ecological education with the ecological training, is engaged in its Humanitarization. In this connection we have the task of the creation of the ecological preparation system of the specialists. Saint Petersburg State Mining Institute is the first institute in Russia, in which are introduced the disciplines of the ecological profile and in which is accumulated the considerable experiment in the education of the engineers-ecologists, is created the scientific base and the skilled workers, is extended the spectrum of the directions and the disciplines – is laid of the stable foundation for the proposed system of the ecological education. The natural-science and engineering blocks of this foundation with the necessity must are cemented with the block of the social and humanistic disciplines, including ecoethics, ecoesthetics, ecopsychology, ecophilosophy, ecohistory, ecopolitology, ecoethnology, etc., (Rebeshchenkova,2014)*

This Russian Philosopher,stands at a crossroad of time, the past, the now and the future in the area of waste studies, underscored in his postulations. It is evident that an attempt is made in eco-aesthetics, as seen in modern and postmodern sculptures.Evidently the above is one of the ways to bring the society in tune with humanizing nature and culture.

The word "sculpture" which derives from a Latin word, *sculpere* which means, to carve has over the years acquired more levels of meaning. The word has been applied to other methods of art production apart from carving. These include the additive process of modeling, construction, assemblage, and installation. What is common to these procedures or processes is that the end product is in the round or relief.

There are various materials and techniques employed in the processes of sculpting. These include materials and methods of joining and arranging of these components for creating a design.Sculpture is one aspect of art which scope and materials can be considered broad and verse and an attempt in proffering a definition from the angle of material would be an exercise in futility. There is no definition of art that is absolute as systems of knowledge shift and evolve

(Lazzari, 2005). Heartney in Coulter (2009)interpretation of art as full swing on two assessment pendulum that if everything is art then nothing especially is art. This view is irrespective of the presence of two problematic facts: now that anything can be art, nothing is art and Art, like politics, goes on after its' death – sometimes in complete indifference to itself. This view of Heartney on art discounts on artist like Marcel Duchamp (1887-1968) who is one of the founding fathers of modern art and indeed purposeful re-appropriation of objects rescued from the world of objecthood and reinstated into society with enhanced status as art.

Various techniques are continuing to evolve and embracing changes in this twenty-first century just as the world is turning into a global village with the numerous inventions and technological breakthroughs. This inclusiveness and pro-adoption tendencies of sculpture has become commonplace for the search for new areas of expression. The above includes the use of materials such as scrap metals, fibres, and plastics. These waste materials are readily available in the environment waiting to be engaged within the concept Wastethetics, which is concerned with the use of wastes in aesthetics and creative engagements in the environment. The above realities inform the research to be undertaken. This is the reason this study is also motivated to anchor its' inspiration on the use of waste materials in sculpture practice.

1.2 Statement of the Problem

The industrial revolution which began in the 19thcentury ushered in certain developments in human society especially in the area of mass production of domestic and industrial objects. However, this mass-production has generated wastes, globally. This development has caused menace and environmental hazards. In Nigeria, economic growth and urbanization have led to the generation of wastes in several places within the country which are equally causing environmental hazards. Even though a few dump sites are created in some urban centres; the menace remains uncontrollable. The difficulties of waste management have

been pointed out as being the reason for the lack of attention to the menace caused by the generated wastes.The visual arts particularly Sculpture, by which these waste substances can be suitable for a new purpose becomes pertinent.

1.3. Objective of the Study

General Objective

Eco-Aesthetics in Sculpture practice, a study in waste metals, plastics and fibres have the following objectives. To produce mixed media green Sculptures and begin to make Eco-Sculptures that are philosophically tied to a universalized Dadaist spirit. The need also arises to contribute to mopping domestic and industrial wastes found in the environment through the use of abandoned and discarded wastes for the production of sculptures, for the restoration and beautification of the environment. Relating Art with the environment and as such the context in which we live in must have a bearing on studies that are sensitive to the environment just as Obiora Udechukwu (b.1946) cried out of water scarcity in one of his solo exhibitions, *No Water* in1981(allafrica.com/200412090151.html). The sensitivity to the environment and the society as a whole is the hallmark of artistry. One has to be responsive to one's environment. Proactively sensitize the public on the dangers of insensitivity to the environment and most especially turning negative aspect of the environment into real creations is a significant contribution to a healthy environment.

Specific Objectives

The specific objectives are to:

i. produce thirty-five (35) mixed-media eco-friendly sculptures that are philosophically tied to a universalized Dadaist spirit and that are for the restoration and beautification of the environment.

ii. utilize domestic and industrial wastes found in the environment.

iii. stimulate the public to the consciousness of dangers of insensitivity to the environment.

Research Question

This problem elicits the following research questions such as;

1. How do wastes become art?
2. What types of wastes can be suitable for application in Sculpture?
3. What three-dimensional aesthetic creation can sensitize society on the dangers of ecological degradation through wastes?
4. What are the relationships between Eco-aesthetics, and Hans Georg Gardener's (b.1900-2002) philosophical theory on phenomenological hermeneutics and aesthetics?

1.4. Scope of Study

This studio research which is a practically oriented study is on waste resources of metal, plastics, and fibre as available materials for sculptures in Nigeria. Other categories of waste outside the materials above are outside the scope of this study.These waste materials shall be collected, sorted, and cleaned. These materials become objects or components configured to Sculptures or forms that could be classified as Sculpture.

The scope defined above situates the conceptual framework on this research, leaning on the synergy of Dadaism, eco-aesthetics and art. In other words, a detailed naturalistic rendition of the human anatomy is completely out of the scope of this study, and rather the futuristic tendencies of applied and product sculpture comes within the scope of this work.The area of study is University of Port Harcourt community in the Rivers state of Nigeria for the wastes collected from homes, schools, shops staff clubs, industries and the dump sites through the waste vendors in Choba/Aluu Area of Rivers State, Nigeria.

1.5 Significance of the Study

"Art washes away from the soul the dust of everyday life" according to Pablo Picasso (Dorling, 2010). The modernist revolt, which Picasso initiated by the above truth, has come to stay even with some of its negative criticism. In the works of Picasso he initiated the use of wastes, and it became recognised in the art world, and now it cannot be ignored because it is relevant now for Nigeria to seek available material which is in abundance in this country.

The Nigerian economy in this dispensation should look inwards towards utilization of what is readily available, resource endowment is to be fully exploited, the country's economy must evolve in a way that is consistent with resource endowment.

Cleaning of the environment is paramount to any industrial environment, whose waste should be managed properly in other to preserve the natural environment. The conventional materials in sculpture productions are becoming alarmingly expensive that the wastes in the environment become additional welcome change, not only by its relatively cheap and available but also a fresh breath from the conventional materials as a welcome change. Furthermore, the ecological degradation in the Nigerian environment and the insensitivity is pointed out in producing Sculptures that are sensitively appealing to the conscience for ecological sanctity.

1.4 Significance of the Study

The study is significant for the following reasons:

i. conventional materials for sculpture production are becoming alarming expensive. The adoption and use of wastes in the environment become additional welcome change, not only by its availability but also by its affordability:
ii. the study aligns with the "waste to wealth" concept which shows that art from waste is a viable foreign exchange earner.
iii. the work also shows that artists contribute to cleaning the environment while upgrading it with their products.

iv. the society, the environment and individuals can utilize the works produced in the study for purely aesthetics/utilitarian purposes.

CHAPTER TWO

REVIEW OF RELATED LITERATURE, KNOWLEDGEAND PRACTICE

Conceptual Framework

The conceptual frame of this study hinges on the suppositions of Dadaism. Dadaism is an art movement that flourished in Europe, during the early twentieth century and drew its' philosophical view from irrationality and negation of accepted laws of beauty. Dadaist ideology is now an accepted norm in this present dispensation of contemporary art, an

extension of the critique of Dadaism incorporates Gadamer's hermeneutics and aesthetics (2007:1).The above is concerned with the holistic place of art in its' natural context and not just in contrast to both these positions. Gadamer argued that people have a "historically-effected" consciousness embedded in the particular history and culture that shaped them. According to Gadamer in as much as there is underlying prejudices and biases as concerns interpretations and appreciations of Art, these should not be jettisoned. Rather all should be allowed to come into the discourse in order to achieve a more multi linear holistic dimension. Gadamer criticized enlightened thinkers for harbouring a "prejudice against prejudices."

Gadamer is of the opinion that Hermeneutics should accommodate aesthetics within philosophy and not to stand alone as a field on its' own. According to the description in Webster Dictionary, hermeneutics engages interpretation and appreciation underpinning it's principles on systematic methodology. The general understanding, appreciation, and interpretation of art are all connected since hermeneutics deals with similar issues it can comfortably accommodate aesthetics (Kremer. 2013.) Gadamer stands squarely in the phenomenological tradition and his basic priority lies in the place of Art in our experienced world. He is primarily concerned with the place of art in our experience of the world. Gadamer looks at aesthetics from the view of the upper echelon of reasoning that could be regarded as a space for the privileged intellectually endowed few that concurrently construct and deconstruct. He shreds elements of the grand tradition of Platonic, Kantian and Hegelian aesthetics and proffers a phenomenological reconstruction of many of the central insights of that tradition to demonstrate their continuing relevance to our contemporary experience of art. For Gadamer, interpreting a text involves a fusion of horizons(http://en.wikipedia.org/wiki/Fusion_of_horizons) where the scholar feels comfortable with various divergent or convergent views in cognizance of the various horizons. It is expedient at this juncture that one should attempt to engage and expound a brief discourse on

the aesthetic philosophic theory by Gadamer, eco-aesthetics, Dadaism and, as this research work stands on these three pods, to launch this thesis on a better understanding and foothold.

Review of Related Literature, Knowledge, and Practice

This review of related literature, knowledge and practice was carried out in the following order;

Hans-Georg Gadamer and his Philosophical views on Hermeneutics and Aesthetics

. Eco-aesthetics in Sculpture Practice.

Dadaism

Ready made in Dadaism

Waste in Other Climes

Waste in Contemporary Nigerian Art

Waste Art in Furniture

Other Creations With Waste Metals.

Implication of the Review.

A look at the very beginning of what led to the generation of much wastes in the environment is not far-fetched as one takes a closer look at the circumstances surrounding the enhanced production of goods that took place. According to Gambino (2009) reinvention occurred after the initial invention of the wheel in Mesopotamia in 3500 BC. As John Keogh received its potency in Australia and this revolutionized with its attendant mass production of goods in the industries.

It is a fact that the Industrial Revolution started in Europe and England precisely, England was at the fore front until other nations like Germany India, America and others followed .It is also a known fact that The reinvention of the wheel and its' attendant mass production of items marked a sharp turn in the history of humankind and also the perception of art and the utilization of the products of such mass production wastes impacted greatly on art today. Many production companies besieged the world production stage and the result is the many wastes that are obviously visible as too much problematic waste in the streets

Hans-Georg Gadamer and his Philosophical views on Hermeneutics and Aesthetics

Hans-Georg Gadamer was born in 1900 by Johannes Gadamer and Emma Karoline Geiese in Marburg, Germany. He studied Philosophy in Breslau under Richard Hönigswald, but soon moved back to Marburg to study with the Neo-Kantian philosophers Paul Natorp (http://en.wikipedia.org/wiki/Paul_Natorp) and Nicolai Hartmann(http://en.wikipedia.org/wiki/ Nicolai_Hartmann), Gadamer moved to Freiburg University (http://en.wikipedia.org/wiki/University_of_Freiburg) and began studying with Martin Heidegger (http://en.wikipedia.org/wiki/Martin_Heidegger), who was then a promising young scholar.

The treatise Truth and method published and revisited in the revised edition in English from the German language contains arguments and discussion emanating from the respond from the books. Finally, Gadamer's essay on Celan entitled "Who Am I and Who Are You?") has been considered by many including Heidegger (http://en.wikipedia.org/wiki/Heidegger) and Gadamer himself as a progression in Truth and Method Hans-Georg Gadamer's Aesthetic Theory Palmer (1994) explains that . The word Hermeneutics was etymologically gotten from the word hermêneutein which is translated as “to interpret” though practically hermeneutics has a much greater significance.

An artist is a hermeneut who is a go between the gods and man in the Greek cosmology Hermeneutics is unique in that it strives to find meaning within the text itself and does so in an iterative progression. Hermeneutics engages opinion as well as biases in order to elucidate understanding and with that understanding reengage the text from a new perspective.

Gadamer's discourse on Truth and the methodology or approaches of unraveling the truth with humanities cannot follow the modern methods found in the natural sciences because they are at variance and, he was critical of modern approaches to humanities that modeled themselves on the natural sciences.

On the other hand, he took issue with the traditional German approach to the humanities, represented for instance by Friedrich Schleiermacher (http://en.wikipedia.org/ wiki/Friedrich_ Schleiermacher) and Wilhelm Dilthey(http://en.wikipedia.org/wiki/ Wilhelm_Dilthey), who is of the opinion that correct interpretation leads to recovery of the original meaning of the original author.

Instead, Hans opined that the meaning within the text cannot be reduced to the intention of the writer context. Some school of thought are of the opinion that if hermeneutics is defined as the bridging of personal or historical distance between minds, then the experience of art would seem to fall entirely outside its' domain. There are three central metaphors associated with hermeneutics. They are to say, to explain, and to translate.

The business of hermeneutics examines what is said, how it is said which is the manner of the said and also the possible underlying meanings of what is said. This approach of study was engaged by early bible scholars to try to explain the bible of which the word is the link between God and Man. The hermenut acts equally in the same way between the philosophy and the audience. The explanation of what is said expands what is said.

Explanation is the speaker's or writer's means of expressing their interpretation of their own thoughts in words; and in doing so provide their audience an opportunity for their own interpretation and understanding. Explanation presents the author's horizon of interpretation. Palmer (1994.25) provides a simplified progression of historic hermeneutic thought: 1) biblical exegesis, 2) philological, 3) scientific, or the engagement of all and social sciences, 4) Existential, and cultural. The evolving emphasis of hermeneutic thought share common themes have unique differences.

Interpretation of the word of God in the Bible is concerned only with understanding of God through his word. This tends to be Theo monistic while Hermeneutics moves in diverse directions of interpretation .Indeed Hermeneutics is geared towards unraveling metaphors. The text in general as a horizon of multiple possibilities (Ronald Arnett 1988, p. 88) Translation

has multiple implications as well. It also has a fundamental meaning of conversion from one language to another..

Translation engages the presenter's horizon of interpretation with their own in order to come to a shared understanding. It is actually a dialogue that is mediated by the text. Gadamer does not provide an account of the aesthetic in any customary sense. The aesthetic philosopher Gadamer, confronted aesthetic appreciation from multiple sides both the biases and advancements in an all-embracing manner.

Gadamers concern over aesthetics of art is beyond the qualities which could be ascribed to the concern of analysis of modern philosophy, rather the major trust of this great philosopher is in the enclave of what the art work sets out to address and it is associated with symbols that can be associated with the other works, approached the issues in a more free flexible robust dimension.

The interpretation of art that is embodied in hermeneutics which exposes art and Gadamer is influenced by Heidegger, though one can say that Gadamer's approach to appreciation of art is more of conceived presentational, far remove from the tradition , which is perceived as real presentation rather than representational. In one of Gadamer's essays "Word and Pictures (1992) he exposes the fact that picture is more than just a copy (Gadamer 1993, 8, 374).

> *"It is in reality more than that as it just stands as an entity of its own without representing any other thing. The nature of art is such that one can never exhaust its deliberations in the arena philosophic aesthetics. As one beholds an art work it has the capability of impacting on the holder, transporting him to a world of its own different from the present sensibility and it is only art that does this directly to the beholder. (Linge. 1976, 95-97).*

However, Gadamer does not define hermeneutics this way. Gadamers version of aesthetic discourse on forms and symbols furthered the horizon of aesthetic principles far into the realm of the speculative. The word "symbol" is a Greek term for a token of remembrance (tesserahospitalis) (Gadamer, 1986,) Gadamer creates creative tensions in his hermeneutics theoretical works on signs, symbol and icons as he shreds with the intention of still bringing together the shredded parts as a complete whole. The symbols are purposefully repeated in

search of more meanings It is this tension in discourse that marks out Gadamer's Hermenutics that originates from Herdegger and Hans now takes it further away from the realm of the speculation enclave.

On the other hand, Gadamer stalwartly defends the autonomy of the art work and, on the other, despite his resistance to any subsuming of art within philosophy; in as much as Hans Gadamer Stalwartly defends the autonomy of the art work, he also believes in the study of aesthetics should not stand alone but be incorporated into Hermeneutics. This vibrant ideas of Gadamer brings his arguments into the superior intellectual reasoning, far more removed from the ordinary.

This tension replicates aspects of the so-called hermeneutic circle. Schleiermacher, (1768-1834) for example, argues that it is only possible to grasp an individual's personal utterances if one can understand the general structure of the language which that individual is coming from. In other words, the background of language must be studied holistically.

Wilhelm Dilthey operates within a similar part-whole structure, namely, an individual's personal experiences will mean little to the reader unless they can be contextualized within a historical frame. A movement between part and whole also takes place in Gadamer's thinking. The art work is initially presented in its singularity. But then, the particular is illuminated by being brought under a subject-matter.

To engage artworks discursively is to bring generalizations about a work to bear, placing it in a wider context of associations. The movement to the wider level of generalization also returns the spectator to the particular, since generalization enables an understanding of which discourse moves forward and backward for clearer view.

It recognizes that the cognitive dimension of aesthetic experience is like all linguistic experience both centrifugal and centripetal in nature. When a work addresses the beholder its' impact is centrifugal: it upsets and transforms what we customarily recognize. (Gadamer. 1993).The question that is always pertinent in the appraisal of art within the realm of the aesthetic theory unraveling isolates the discourse from the art.

Discursions from the particular point, given artwork to a more abstract level of reflection, revolving on its' subject-matter. Does not the contemplative movement away from the work betray its particularity and suggest that the sense of a work lies beyond it, in its

concept? Were Gadamer to have fallen into this impasse, an idealist and representation list account of art would be forced upon him, contemplation of its' content must be at play. (Pragmatism Today, 2013).

Eco-aesthetics in Sculpture Practice

Eco-aesthetics is concerned with the study of art and the sensitivity to sustainable aesthetic propositions. Therefore, Eco-Sculptures are Sculptures that comb the study of three-dimensional art with recourse to the sensitivity of the ecological system and its' preservation. Wastes that degrade the environment are therefore utilized to make sculptures. In the same vein, incorporation of wastes as materials in art creation and sensitization of the sensitivity to the environment, Jansen (2011) calls the term wastethetics. Others simply call it green sculptures.

Art, aesthetics and environment as they interrelate dominates the twenty first century discourse as it calls for urgent solution to the environmental space; hence art's attention is drawn to Environmental Art. In this way, the aesthetic of environment goes beyond appreciation of art but further into the aesthetic appreciation of both natural and human-made environments.(Routledge Encyclopedia (n.d.). These afore mentioned factors have broadened the scope of environmental aesthetics beyond that of18th century aesthetics in the world at large, and the nature of art. These differences require that environmental aesthetics must begin with most basic questions, such as 'what' and 'how' to appreciate. How do we rehabilitate the environment which as nature, we are part of? What could be the nature or order in the environment to appreciate it fully? What input can the artist make to add to the general expectation of order in the environment? In this area of Sculpture Studies there are different types such as renewable energy sculpture, which produces power from renewable sources (https://en.wikipedia.org/wiki/Renewable_source), such as solar, wind, geothermal, hydroelectric or tidal energy sources. Such Sculptors as Alexandre Dang (http://www.alexandredang.com/) (b.1973) have developed and incorporated solar energy into kinetic artworks. Functional renewable energy generator (https://en.wikipedia.org/wiki/ Renewable_energy_generator) in his work hence utilitarian and aesthetic creations that is simple but also complex. In this study, some Sculptures are produced for security surveillance. These eco-sculptures are developed bearing in mind the safety challenges in the environment.

The idea of renewable energy sculptures has been pioneered by Eco futurist visionaries such as Patrice Stellest (https://en.wikipedia.org/wiki/Patrice_Stellest) (b.1953), Sarah Hall (https://en.wikipedia.org/wiki/Sarah_Hall_%28glass_artist%29) (b.1974), Julian H. Scaff (https://en.wikipedia.org/wiki/Julian_H._Scaff) (b.1970), Patrick Marold (b.1975) and architects such as Laurie Chetwood (https://en.wikipedia.org/w/index.php?title=Laurie_ Chetwood&action =edit&redlink=1) and Nicholas Grimshaw (b.1984). The philosophy of the environmental art (https://en.wikipedia.org/wiki/Environmental_art) as a whole believes that the aesthetics and the artwork are inter related underpinning the functions in ecology.

Dadaism

The word Dada is derived from two sources the first is the hobby horse and the second is the 'da da' source which is yes, yes in Roman language attributed to Tristan Tzara (1896-1963) and Marcel Janco (1895-1985) according to Wikipedia. Dadaism is an attitude expected in an art movement characterized by rejection of the cultural and political values that stood for the First World War. (Richer, 2016) It is within the sphere of creativity and inventive experimental spirit. It started with the ideology of nihilism. Marcel Janco recalled, "We had lost confidence in our culture. Everything had to be demolished. We would begin again after the tabula rasa (http://en.wikipedia.org/wiki/Tabula_rasa).'Dadaism was set to shock the world with art that were anti society and protest against the senselessness and brutality of the world war and total rejection of social order. One could also deduce that Dadaism furthered the frontiers of cubism by telling a full story with pieces of cut papers tickets plastic wrappers in collage. This is done with the incorporation of media cut-offs in photomontage. In Cologne, Max Ernst (http://en.wikipedia.org/wiki/Max_Erns) (1891-1976) engaged photographs and illustrations gathered from the First World War to portray the destruction of war .The Dadaists - the "monteurs" (mechanics) - took to unconventional methods of production of art to express their views of modern life through images presented by the media. Renewable energy sculpture - (Wikipedia).

Figure 1: Raoul Hausmann, *Mechanischer Kopf (Der Geist unserer Zeit) (Mechanical Head) (The Spirit of Our Age)*, Wood, Metal, 1920 Courtesy, www.metmuseum.org/art/...65584

Figure2: Raoul Hausmann, *ABCD* (self-portrait), photomontage, Gelatin silver print, 1923-24, 15.1cm x 10.1 cm (515/16x4in.) Courtesy, www.metmuseum.org/art/...65584

Ready-Mades in Dadaism

This term ready-made was a term used in America to differentiate between the handmade products, from the manufactured ones in early 1900.This same term caught the fancy of Duchamp and it best suited his concept of non-retinal art as against retinal stereotype, thereby breaking into the realm of conceptual art while defiling conventional concept of art being always associated with beauty. Duchamp got fed up of painting as ideas took over transforming objects into art.

An ordinary object is elevated to the dignity of a work of art, by the mere gesture of choice of an artist. A movement that questioned long-held assumptions about what art should be, and how it should be made. In the years immediately preceding World War I Duchamp found success as a painter in Paris. (MoMA | Marcel Duchamp and the Readymade.(n.d.) However the restless kindred spirit and experimental revolutionary too better part him and so, he soon gave up painting almost entirely, explaining, 'I was interested in ideas-not merely in visual products' .In doing so, Duchamp paved the way for Conceptual artwork that serves within the mind (conceptual) and not just the eye(beauty).

Figure.3: Duchamp, *SnowShovel*,Metal, Style, Readymade, 1923-24

Courtesy, http://www.moma.org/.../.../marcelduchamp….

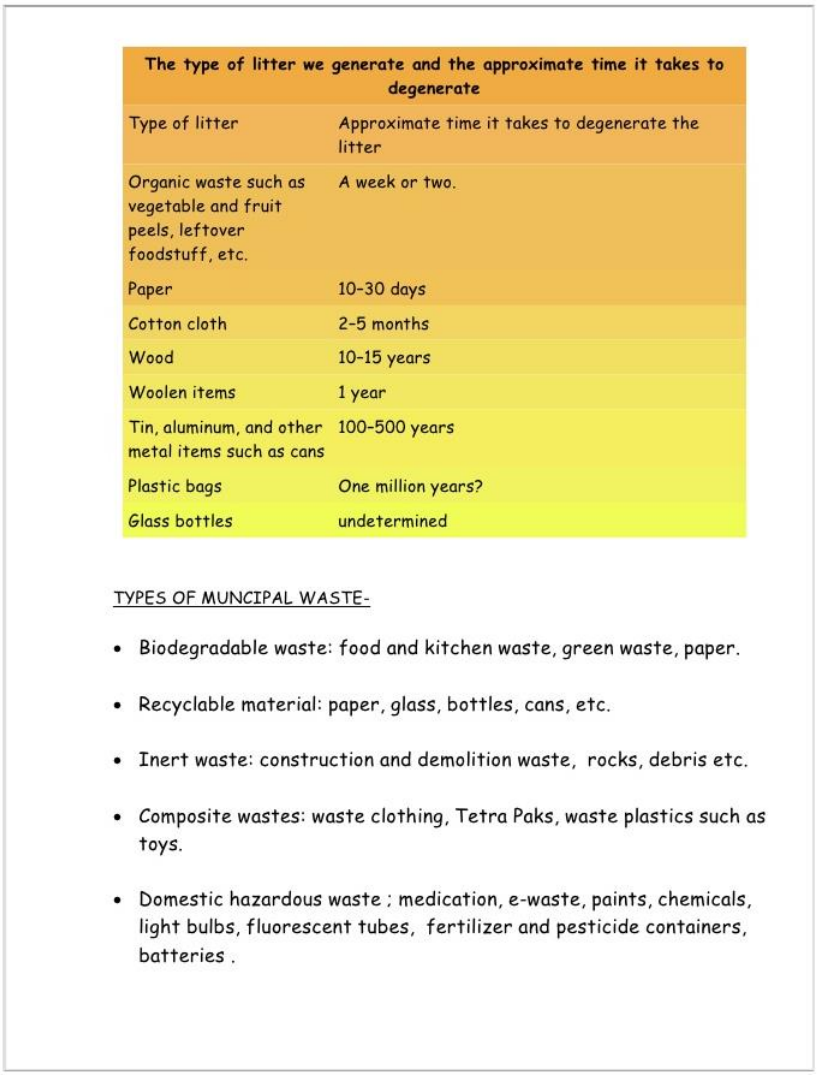
Porcelain urinal was purchased in April 1917 by Duchamp, Walter Arensberg (1878-1954) and Joseph Stella (1877-1946) from Mott ironworks in New York and the simple explanation attached to it which reads, ‘he chose it `had a turn in the tradition of art into the conceptual realm. It is not just only what we see but what engages our vision within that makes an artwork and on that basis, the new creations or objects stood as artworks and created a new meaning for that object. Marcel began to view the manufactured objects of his collection as objects of art, which he called "ready-mades (http://en.wikipedia.org/wiki/Readymades _of_Marcel_Duchamp)."

Duchamp will sign his signature on the work with some captions and the artworks werecalled readymade. Duchamp wrote introductory statement attached to the ready- made which helped the beholder to internalize the direction of which the art pointed their beholder to the conceptual realm.

Metaphorically this is the goal of hermeneutic translation. With translation, the audience engages the presenter's horizon of interpretation with their own to come to a shared understanding. In a sense, it is a dialogue that is edited by the text. Through the process of translation, the audience is brought to understanding.

Waste and Art in other Climes

Several studies, works, and practices have been done in the international circles of Asia, Europe and America as regards waste and art. In India, wastes from various sources have been catalogued and analyses done to determine their duration of time they take to degenerate (Figure. 7)



The type of litter we generate and the approximate time it takes to degenerate	
Type of litter	Approximate time it takes to degenerate the litter
Organic waste such as vegetable and fruit peels, leftover foodstuff, etc.	A week or two.
Paper	10–30 days
Cotton cloth	2–5 months
Wood	10–15 years
Woolen items	1 year
Tin, aluminum, and other metal items such as cans	100–500 years
Plastic bags	One million years?
Glass bottles	undetermined

Figure4. Types of Wastes generated in India and how long it takes to degenerate. Courtesy, National solid waste association of India

There are high potentials for art in these available materials in the environment. Indeed, prior art practitioners like Pablo Picasso had initiated trends in this direction with the famous work, Bull Head (1942) where he combined a bicycle seat and its' metal handle to actualize the composition.

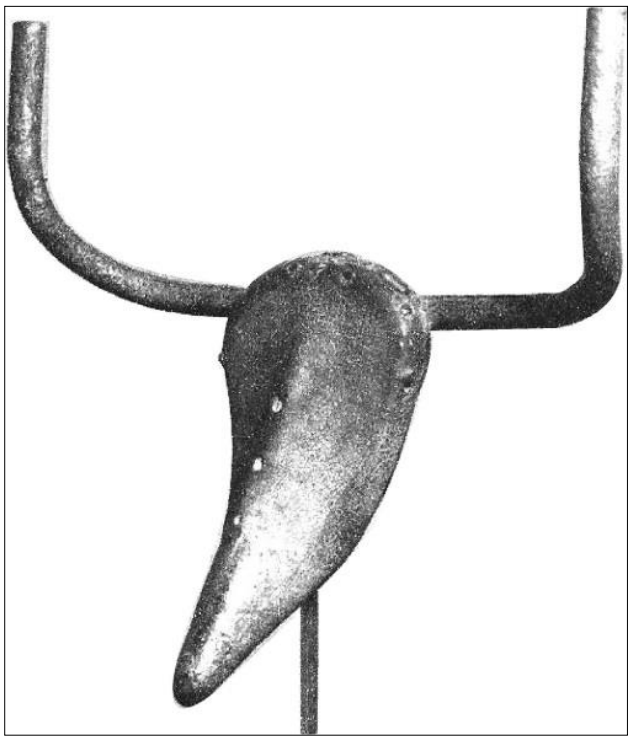


Figure. 5: Pablo Picasso, *Bull Head,* Waste Metal,844cmx 128cm (11.7x17.8ins) 1942, Courtesy, The Wall Street Journal Eric Gibson reunion des museesnationaux\ art resource New York

Ray Tomasso (b.1949) is another artist that worked with waste paper and waste jeans to make relief casted Sculptures (Jacobson, 2010:1) It is stated that each piece of Tomasso is a statement of emotion and physical tolls left by the passage of time. Other sculptors that shared the same vision with Duchamp and Pablo Picasso in this trash art include Kurt Schwitters (1887 -1948), Georges Brague (1882-1963), Vladimir Bararoffe Rossine (1888-1944), Alexander Achipenko (1887-1954) and Henry Laurens (1724-1792).

It cannot be directly and specifically stated the particular time that this genre of art which is waste or trash art started globally. Hassan and Oguibe (2001:1) tried to throw more light on some of the phenomenal indices that paved way for the turn from the traditional norms in art, to a reaction that has emerged from anti-conventionalism. Moreover, it can easily be pointed out too, that the continuous nature of life which is characterized by changes bring to fore, change, which is the only constant variable in art.

Lawrence Alloway (1926-1990) coined the term “junk art” which is used for original art works that utilize scrap metal, broken up machinery, cloth rags, timber, waste paper and

other found materials (Matin, 2011:1).

These junk artworks and genre of art are traceable to the works of Pablo Picasso, Marcel Duchamp, and Schwitters. It is sometimes referred to as junk art movement, found art or trash Art. It utilizes ordinary everyday materials to address the aesthetic issues of creativity. Marcel Duchamp could rightly be said to be one of the pioneer sculptors to produce works with wastes. Eventual (http://www.collegeart.org/itsatrap/trainer.php).The works of AlinaSzapocznikow (1926 - 1973) below in Fig. 10.also shows the extent to which waste objects have been utilized for the production of Sculpture in Europe.

Figure6: Marcel, *Fountain*,61cm x 36cm x 48cm, 1917, Courtesy, AlfredStieglitz

Alina's parents were Jews who were medical doctors and she was born in Kalisz. During the war she was imprisoned in German concentration camps, Alina worked in Poland, but in 1963, she went to Paris because she was attracted to a conducive atmosphere for her creative work and artistic projects. It was in Paris she began to use plastic, among others polyester.

Her work was mostly casts of her body, but also fragments of the bodies of their loved ones such as her son. Perhaps working in such toxic materials had an impact on her and exposed her to breast cancer. Unfortunately, after a long struggle with cancer, she lost the battle and died in France at the age of 47 years.

Figure.7:Alina Szapocznikow, *Petit Dessert I,*Coloured polyester resin and glass, (3 3/16 x 4 5/16 x 5⅛ ins) 8x11x13cm, 1966-1967, Courtesy, Travis collection.

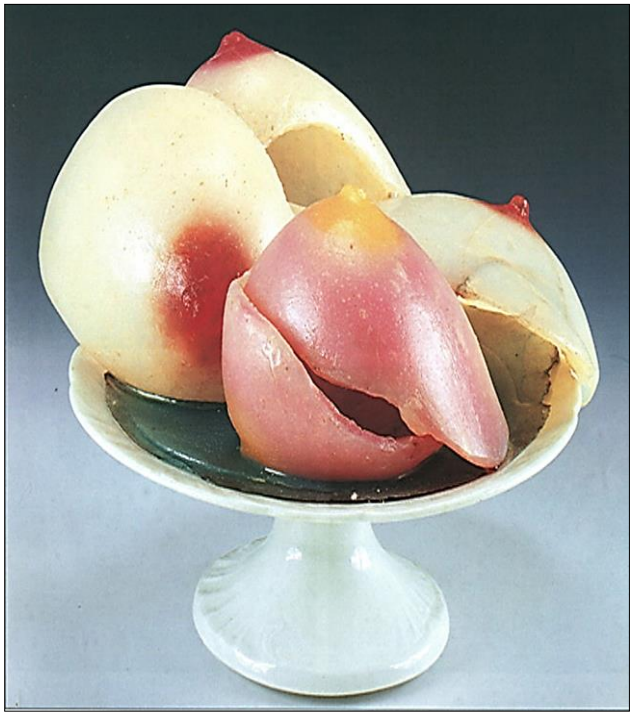


Figure.8:Alina Szapocznikow, "*Dessert* III, Discarded plastics. Dimension, not stated 1971Courtesy,MoMa. New York, and Galerie Gisela Captain, Cologne

Figure.9:AlinaSzapocznikow, *"Illuminated Woman"*,Discarded plastics,155cm x57cm x 40cm,1966-1967,Courtesy, MoMa , New York, and Galerie Gisela Captain, Cologne.

Her artist peers widely acknowledge Szapocznikow as among the highly contributors to the shaping of the twentieth century Sculpture. She pioneered the use of unconventional sculptural materials, such as polyester and polyurethane, and constructed a visual language that

addressed the body's pain and regeneration (MoMa, 2014). The exhibition organized for this same artist, Alina, includes approximately sixty sculptures, fifty works on paper, and numerous photographic works, demonstrating the tremendous range of Szapocznikow's vision and continuing influence on twentieth- and twenty-first-century artists. In the United States of America, similar works were being done by Kathryn Spence in an exhibition tagged Dirty and Clean (http://www.aldrichart.org/exhibitions/Spence.php), at Aldrich Contemporary Art Museum. Spence uses found, dirty, and discarded materials to explore the complexities of humanity's relationship to garbage and its place in our ecosystem. Spence, an avid bird-watcher and nature enthusiast, creates life-sized animal models from scraps of paper, fabric, string, and wire. Her work plays with the idea of dirt and dirtiness as both a purifying source and as a by-product of human waste.(The Aldrich Contemporary Art Museum, 2014).

Another artist that works with even a more perishable waste, (garbage) is McDonald. McDonald's works at the Community Innovators Lab (http://web.mit.edu/colab/) at the Massachusetts Institute of Technology, and combined technology and economics to help create sustainable cities.

McDonald believes this to be a missed opportunity, in that one is wasting waste when it could be turned into resources. Still in the same vein is Sayaka Ganz (b.1976) an American Japanese with multi-cultural interplay of Japan, Brazil, and Hong Kong as a result of her interactions with these places of abode. She is currently a university don in Purdue University Fort Wayne.

Figure10:Sayaka Ganz, *Dragon*, Discarded Plastics, Dimension, 960px x447px Courtesy: htt://www.sayaka ganz.com

Figure.11:SayakaGanz, *Wisdom*, Discarded Plastics, 21.2 cm x 14.96cm x 3.14cm (54 ins x38ins x 8ins)Courtesy, htt://www.sayaka ganz.com

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Figure 12:PaulBonomini,*Wee Man 1*,E-waste,7meters,2013, Courtesy:www.shutterstock.com.

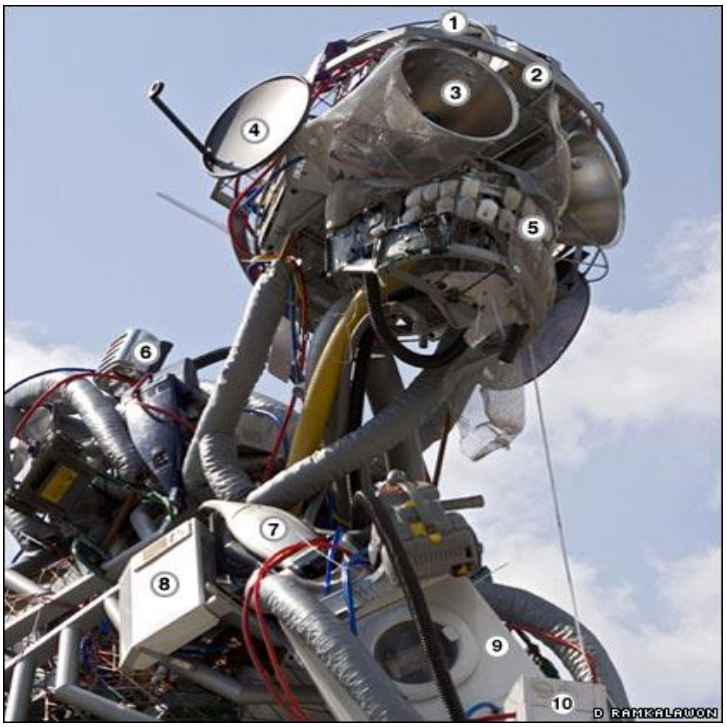

Figure13: Paul Bonomini, *Wee Man 2*, E-waste, 7meters, 2013,Courtesy: www.shutterstock.com.

Ganz utilizes waste plastics as tools of expression. Sayaka's recent sculptures depict moving animals in polychrome and energy. In the area of waste plastics, the advent of the CD, vinyl record production rapidly declined but there are still millions of old discs in circulation. Still, there is undoubtedly much vinyl out there by weight sitting unused.

Figure14: Christophe Gaudin, "*Vinyl, artdisc,* Vinyl26.5x162x88cm, Courtesy, Tony Leather.

Ingeniously, the United States of American has found ways of repurposing vinyl into various items such as tiles, hose, bottles. Ladies hand bags are made from vinyl and vinyl exhibits more environmental friendly trait than plastics. Vinyl is more environmentally friendly to make than other plastics, using less energy and causing fewer emissions, but it never bio-degrades or breaks down in a landfill.

Figure.15: Plastics Animal figures, courtesy www.google.com.ng/.....

Figure 16: Beckley Park Topiary Garden,courtesywww.parksandgardens.org/places/333

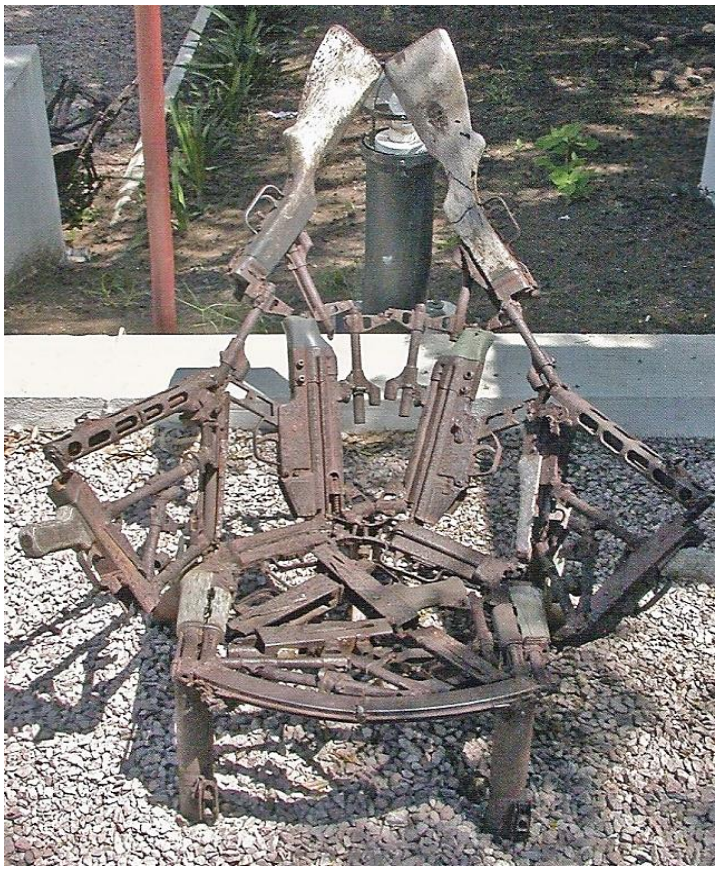

Figure17: GoncaloMabunda, *Chair*, Metal recycled weapons, Wood and Metal,2003,Courtesy,Africa,Contemporary Art of a Continent,Remix.

Abraham Cruzvillegas (b.1968) is a Mexican Sculptor whose fascination on wastethetics has earned hima space in Turbine Hall at London's Tate Modern (BBC, 2015)

Figure.18: Abraham Cruzvillegas, Dimension, 1600x750\(sic) Courtesy, www.bbc.com/news/entertainment-arts-34504157

Looking at the history of Plastics, revealed that the initial studies on Ebonite or hard Rubber in 1851 paved way for studies in plastics and the successes in this area has led to the utilization of plastics in virtually all area of industries and manufacturing. The new understanding exposed the attendant mass waste of plastics almost to a state of menace in the society .The natural rubber studies set the two brothers, Wyatt and Isaiah, to create a process for producing a material made of camphor and cellulose nitrate in 1870. By 1872, The two brothers, Wyatt and Isaiah went on to establish the Celluloid Manufacturing Company. Alexander Parkes, (1813-1890) an English inventor, noticed that a solid residue was left after solvent in the collodion evaporated. As he was experimenting he noticed a "hard, horny elastic and waterproof substance." which was the actual beginning of plastics.

In 1856 some woven waterproof fabrics emerged. (www.chem) By the 1900s, the use of plastic and all of its variations took off in its full bloom. Today, it is the most used material in the entire world not the just United States of American industries, with nearly every product containing plastic in one way or another. No matter the classification, all plastics (http://www.plasticsindustry.com/types-plastics.asp) are polymers.

Plastic is then customized by "hanging" different little groups to the backbone. Wastes of plastic origin could be a menace as well as an opportunity in the contemporary environment. The theory of Janet's 'Triple 'R' of reduce, reuse and recycle seems to hold sway as waste, engages in waste plastic bins filled with wastes and the impact of the wastes on the bin bag suggesting internal peeping forms that ordinarily might mean nothing to anyone until close attention is given.

A bag for collecting recyclable containers made out of stretch material -'I look at these bags and the first thing I think is: why hasn't anyone thought of this before?' Repurposing engages the philosophy of "Reduce, reuse, recycle" which is the "holy trilogy" of today's contemporary twenty first century responsible lifestyle. These bags are more than their intended use; they portray the philosophy behind the three words.

. One reuses and recycles garbage bags and waste and turn them into a dynamic work of art. Seeing the bag fill up and how each package put in, affects the bin bag, the amount of garbage produced and provokes a rethink of purchasing habits. (Busy boo, 2011).

Figure. 19: Laura Lynn Jansen, *Wastethetics*, Dustbin bag and refuse,2011, Courtesy: Busyboo.www.busyboo.com/../recycling

Plants and animal sculptures with waste plastic bottles have been the preoccupation of Veronika Richterova (b.1964) from Czechoslovakia, for the past decade has collected 3000 pet plastic bottles from 76 countries. She started her experiments in 2004 without having any environmental friendly agenda when she stumbled to the fact that heat can easily manipulate the bottles and she waded into this sphere of creativity. Sculpture metaphors and statements are ascribed to Willie Coles an African American postmodern artists.

Figure 20:VeronikaRichterova, *Plastic bottle art*, plastic bottles, (sic),Courtesy: Lucy Wang.

Figure.21:Veronika Richterova, *Cactus*, Plastic bottle art, plastic bottles,Courtesy Lucy Wang.

His assembling items ranges from discards of irons, bicycles, shoes, hair dryers. He engages the repetition elements of design to state his sculptural view in installations. He at times takes to scorching with iron and the scorching marks as decorative elements. He appeals to the same cord of waste mania in the present day environment. His statements in installation came to the lime light in middle of 1980s as his works tilts towards Dada ready-made and surrealism The other extreme of study on waste is Peter Buggenhout's first impression of Mumbai, his raw sculptures and installations are made from waste materials that include degradable wastes, animal intestines, and dust. At first sight, these dirty works look unattractive, odd and even frightening. It is as if they wanted to take over the room completely and infect it. It is as if Buggenhout had turned his sculptures inside out and emphasized the

physical decay, the imperfect perfection, erosion, and transience. His aim is to mirror the world that surrounds us. Depending on its' scale, his work may take the 'form' of a large body or a shattered building in a run-down district.

Fig. 22:Peter Buggenhout, *Horse*,hair, blood, polyester, epoxy, polyurethane, iron, Aluminum, Dimension: 26.5x162x88cm,1966-1967Courtesy, MoMa.moMa.org/m/…

This Belgian artist Peter Buggenhout encountered Mumbai and his experience in a new area gave birth to his spaghetti leftover petrifying Sculptures ' When Peter Buggenhout is confronted with bustling city of dreams, he sees a big plate of spaghetti. According to him a chaotic mangling of spaghetti and its accompanying source struck an indelible note in his memory which later gave birth to the bio-degradable putrefying sculpture in his solo exhibition. People are crawling over and under each other; there are cars and bikes everywhere."

Buggenhout's sculptures are born out of the discarded debris of garbage heaps" (Maria, 2008:10). Sculpture moves towards a safer environment and engineering in the work of Ralf Sander, this world saving machine project that utilizes solar to produce ice blocks Environmentalism and climate change propels Ralf Sander to venture into futuristic thought-provoking adventure, in this project that might change the face of Sculpture, bringing technology in renewable, energy into Sculpture practice.

Figure.23:Ralf Sander,*World Saving Machine*, Solarpanels, Metal pipes, 2008, Courtesy, en.wikipedia.org/wiki/Ralf Sander

2.4 Wastes in Contemporary Nigeria Art

The consciousness of productive utilization of waste is growing in Nigerian contemporary Art. One of such point of discourse is "Art is everywhere", which is an international art workshop. Art is Everywhere was originated by Ayo Adewunmi in 2005 in collaboration with Alliance Francaise in Enugu.. The workshop sets out to harness waste in the creation of Art works thereby attempting to reduce the wastes as well as serve as a platform for youth training in the bid to harness wealth from waste. This will also gainfully engage the youth thereby removing their mind from youthful vices .Utilizing wastes in the workshop tends towards sensitizing the public to the dangers of generated wastes in the environment, This same workshop also create bridges between cultures both within and outside Nigeria.

From having the workshop in one place to improving its outlook to revolving the workshop places from one place to another .This particular arrangement has not only brought the works closer to more people but also engage the utilization of wastes in various places .So far, Art is everywhere workshop has been held in Enugu, Jos, Kaduna, Zaria and Banjul,

Gambia, using wastes to create artworks. The workshop had certain cardinal terms of reference among which are,

1. Point to and tickle the artist sensitivity to his environment its degradation, and

2. Turn such garnered environment sensibility into making wealth through art.

Figure.25: Togolese, Onyo Dackey at work, Courtesy Art is everywhere

The exhibition housed some international artists like Malick Ceesay, Amie Puye, Artmerh Assogba, Ferreol Yamadjako and MOR Faye. Others that participated from Nigeria within were Tonie Okpe, Jerry Buhari, Ken Okoli, Ayo Aina, Chike Obeagu, Okechukwu Eze and Ike Francis. One thing that is not clear is what waste materials were sourced and used in the tenth outing of Art is Everywhere in Ahmadu Bello University in Zaria (art is every were.com/workshops/….,).Waste is enormous a workshop of such nature should have been tailored to a particular category of waste.

Apart from this workshop on Wastes, the other workshop in Nigerian that attempts re-utilization of waste is the Harmattan Workshop in Agbara-Otor in Delta State of Nigeria Further studies and more contemporary works of Osahenye Kainebi in *Trash-ing* engages empty containers of bottled water from Coca-Cola and its' market rival Pepsi-Cola in harmonious visual interactivity to make deep paint statements in Lagos environment, drawing

inspiration from Jean-Michel Basquiat (Ogbechie, 2009:1).Ugiomoh in the same text brings the quotation of Plotinus the Egyptian Neo-Platonist that no eye ever saw the sun without becoming sun-like, nor a son see beauty without becoming beautiful. The entire underlying meaning of what Kainebi does is better portrayed by the medium connoting Marshall McLuhan advocacy that the characteristics of a medium affects the message, in other words, the empty cans and empty bottles point to global consumption of such products, and the sensitivity of this artist to his environment drawing his resources from the readily available waste. Kainebi's creativity tunnel is so enlarged that his studio waste becomes a medium for intense creativity that involves re-contextualization and refiguring of urban waste (Osahenye, 2009:1).

Figure 26:KainebiOsahenye, *Casualties*, Discarded metal cans, 2008, Courtesy, Wand installation, 2008.

OsahenyeKainebi (b.1964) a painter; seem to be consistently blazing the trail on Waste art in Nigeria.

A female Nigerian Artist Dike Ndidi has been in the fore front in projecting the issues in Nigerian and this time she focused her artistic idiom on the missing Chibok girls that were kidnapped by *Boko haram* Islamic terrorists in Nigeria, with double Decker bed and scattered Flip Flops.

Figure27: Ndidi Dike, *How Much Am I Worth?*, Metal ,Plastic Flipflops, Courtesy,www.vanguardngr.com/..state –of-the-

Olu Amoda is another Nigerian contemporary sculptor that has contributed immensely in the area of waste metals that Ugiomoh in his critical analysis of Amoda's works says;

> *Forgotten scraps of iron and steel gleaned from junkyards, roadsides, or whatever - for Amoda, these things vibrate with invisible internationalities, the residual energies of past users. Both on and below the surface, an old piece of metal retains the traces of the human beings who created it, used it, cared for it, damaged it and discarded it. Such an object is an index: it refers to its own history as a constituent part of a functioning works of art; each piece contributes not only to a wider, more variegated history, but also to the sturdier, more harmonious future. And in making the contribution, each object - however scarred, rusted or wounded it may be redeemed (Ugiomoh, 2006: 2).*

Since the introduction of information communication technology in 1936, it came in with its attendant numerous wastes of the various components of the computers and accessories that are classified as e-waste which is the disposal of electronic goods, such as cell phones, mp3.

Players, televisions, andcomputers. The industry produces most of the dangerous waste

in industrialized market economies. Little considerations are taken about e-waste of electronic goods, phones, televisions, that are generated in the developed world in large quantity and indeed expensive to repurpose in line with green advocacy for green environment. Instead of being dismantled and recycled domestically, e-waste is often shipped either directly or indirectly through brokers, to countries where labour and environmental laws are not as stringent.

A Nigerian contemporary artist that has consistently worked on metal is OluAmoda.

Figure28: Artist, OluAmoda,*Horse 1,* Waste Metal, Courtesy,

One cannot expect anything less from OluAmoda whose father had a successful carrier in the (JessyCastellotes blog on contemporary arts in Nigeria) smiting industry (Amoda,

2000:18) Amoda's salvaged metal aesthetic configuration cut across themes though has not explored on play sculptures as this study would want to explore. Change and continuity and the manipulation of every day materials like pieces of wood, plastics and more are observed by Ojeh (2011:2) in 'Beyond the Mimesis', exhibition of a Nigerian sculptor and scholar, Abel Mac Diakparomre's (b.1952). Mimesis is indeed a break away from the classical representation that has been characterized by the earlier sculpture tradition bequeathed from the Greek traditions. (Diakparomre, 2001:2) Mimesis is taken further in this study to the area of the environment and its aesthetic adaptations with waste and in the principle of change. The preoccupation of proactive sensibility of mass, space, void and weight in classical sculpture of which Diakparomre's Mimesis is concerned about, has also been taken further with interjections of light, movement and sound into sculpture.

This leads to the Gotthold Lessing's aesthetic treatise and the definition of Sculpture even in the eighteenth century (Krauss, 1977:1). The definition of Sculpture in the twenty first century, must take cognizance of the fact that Sculpture has metamorphosed from pre-historic cleric designation to secular, even through the ages to the realm of conceptualism which could be appreciated more as art of the intellect.

It is this art of intellect that led El Anatsui (b.1944), , a Ghanaian sculptor to work with discarded milk tins, cassava graters, used printing plates, broken pots in manipulation of waste material, process and form in sculpture (Dorling Kindersley. 2010:590).

Since the late eighties, El Anatsui in his 'of Exploration& Experiences' has always advocated for a shift from the traditional norms in art when he states that:

Among the ranks of school- trained artists one can see a cleavage between those who, being conformists, are satisfied with doing anything more, than regurgitating the experiences they have been exposed to in the mostly stifling school programs on the one hand, and on the other, a few, who being non-conformists by persuasion are given to persistent and restless

exploration, experiments and probity…….art being a purely creative activity is nurtured by the former attitude (Matovu, Okogwu, 1987:3)

Figure 29: Artist, El Anatsui ,Title, *Flag for A New World* Material, copper wire,500cmx 550cm (197 x 217),2004, Courtesy, https://www.Bonhams.com/options/…/16… October gallery.

Among the aforementioned artists that could be described as restless experimentalists, something strikes as a common indices uniting them, could it be the kindred Nsukka school Ulispirit ?,ignited by the Zaria rebel exponent, Uche Christopher Okeke (1933-2016).

On the contrary to the advocacy of El Anatsui in projecting the non-conformist within the Art fold, Bosah, et al (2010) rather took to the other side of the coin which is projecting the conformists in cataloguing one hundred and one Nigerian artists in what seem to be frantic bid to continue what Smithsonian institute did in Nigeria Who is Who in Art .Within the one hundred and one artists only Cyril Nwokoli, Ekwere Ebong and Ekezie Okoafor seem to be the lone rangers in this celebration of two dimensionality and colours.

Three pronged artist, Dil Humphrey-Umezulike (b.1960) is a contemporary artist working in sculpture, performance and painting. Waste Sculptures of peopled multi-scrap figures are exhibited both in Nigeria and abroad. He studied art at the University of Nigeria, Nsukka<http://en.wikipedia.org/wiki/University_of_Nigeria,_Nsukka>, Nigeria and has a master of fine arts (MFA) from the University of Dundee , Scotland. One of his exhibitions has the concept of wear and tear. Dil Humphreys - Umezulike is trapped in between two Worlds, that of his culture that has been fragmented and distorted and that of the contemporary western world. Using materials that are already wrapped with stories seem to be the interest of

Ovbiebo and he does pick up these found objects, metal from the dockyard and input and enhance the stories already embedded in them to make his statements as an ardent follower of Marcel Duchamp.

Figure.30: Artist, Dilomprizulike, Title, *Waste composition*, Material, Discarded textiles, plastics and metals, not stated, courtesy, Error! Hyperlink reference not valid.–

Context form ideals and the doors are crystallized metaphors in Nigeria custom present represented by the wheel and it symbolic motion and Hex being represented in the Movements always associated with doors. Ovbiebo (b.1982) is one of the Nigerian artists whose practices are within the realm of ideals and sensatory to movements and doors as metaphoric symbols of the Nigerian Society (Ovbiebo, 2011).

Figure.31 Richardson Ovbiebo, *I better pass my neighbour*, metal and acrylics,(65 ins x 41ins.)165.1cm x104.14cm,2011.Courtesy: The form I heard – Richardson Ovbiebo

Francis Ike Okoronkwo (b.1970) engages in comparative idiom with the statue of liberty and that of the national theatre in Lagos, one is upward while the other is static. Art metaphors and comparative statement stated by Francis Ikechukwu Okoronkwo exhibit comparative art metaphors with led lights depicting the light situations in Nigeria, Dakar and New York. Okoronkwo's concern of instability of electricity in Nigeria is reflected on his work with led lights. Definitely, it works well in this installation as a device to convey meaning without words.

Figure. 32. Artist Okore Nnenna, Title, working with waste Fibre, Courtesy, www.walkartroad.com.ng

NnennaOkore (b.1975) is another Nigerian artist committed to the study and creation of waste art. An associate professor and occupant of Art department chair at the North Park University, who just won a Fulbright Scholarship, has announced plans to build a studio for waste art in Lagos. (Igbodefender.com; The Igbo-African American Blog (http://www.igbodefender.com/)

Figure33:Artist, OkoreNnenna, Title, Emissaries, Material,Handmade paper, dye, burlap, jute rope and yarn, Dimension, 274cm by366cm, Courtesy, October Gallery Waste and Furniture

There are new creations of contemporary furniture using waste steel drums that could classified as exotic waste furniture that were previously made for the gardens and the artists have upgraded some to be used in the interiors

Figure 34: DrumFurniture.Courtesywww.google.com.ng/search?client=ms-operamini

Figure35:Waste Drums Furniture, Courtesy www.google.com.ng/search?client=ms-operamini

Figure36:Drum furniture,www.google.com.ng/search?client=ms-operamini

Figure.37: DrumFurniture, Courtesy,www.google.com.ng/

Figure. 38: Recycle Tyre Furniture, www.google.com.ng/search?client=ms-operamini

Other Creations With Waste Metal

There are creations in waste metals including Tortoise creations, they are done globally in different media and diverse conception perceptive from contemporary to the mythical epoch and the forms are all sourced from the form and interpreted differently by individual artists and are brought in as cited visual literature.

Ono Gaf is an Indonesian Sculptor that is engaged in Waste metal forms and one of his creations is the giant Turtle (www.thisiscolossal.com.../a-towering-tur...)

Figure 39: Motorcycle, waste metal, courtesy www.buredpanda.com/scrapmetal-sculpture

Figure 40: Ono Gaf, *Giant Turtle* , Waste metal,Courtesy,www.thisiscolossal.com.../a-towring-tur...,Hosmer, K. (2014),Huge Tortoise Sculpture Emerges From Thousands of Scrap Metal Parts www.mymodernmet.com/profiles/blogs/list/list/tag/ono+gaf

Figure.41Marcel Duchamp,Bottle Rack, Metal Ready-Made 1964,Metal, Courtesy: www.toutfait.com

Figure 42:*Tortoise*,waste metal courtesy,alibaba.com

Figure 43:Chameleon ,waste metal, courtesy, www.buredpanda.com/scrapmetal-sculpture

Figure 44: Chameleon waste metal, courtesy www.buredpanda.com/scrapmetal-sculpture

Figure 45:MiinaAkkijyrkka,The Behemoth Metal Works, Courtesy :https://de

Figure 46:MiinaAkkijyrkka,The Behemoth Metal Works, Courtesy, https://de

Sculpture practice in the studio that naturally utilizes three dimension is perhaps considered a trail blazer in this dispensation and its' turn to waste utilization and sensitization, giving it not just an aesthetic ting but also engineering it towards an eco-environmental friendly tint and fulfilling Malcom Miles quest in understanding eco -aesthetics. Sculpture's ability to easily take in new areas is also opening up to security as security Sculpture in the society.

2.6 Implication of the Review

The studies reviewed exhibit works and studies in waste art, in metal, fibre and even garbage of Peter Buggenhout from the contemporary Nigerian art where wastes of metal mainly, paper and other sources of waste are utilized. Inclusive material pro- nature of Sculpture has opened more areas in material studies in contemporary Nigeria.

This research work moved further in the frontiers of utilization of wastes to consciously toe the line of eco aesthetics and with the view to knot eco-aesthetics with the Dadaism and Gadamer aesthetics to incorporate the three sources of waste to create outdoor sculptures and

indoor utilitarian product sculptures with some cultural imputes in the designs.

CHAPTER THREE

MATERIALS AND METHODS

3.0

This chapter chronicles the tools of enquiry as well as the tools of practice in other words it is a hybrid of theoretical philosophy and the practical studio practice of sculpture therefore reportage design also assumes the nomenclature of both. The area of study, the research design, method of data collection, make up the methodology while the other section deals with the studio practice, materials and methods.

3.1 Methods

The research design methods adopted for the study are qualitative and exploratory. These are explained within descriptive and monologue observations, since it is a double edged research of the theoretical philosophy and sculpture studio led practice.

3.2 Method of Data Collection

There are several methods employed in gathering data for this research both primary and secondary sources. Interviews were conducted for the four strata of the population that spans through the domestic, the commercial and industrial involving the industry managers that are at the apex of the strata, then the commercial strata that constitute the shop keepers and dirt vendors while the domestic strata constitute the house helps. Several visitations to the dumpsites and observation of the traffic of wastes to the dump sites and collection of the three types of wastes used in the research which are metals, plastics and fibres .Secondary sources through library search, books, and the internet . Delta State University library, University of Port Harcourt library, Professors Mac Abel Diakparomre, Frank Ugiomoh and John Agberia's personal libraries were also used.

3.3 Materials, Methods and Practices

This study is hinged on practical studio exploration in the sculpture studio using waste materials such as metals, plastics and fibre that are easily gotten around the environment as discards.In this studio practical exploration or rather experience, the materials shall be sourced,cleaned and sorted for configuration, and the method of joining are,welding and soldering.Other methods that will be employed are and ,weaving and forging with recognition of the nature of the materials invovled .

In some cases multiple methods are employed to achieve desired results as in cases of mixed media . Exploratory experiences gained in using found objects and their arrangement and assemblage during the forging of the various constructions of the found objects, were used.

3.4 Materials

In this research there are three major categories of materials employed: waste metals, waste plastics and waste fibres and are discussed as their makeup configurations and their application to the works within the limited area of study. In this study fibre is regarded as any threadlike material irrespective of the material source. The choice of the three materials is

informed by the frequency of occurrence as solid none bio-degradable in the waste dumps in the study area which is the University of Port Harcourt community.

Metals


Plastics


Fibres

Figure.47:Three Materials of the study: Metals, Plastics and Fibres

Waste Metals

Seven Metals recognized by early Mesopotamians, Egyptians, Greeks and Romans civilizations and five are associated in being in their native states, gold, silver, copper, iron and mercury. Cramb (2007) of the Department of Material Science and Engineering of Carnegie Mellon University underpins that metallurgy which is the technology associated with metal processes is one of the oldest applied sciences, dating back in History to 6000 B.C. Currently, there are 86 known metals. Before the 19thcentury, only 24 of these metals had been discovered and, of these 24 metals, 12 were discovered in the 18thcentury. Therefore, from the discovery of the first metals – gold and copper until the end of 17th century, some 7700 years, and only 12 metals were known. Four of these metals, arsenic, antimony, zinc, and bismuth, were discovered in thirteen and fourteen centuries while platinum was found in the thirteen century

In this category of materials used in this study there are six different types of waste metals solid rods, metal pipes and sheets ,bottle crowns, auto parts, bicycle part and nails sourced from construction sites in University of Port-Harcourt.

Figure.48: Waste vendors in the dump site, Courtesy, Andrew Mcconnel

Figure 49: Metal Crowns Courtesy: Okogwu Antonia

Metal Nails

Nails of various sizes form part of the components of metal wastes in this research

Figure 50: Discarded Nails. Courtesy Okogwu Anthonia

The fans both the ceiling and standing fan metal parts have interesting parts that a creative mind cannot ignore and they have been incorporated into the designs within this study

3.6 Waste Plastics as Materials in the Sculpture Studio

Figure51: Discarded Flip Flops

3.7 Waste Fibres

Fibre or fiber is natural or synthetic filament described as continuous tread like long object that has been incorporated in this research. There are many objects that conveniently fit into this description such as electric wires, metal wires and plastic fibres and all these have been incorporated into the research .Some of these fibres are incorporated within the Designs while others are visibly seen. Fibre has always been visible in textiles but bolder fibres are now been incorporated in other areas like one has done in this study

3.8 Studio Equipment

Power Gadgets and Tools

There are major power driven gadgets used in the course of this study such as Welding machine, Angle Grinders and Drilling machine they are actually indispensable in the actualization of the number of works in the study .There are also some simple tools such as pen knives, modeling tools pots metal scissors ordinary scissors wood spoons and plastic bows, Hammers and nails.

Figure. 52: Welding Machine and Accessories

Figure53: Angle Grinder

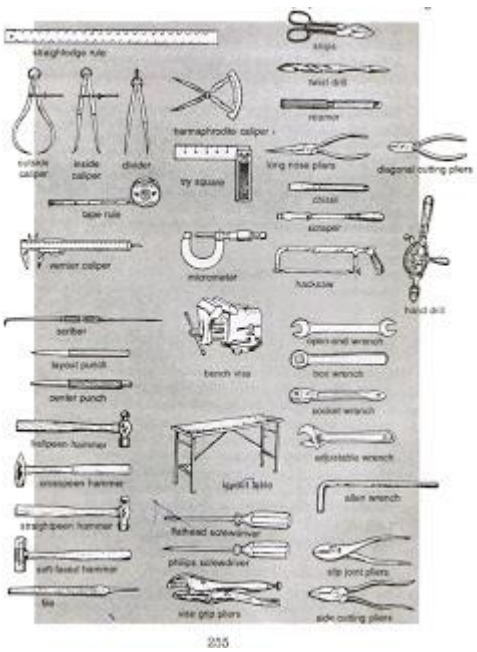

Figure 54: Catalogue of Tools

Figure55: Drilling Machine

Figure56:Auto Metal Cutter

Figure57:Auto Sanding Machine

Figure58:.Auto Plastic Cutter

Figure 59: Plastic Cutter

3.9 Tools

Figure 60: Metal Scissors

Figure 61:Vice

Figure 62.light Metal Scissor

Figure.63. Plyer

Figure 64.Metal Sheet Cutter

Figure.65. Hammer

Figure 66.Needles

Figure 67. Title: Bow Cutters

Figure. 68 Piercing Needles

Figure. 69. Electrical switch

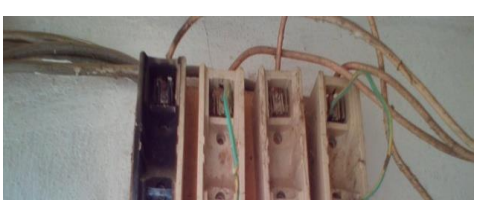

Fig. 70. Electrical Power Source

Fig. 71. Local Weldig Machine

Figure 72. Improvised Iron Bending Device

Figure73.Cables

Figure 74: Metal Cutter.

3.10 Sculpture Studio Methods

Methods employed in this study which are in the sculpture studio reveal some of the techniques within that are utilized for this study. The methods are as diverse as well as the methods within the sculpture Studio

3.10.1 Metal Methods

Welding as a sculpture process attempts to join by fusion two or more metals using the welding machine and electrodes .This occurs at high temperature and there are various types of welding such as arc, mig, tig, flux and spot .This study employed mainly arc welding which simply creates an electric arc between the electrode and base metals. This type of welding was introduced in later part of 19th century, its' processes are illustrated bellow;

Figure 75:Weldingparts of Night Soil Woman1.Photograph:OkogwuAntonia,2016

Figure 76: Welding parts of Night Soil Woman, 2,Photograph:Okogwu Antonia,2016

3.10.2 Waste Plastics Methods

The waste plastics within the population area are such that they can be melted and used for casting, diced as in the case of plastic slippers, pierced stringed and cumulated as mass element in sculpture productions.

3.10.3 Waste Plastics Casting

Casting with Waste plastics is better in relief sculpture and safety precautions should be taken to avoid inhaling the fumes because it is highly injurious to the body. It is also advised to do this process of casting outside with fire containers and stirring Plata, as soon as the waste plastics molten it is poured into the prepared mold that utilizes a separating agent like palm oil, used engine oil or grease.

3.10.4 Dicing

After studying the waste slippers and discovering the sand -witched overlaying colours within, which when cut and exposed looks better therefore dicing and cumulating to form

body becomes imperative .Slippers were sort cleaned and cut into cuboids' shapes and joined together

Figure77: Exposing the colours of Bottle Crowns ,Photograph:OkogwuAntonia,2016.

Piercing is a process of creating a hole in an object to be incorporated into a sculpture composition and perhaps the incorporation is done by stringing. Most of the components of this study is in small components like crowns or reduced to such smaller pieces like the slippers. A sharp nail is used to bore a hole in the small components after which they are stringed together you are to create mass for sculpture composition in the stringing of these small components of crowns and diced slippers The processes of joining the pieces of diced slippers are by piercing and stringing the pieces together to form the mass . Metal fibre is used to pierce and string the diced slippers together. In this process, precaution should be taken with hand gloves to prevent being pierced or cut. Random selection is done without any preconceived pattern and this is so because of the fact that they are found objects therefore preconceived design might fail if the materials you get from the dump yield otherwise. The

slippers come in different sizes, compact or loose grain which also inform the kind of pressure to exact to help the piercing.

Figure 78: Bottle Crowns, Hammer, and Nail in readiness for Piercing, Photograph: Okogwu Antonia.2016.

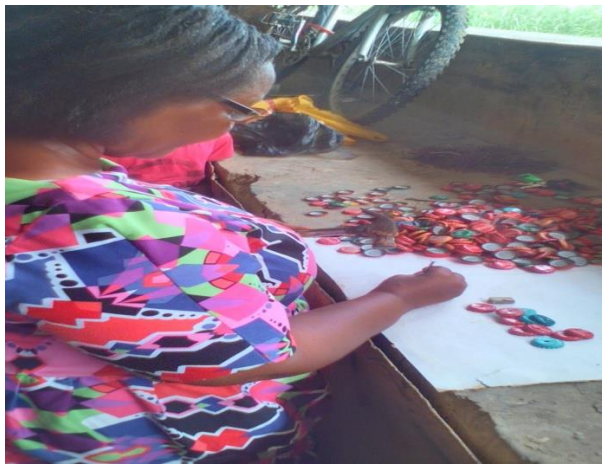

Figure 79. Piercing Process1, Photograph: Okogwu Antonia,2016.

Figure 80: Piercing Process, 2, Photograph: Okogwu Antonia,2016

Figure 81. Wrapping Process with Pliers, Photograph: Okogwu Antonia, 2016

3.10.5 Wrapping

Wrapping is a process whereby the cumulated body gotten from stringing is used to build the form by creating a skeletal form and then finishing the creation by using the string pieces to wrap round the body of the sculpture piece

Figure 82: Wrapping Process 2, Photograph: OkogwuAntonia,2016.

Figure 83: Title, Dicing Knives.

Figure 84: Flip flop Dicing , Photograph: Okogwu Antonia,2016.

3.10.6 Fibre Methods and Practices

Some methods commend themselves to fibre due to the tread like nature of fibre such as cumulating through tying, tangling, stringing and weaving.

3.10.7 Tying

Tying is a process that capitalizes on the tread like nature of fibre to use as a surfacing material wound round pieces of art. This process is used in works of this study in the tortoise series, Okonjo-Iweala, and in the Shrub.

3.10.8 Tangling

Wherever there are many strands of pieces of art jumbled together purposely to exhibit disorder then tangling comes into play as a process effectively employed in Mermaid. A design that tries to imitate the uncombed hair is tangling, representing disorder that brings to remembrance the African Rasta and dada hair- do that are always associated with water spirit.

Figure 85: Strands of stringed Flip flop Scattered to purposefully tangle. Photograph: Okogwu Antonia, 2014

3.10.9 Stringing

Small components of composition are brought together by stringing, like the numerous crowns that are used virtually in most of the forms made in this study. And they are found in

abundance in University of Port Harcourt community in all the three parks that make up the core university community area.

Figure 86: Stringing Process, Photograph: Okogwu Antonia.

Figure 87: Stringing Wrapped Bottle Crown, Photograph: Okogwu Antonia

3.11 Weaving

The weaving in Nigerian African culture is very popular in textiles .Nigerian hair design process has been incorporated into Sculpture in weaving strands of stringed crowns in many of the works like the crown mat.

3.12 Finishing and Surfacing

There are some finishing and surfacing methods carried out such as painting, spraying and lacquering of surfaces of the sculptures .In painting two techniques were applied. Direct painting with brushes and spraying with spray paints for a perfect smooth finish .This is necessary because of the state of some of the wastes at the point of acquisition that could be unsightly to be incorporated into art. Lacquer is also used for some surfaces while transparent dashboard spray is used to polish the diced slippers

3.13

Wastes or discarded materials in the environment as materials for construction and configuring in Sculpture made its' entry into the art scene in the 17thcentury with such works as the Bull *Head and Fountain* by Pablo Picasso and Marcel Duchamp respectively. At the time of entry into the art scene it was challenged by the conventions but the present dispensation of contemporary art world has accepted this genre of art as a norm. It is in the light of this that this study tries to investigate in the sculpture studio the waste materials of metal plastics and fibre that are a menace in the Nigerian environment and tries to repurpose same.

CHAPTER FOUR

STUDIO PRACTICE, ANALYSES AND FINDINGS

4.0

This part of the study presents the practical studio engagement with the three materials: waste metals, plastics and fibres. Some are mobile Sculptures automated by electricity and manually applied energy, while others are not. Some are so poly chromatic in the Dada spirit that contrary to the typical monochromatic nature of Sculptures and the reportage attempts to follow the comprehensiveness of the theory of Gadamer's hermeneutics and aesthetics. The story line most often begins from the conception stage and metamorphoses to metaphors that mirror the wastes in the environment. This other part of analysis attempts to critically study the Titling of Sculptures in the study and Knotting the philosophies of Dada and Gadamer's hermeneutics-aesthetics in Eco- Sculpture, abstraction and poly material, Mobility as the fourth dimension, the reoccurring ideographs, The circle and circle and the triangle in a tango.

4.1 Waste Metals as components of composition

4.1.1 Nigeria Slowed Down

Step1. Conceptual Stage,

Nigeria Slowed Down is a thought that bemused my mind during and after the 2015 Nigerian election and things naturally were very slow in the country. This thought took of

with the way Nigerian was running and suddenly slowed down as if it was on a journey in a plane and then nosedived and switched to a rickety bicycle.

Step 2. Acquisition stage

Metal wastes of standing fan blade casing, wires, bicycle wheel and handle, ¾ rod and found joined angular square pipe

Figure. 88: Bicycle Wheel

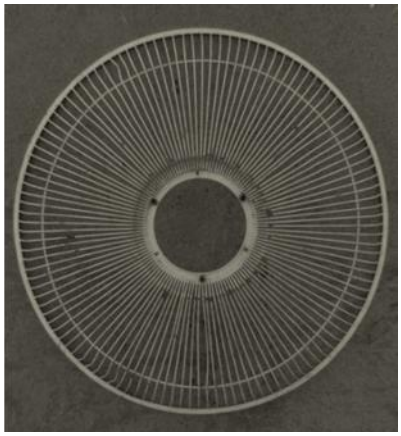

Figure.89:Standing Fan Cover

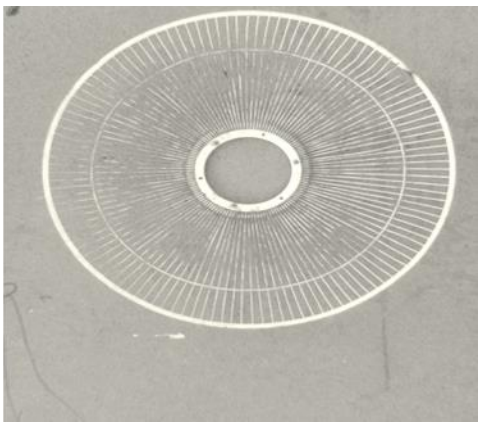

Figure 90.

Figure 91.

Figure 92:

Figure 93: Components of *Nigeria Slowed Down*… Photograph: Okogwu Antonia

Step 3. Construction Stage

Welding of the ¾ rod on the square pipe that serves as a base of the assemblage. The two circular discs from the standing fan are latched together on the bicycle wheel , and hung

in to the composition through the 1ft ¾ rod, the bicycle handle is now forged into the ¾ rod and the dangling break rods are forced into spaces in the fan disc to aid mobility

Figure 94: Metal Base

Figure 95: Wheel

Figure 96: Construction

Step 4, Finishing stage,

Figure 97: Spray paint

At this stage after the construction and assembling then the work is ready for de-rusting because the components are wastes from the dump sites and as such, are predisposed to being exposed to variances of the weather. De-rusting is done with metal brush and iron sponge

after which the composition is sprayed with oil based paints of silver for the handle, white and green

Figure 98:Nigeria slowed down, Discarded metal Bicycle wheel and handle, fan casing and square pipes,10.62cm X1.59cm (2ft.3ins x2ft.8ins) 2014, Photograph: Okogwu Antonia, 2016

This Sculpture is metal configuration of various gauges of rods and pipes. It is divided into three parts, the upper part which is the bicycle handle, the tension packed middle of the circular wheel and fan blade casing and the square pipe base .All these three parts can be dismantled for easy movement and package.

This particular work is a product of time and chance in thinking about Nigeria and the broom change of the All progressive Alliance (A.P.C.) new government. It involves metaphor in forms. The Wheel of the bicycle symbolizing movement supported by standing fan blade casing also suggesting movement but the bicycle handle is the driving force. However a second look at this handle, weak, worn out and mishandled suggesting weakness and what force can be mustered by such bicycle. This same weakness is also exhibited in the short ¾ rods inserted in the still weaker metals of lower gauge that characterize the fan blade casing that is coated with white in line with the white colour of the Nigerian flag This colour white symbolizes purity despite the heavy corruption that is ravaging Nigeria. The same casing is attached to

the bicycle wheel in the upper and the lower side, thereby bestriding the wheel in support and to strengthen.

The fan casing is circular and the wheel is also a circular form and both forms are spiky, this would have been monotonous but for the variation in size and also colour. The spokes of the bicycle wheel and the converging lines of the tiny rods of the fan casing are centrifugal leading the eyes to the centre rod of the handle .The gauge of metal and the colour green encases the work and arrests the radiating spikes of both the wheel and the fan blade casing delimiting the spaces within and outside the Sculpture. The chance element came into play with the square pipe that was found just the way it is from the dump site serving as a stand or pedestal for the bicycle handle, the wheel and the fan casing .It aptly compliments by contrasting in its' square nature with the circler affair in the middle region of the form.

4.1.2 Movement

The Sculpture falls in the category of stabiles since it utilizes motion and not static. The motion is vertically radial with a simple mechanism of welding on a ¾ rod to the square pipe base and inserting a wider pipe of the bicycle handle into it. Then it is latched onto the two break rods of the bicycle handle unto the spaces of the fan casing which when turned automatically harnesses the ball bearing in the bicycle wheel to affect motion

4.2 Mobile Table.

Step1. Conceptual stage

Ijele masquerade in Igbo culture is an elitist masquerade that moves with grace and grandeur, and it is in the four walls of my captivated imagination to capture this movement in a product sculpture, Also the motorcycle crash bar of various shapes and forms are captivating to work with.

Step 2: Acquisition Stage.

With a clear perception of what is to be constructed, one sets out to the refuse dump to search for waste metals to acquire .Other embellishing items such as transparent plastic sheet and fibres, beads and wheels.

Step 3.

Assembling and jig sawing of the available components in the bid to fit into each other and as well as suit the composition.

Step 4: Welding

The first composition formed the base with two cash bars forming the shape of across on the ground, the wheels are attached to achieve mobility by applying manual force, and then two more crash bars are raised and welded to form the receptor of the plastic sheet. Abigger pipe is centrally welded on to carry the bent pipe as handle of the composition.

Step 5

Measurements are taken and the plastic sheet perforated in the middle and around the periphery to thread the beads unto the sheet, the metal is sprayed with black and silver oil paint.

Figure 99:Mobile Table, the Metal Frame

Figure 100:Mobile Table, Discarded metal Motor Cycle Fenders, plastic sheet, rolling wheels plastic tread and beads., 4ft.x3ft, 2010,Photograph:Okogwu Antonia.

Five motor cycle fenders(Crash bars) are assembled and arranged and welded in place with a central pipe that serves as the handle of the table. The first two fenders are horizontally latched at ninety degrees angle together to form the base of the table while rollers are welded on at three strategic three points to aid mobility. The choice of rollers is such that have unlimited movement in all sides as the user desires for convenience .One of the fenders is placed on one base vertically while others are wrapped to achieve the desired height. Circular three feet diameter disc is cut with the Jig saw and perforated peripherally and at the centre. The peripheral tiny holesare stringed with draping beads at calculated intervals for effect while the hole at the centre is bigger to accommodate the size of the pipe handle at the centre. The beads are stringed with tigers tail fishing line .The plastic beads are of various pastel colours adding childlike vitality to the creation.

4.3 Merry-Go-Round

Step 1.Conceptual stage

Critical study of the movement of the ceiling fan that utilizes radial movement, with speed regulation properly conceived gave birth to this piece Merry Go- Round

Step 2.Acquisition of Materials

Acquiring of discarded fan, bicycle wheel, beads, straws and tiger threads.

Step 3. Construction in the Studio

Measurement cutting of the various components into fitting sizes, the fan blade is cut to size to be encased with the bicycle wheel and welded bearing in mind the differences in the

gauges of the two metals and placing the electrode appropriately to avoid boring holes in the lighter gauge metal which is the fan blades. The work is painted brown with oil car paint.

Step 4 Stringing

Stringing and attaching of the beads and straws with the tiger thread to the holes in the bicycle wheel completes this composition.

Step 5 Mounting

This work is electrically mounted in the centre of the room and set in restricted motion through the regulation of the speed of the fan regulator and the movement is appreciated artistically.

Figure 101:Merry-Go-Round: Discarded metal Bicycle wheel, Ceiling fan, plastic Straws and Beads, 23.62cm x 9.4cm (5 ft. x2ft.),2013.Photograph:Okogwu Antonia

Merry- Go- Round is a chandelier like circular centre piece that borrowed the mechanism of the mobility of the ceiling fan and the aesthetic exhibition of the chandelier, often times placed in choice places in the house. It is automated by electricity and utilizes the radial movement just like the fan but it is better appreciated in slow speed. It is made up three major parts, the ceiling fan with its' blades reduced in length, the bicycle wheel and the draping beads and straws. The ceiling fan is welded on to the bicycle wheel, encapsulating it.

Used soda drink straws are collected washed and cut into half of the original length while some are left just the way they came ,and they came in different colours of green, red, yellow and blue and are interjected at regular intervals to compliment the beads. The beads also come in various colours of brown red, pink, white and green. This mobile creation has the bulk of the weight of the work up while the down part is made with materials that are light to make way for easy carriage and movement bearing in mind that the piece is being moved by the coil and if it is overburdened it could cause the coil which is the engine of the configuration to burn. The straws and beads are stringed with fishing line and fastened through tiny holes in the Bicycle wheel and allowed to drape downwards. A simple interplay of design and technology is brought to the fore in Merry-Go-Round.

4.4 Circling.

Step1: Conceptual Stage

Circular shapes and forms always stand out in design compared to the rectangular ones and have always had a special appeal to the researcher.

Step 2

Five bigger pipes of various lengths were put in place and the various sizes of wheels were welded on at aesthetic intervals to enhance the composition, the apex of the two long pipes is attached the mobile wheel. Smaller rods are used at two intervals of the composition to enhance the stability of the piece

Step 3

De-rusting and painting with black and silver colour oil paint.

Figure 102.*Circling*, Discarded metal pipes, wheels. Rods.(6ft.2 ins. x 3ft.8ins)29.13cm x17.71cm,2010,Photograph:Okogwu Antonia,2010

Circling is a configuration of five rims of two sizes, pipes and rods .The top most wheels has spokes and placed horizontally at the apex of the form and it allows a radial movement within the configuration rotating around the form. The same size of wheel though spoke less is placed at the lowest part of the configuration at the alternate side .Five circular pipes suspend the five wheels at five different vertical intervals ranging from the apex with stabile spokefull wheel, far removed from the base that houses the rest of the cluster of wheels. Some rods are welded at strategic intervals to reinforce the configuration which generally has light weight and so can be transported easily. The circle as an element in design is always appealing with its' edgeless seamless continuity though difficult to manage in design. The architectural design in some part of the middle belt of Nigeria adopted the circular house type not just because of its' beauty but for adaptation to geographical setting.

Circling is a form that is purely circular metal with a lot of spaces within than mass and the method employed is basically welding. In terms of mobility it could be called an inert form

but the apex is a stabile. A combination of the inert and stabile in one form is an exploration of both modes of sculpture.

4.5 Manised Labourer

Step1:

Female labourers at construction sites are pitiful site to behold just as the one below .It is this de-womanizing site that philosophically gave birth to Manised Labourer

Figure 103: Female Construction Site Worker

Step 2.

Acquisition of metal components

Step 3.

Attempts at organizing the components and dicing and stringing of plastic slippers

Step 4.

Welding of the different components and balancing the composition

Figure 104. Manised Labourer,Photograph,Okogwu Antonia

Step 5.

De-rusting and painting with white oil paint

Step 6.

Wrapping the composition with the plastic diced slippers

Figure 105: Manised labourer, bare metals the first attempt on Wrapping, Photograph: Okogwu, Antonia

Figure 106:Manised Labourer, Detail of the Face.

This face is characterized by two eyes, one starry and penetrating and the other with alluring tired subdued gaze. This is achieved with two circular pieces of metal one with uneven edge while the other is a short cylindrical even edged rim. The nose is a shank that runs in-between the eyes down to the mouth which clutches the coiled 3\4 rod that serves as a pipe ruggedly presented similitude of dada rendition of the (Mechanical Head) (The Spirit of OurAge*)* by Raoul Hausmann.

Figure 107:ManisedLabourer, Detail of the hand

This hand is square pipe and bent to clutch the head of the shovel with bangles as coiled electrical wires and same is used to embellish the pipe of the shovel towards the the shovel handle but in this juncture it is not to embellish but to strenghen the weak shovel that has been over utilized showing visible signs of giving way all in the bid to portray abuse of the weak female strength.

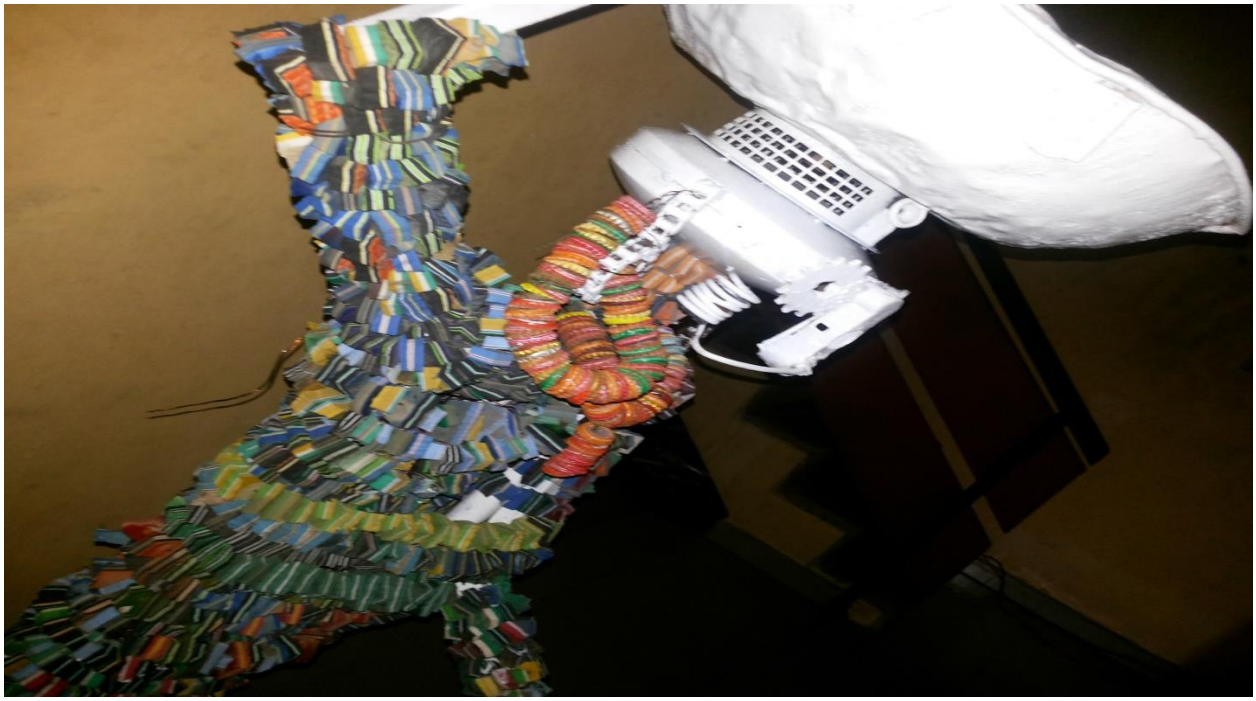

Figure 108:ManisedLabourer: Torso ,Photograph: Okogwu ,A.A. 2014

This part of Manised Labourer is the area that is tensed with sculptural activities; the diced stringed slippers are wrapped round the metal skeleton as colourful attire for the sculpture. The gait exhibited is that of one in a haste which could be understood when one tries to depict labour especially one that is connoted as being abused.

Figure 109:ManisedLabourer: The head pad, perforated metal of generator part

Figure 110: Manised Labourer, Discarded metal Head pan, Chains, Shovels, diced Slippers, and Fibres, (5ft.4ins)25.19cm, 2014/2015,Photograph: Okogwu Antonia,2015.

Certain practices within Africa, Nigeria precisely has exposed many women as hard labourers to the building sites as concrete mixers and such odd jobs within the society .It is this practice that informs Female Labourer Manised .A woman in the family is a help mate but the economy down turn has taken the femininity off many African women, some are no longer help mates but sole bread winners in the home. This work tries to capture this essence with symbols of labour the shovel the chain and the head pan, the stylized body posture or gait trusts forward encumbered but not broken, penetrating eyes focusing on the hard day ahead, the legs are abused battered shovel heads while she steps out with a shovel spent with use. The only

remaining factor female metaphors are the chain earrings which are also symbols of slavery right from inception in the bible where only slaves who refused freedom are pierced in the ear and rings placed on them to inform the public that they are slaves. The multi coloured gown of diced wrapped slippers.

The size of the entire Manised figure is emaciated small uncomely figure that is neither a female nor a male form, in other words it is a transitory figure just like a bat that is neither a bird nor an animal making the name aptly and appropriate. The head is made of the fan component that houses the coil which is the engine of the ceiling fan which is round flat and squashy symbolizing the many use of concrete mixture (mortar) carriage. The squashy head is emphasized by the long thin neck. The Head pan on the head of this form is also suggestive of many days of toil as the wear and tear is obvious through the numerous dents on it and one of its' handles is already off . The perforated generator metal that serves as pad contrasts sharply with the head pan. The head pan is bartered and disorderly while the pad is orderly with ruled pattern and this emphasizes the orderliness. The perforated pad also contracts with the solid mass of the head pan.

The miniature size is purposeful to buttress unseemliness and the weight is also controlled purposefully to allow for traveling convenience and also to buttress abused labour of which the work sets out to portray. The choice of old warped shovels as feet and the outstretched step and gait were also calculated to give away a woman in a hurry to go to her duty post which is the building site. The use of enhancers or energy boosters to sustain her strength and deaden her nerves to pain is metaphoric in the tobacco pipe protruding from her mouth forged with the coiling of a three quarter rod.

The diced slippers are stringed with metal fibre and wrapped round the body and contracts with the white painted body of the labourer. The colourfulness is so attractive that it

halts attention to enable the viewer to take a second look at the work and then engage the eyes for critical study of the work.

4.6 The Spider Web

Step 1: Conceptual Stage

The spider web is nature linear rendition of Uli, fascinating and no two are the same as intricately rendered. As one take time to study this nature art inspiration came to render this nature art in relief .Another artist Brandow John, also rendered the web as below;

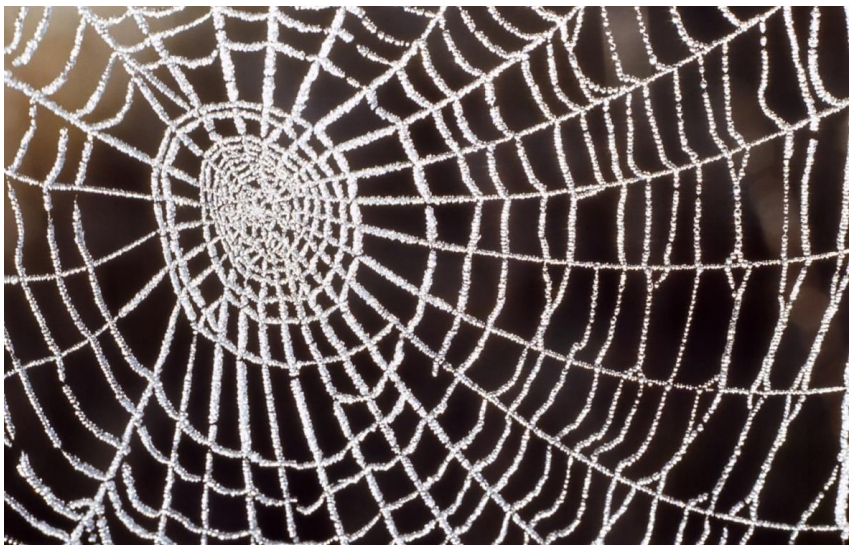

Figure 111.*Spiderweb*,Courtesy, Brandow John

Step 2. Aqusition Stage

Metals of rods,chains and catchers from bicycle,wheels and beads where purchaced from the dump site at Aluu

Step 3 Arranging, Cutting and Welding

Cental fugal arrangement is carried out with the pieces of metal .It was the most challenging task because of trying to weld some chains to stiffen them while others are allowed to be free to move even as one tries to mimic the spider design

Step 4. Finishing

De-rusting with metal brush and painting and beading

Figure112:*The Metal Web* Material, Discarded metal chains, rods, bicycle chain carriers beads, (4ft3insx 5ft6ins) 20.07cm x 25.98cm, 2009/2010,Photograph: Okogwu, Antonia, 2010.

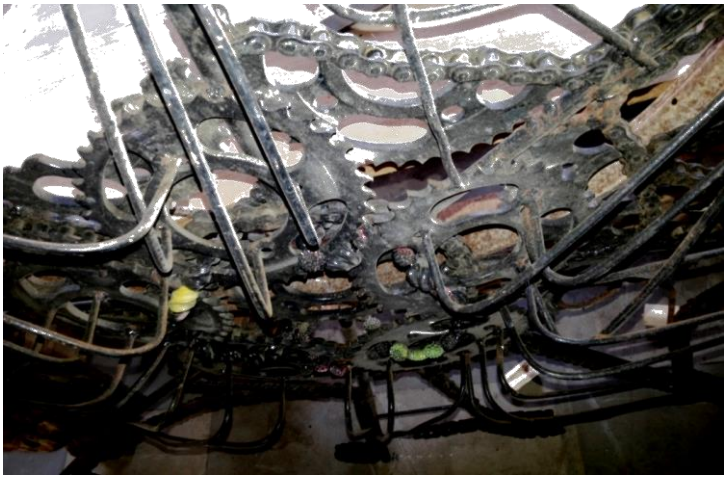

Figure 113: The Metal Web, Detail, Discarded metal chains, rods, bicycle chain carriers and beads(4ft3insx5ft6ins)131.064cm x 140.208cm ,2009/2010

Nature in its' purity has some aesthetics that always appeal to man even as undiluted form of art. It is from this angle that metals of bicycle chains, wheel, rods, chain carriers and beads are assembled to develop a metal web using the centrifugal nature of the web. Clustering

the centre with serrated bicycle carriers cut into two and arranged in the centre. Lighter gauge of ¾ rods are arranged in three rows of seven radiating away from the centre and given off configuration of a star as against the circular perforated half-moons of the chain carriers.

4.7 Family

Step 1: Conceptual stage

The society is made of people that basically emanate from families and that is the focal point of this relief sculpture.

Step 2:Acquisition of Metals

Auto parts of bicycle, motorcycle, and ceiling fan

Step 3: Composition and arrangement

Step 4:Welding and Finishing

The composition of a family of four is welded together and de-rusted and sprayed with oil paint.

Figure 114:Family Portrait. Material, Discarded metal, (6ft.x2ft) 28.34cm x 44cm, 2014/2015.Photograph:Okogwu Antonia.2015

4.8 The Bond

Step1. Conceptual Stage

The unity of Nigeria is a big issue now that the different areas that constitute Nigeria are agitating for one thing or the other and the unity of Nigerian is threatened both from the north and the southern part.

Step 2.

Broken down components of a centre table yielded as components for this design and the dada chance philosophic element played out in this piece

Step3

Three components symbolically represent the three major ethnic entities in Nigeria are closely welded together attached with some metal rings and keys

Step 4

Finishing the piece with spraying of oil paint of silver and brown

Figure 115: *The Bond*, Discarded metal from centre table, (1.3Ft) 5.90cm, 2009/2010. Photograph: Okogwu Antonia

The three major components of this form are in a tight tripod tango exhibiting rings and curvilinear synergy with three rings in the centre at regular intervals repeated at the sides and fondly locked with keys and symbolically stating that the bond between the trilogy can't be broken. The key connotes authority. One head of the three is de-crowned but cannot pull out of the bond. This piece is metaphorically speaking about the three major tribes of Nigeria, the Hausa, the Yoruba and the Igbo ethnic nationalities. Recent problems within Nigeria tends to

pull it apart but this piece like a prophetic metal statement reiterates Nigerian multi ethnic nationality bond and unity that can never be broken. This is also likened to the bond within the nuclear family, the father the son and the mother or even taken to the spiritual realm of the trinity of the Godhead the Father, the son and the Holy Spirit, one entity that can never be broken.

4.9 Tortoise Series of six compositions

Figure 116: Tortoise, Material, Natural, Courtesy: National Geographic.com

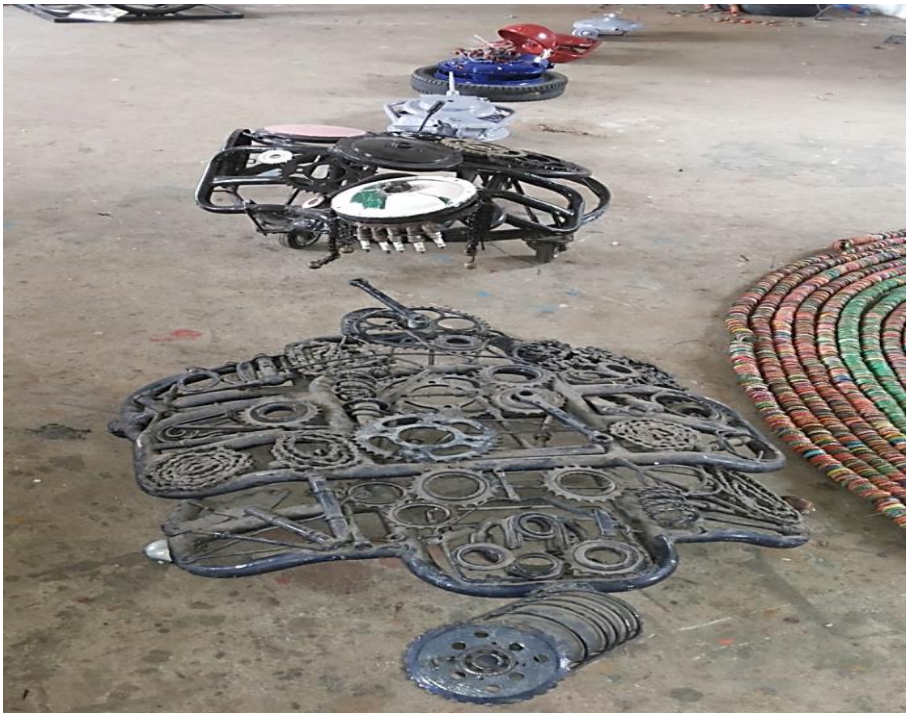

Figure 117: Tortoise procession, Photograph: Okogwu Antonia,2013

Figure 118: Tortoise Procession 2, Photograph: Okogwu Antonia, 2013

Figure119:*FatherTortoise*,Discarded motor cycle and bicycle parts, chains bicycle chain carriers bolts, Spark plugs, Motorcycle fenders and wheels, (4ft.x2ft. 9ins)18.89cm x 12.99cm.2011.Photograph: Okogwu Antonia,2013.

The story of the Tortoise and its' natural tendencies contradicts family living as the tortoise lays her eggs secures them and moves away from them and continues without waiting for them to hatch or even care for them .These series of Six abstract tortoises is a recreation of the Tortoise by the researcher imputing family life into the sociology of the Tortoise.

Motor cycle Fenders have always held some kind of attention in the refuse Dump ,first because of the chrome, sparkling catchy nature ,secondly its' natural configuration from the factory and thirdly its' bulk and quick way to be utilized as a building block in this composition. Three of the fenders are gotten and laid on the floor and studied and rearranged before they were welded to form the base of the Father Tortoise. In this composition the gaps created are filled in with the available scraps with an ideology of the nature of father in a family set up.

A father is a male first and foremost, this role as a father it naturally assumes masculine characterization in its' making, then he is the head of the family therefore the leadership traits must be portrayed in the characterization with the metal scraps. The masculine rigidity and boldness exhibited in Father Tortoise commends easily with the choice of material which is

metal. The rolled chains, Spring, serrated rings, rods, that are welded at the back of Father Tortoise portrays solidity associated with masculinity .The gait exhibited in the tilt of the head and the crown mark it out as the head. Not just the head but the tilt backwards exposes care of the followers behind it. In an attempt to make this piece rugged and solid it almost became too busy .The tail is made of bicycle chain carrier and has this appeal of touch.

It is a mobile Sculpture that uses human energy for movement and not automated like the Merry – Go- Round. The form rests on four rolling wheels and as pressure is applied by pushing it moves, thereby achieving the fourth dimension in Sculpture which is in this case is movement.

The Head is a metal cylinder, inserted in a spring Then the crown is slightly open and this gives a gaping gap that adds to its' aesthetic enhancement through dynamism of forms. The surface quality of a Sculpture could mar or enhance the composition, therefore the colour that is used in finishing this piece is deep blue and not black; it is purposeful to douse the many competing components of the back of the carapace of the tortoise.

Abstract representation of the tortoise does recognize the philosophy of Dadaism which is evident in the too many imputation of metal design element on the carapace exhibiting rigidity which also could be seen in The Mechanical Man in figure 2.

Figure120: *Mother Tortoise*, Discarded metals, plugs, bells, chains, wheels motor cycle fenders, tires, ceiling fan coil casing, joint pipe, bicycle and chain casing, (4.2ft. 3ft.x2ft)19.68cm x 14.17cmx9.44cm, 2011.Photograph: Okogwu Antonia,2011

Figure 121: Mother Tortoise, Arial view

Figure 122: Mother Tortoise, Side view

Mother Tortoise is made of various components of waste metal that are listed above exhibiting a crown on her head which is also adorned with plugs chains and bells the neck is jointed and allows swing movement that rattle the bells making this section of the tortoise not just a stabile but also a sound sculpture .The down part attached with the four small tires move at any direction making the entire piece a mobile work.

The femininity is accentuated by the multiplicity of curves and cycles as against the rigidity of the father Tortoise .The symbolic white green symbolizes Nigerian woman and the pink colour is traditionally associated with the female gender. The tail is raised and given a coiled metal to enco

Figure123: Tortoise Series, *Red Hot,* Discarded metal Motor cyclese at casing and wheel, Ceiling fan, Head light casing of motor cycle, (2.3ft.x1ft)10.62cm x4.72, 2015.Photograph: Okogwu Antonia,2015

Figure 124: Tortoise Series, *Red Hot,*

The red hot tortoise is a symbol of the warrior in the family with its' head, which is the light casing of the head lamp of a motor cycle, rose to look out for the rest of the family. It therefore exhibits the spirit of non-conformist which is the Dada spirit. This tortoise is not within the norm of the family in terms of colour and form. A symbol of the dada spirit that goes away from the traditional norm .It is a saying in O'Hara area of Delta state of Nigerian

that if you have not given birth to a thief in the family then you have not started .One who is hot and aggressive is needed in a family to ward off insults and aggression from outside.

Figure 125:Tortoise series the *beautiful loner*, Material, Bicycle chain case, motor wheel. Motor cycle fender, generator exhaust and ceiling fan coil casing, (1.6ft.)7cm, 2014.Photograph:Okogwu Antonia,2014.

Wheel is the base and upon the wheel is laid the motor cycle seat casing, a generator exhaust is attached as the head while the carapace is the ceiling fan coil casing and the configuration is finished with a tail of bicycle chain casing. A mixture of white and a tint of black car paint is used to finish the form. This configuration is all metal and is not mobile. The ceiling fan carapace is a circular smooth-edged form that agrees also with the circular tail though the edge is serrated and the entire piece is perforated as against the solid nature of the carapace. Even though the tail and the carapace are circular there are contrasting nomenclature in the bold sizes of perforations in the tail as against the tiny perforations in the carapace and this makes it more of a solid form .The rectangular head stands out and the linear formation of the metal pipes also contracts with solid forms and the spaces within the sculpture also heightens the contracts in the forms.

Figure 126: Tyre Stand for *Synchronizer*

Figure 127: The Motor for Synchronizer

Figure 128: Mounting the configuration on Tyre to aid Motion

Figure 129: Attaching Fibre as Hair

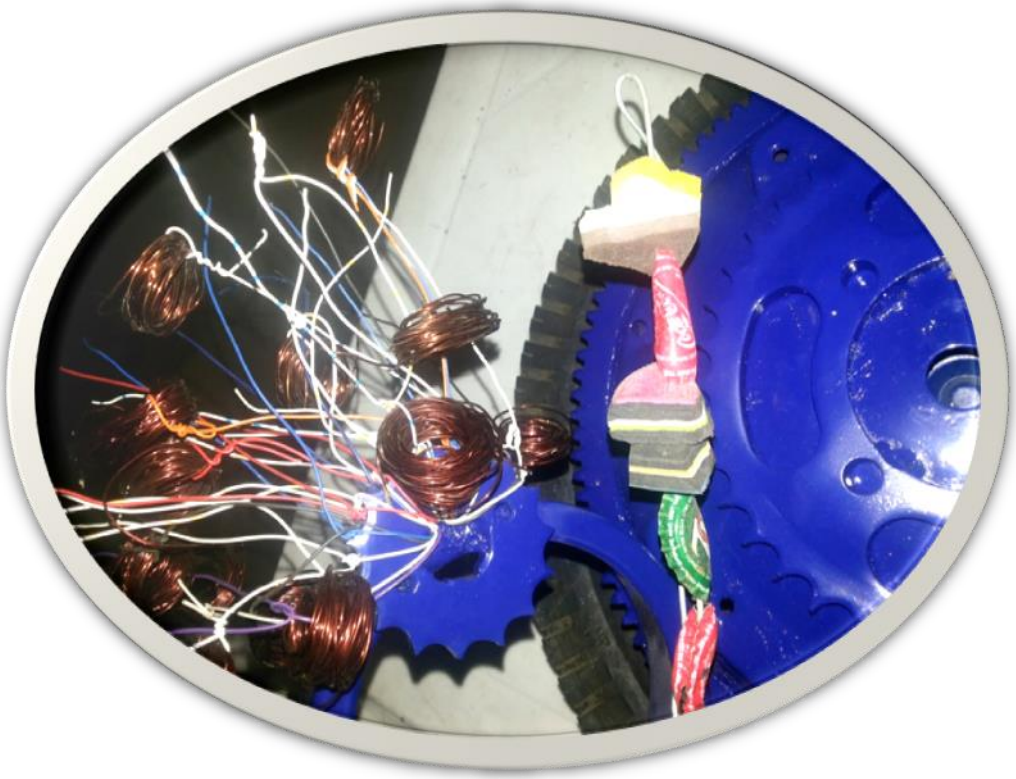

Figure130:Tortoise series, Synchronizer Material, Discarded metal Fan coil casing, bicycle part(1ft. 5ins.x1ft. 3ins)6.69cm x5.9cm, 2015.Photograph: Okogwu Antonia.2015

The family synchronizer is made of metal, plastics and Coptic fibres in a circular form. Its' base is a small tire wheel a ring metal slightly tilted and two pieces of flat circular disc

with spiky edges welded on the ring as eyes .The body is a motor fan that utilizes radial movement therefore the form is not static rather it is a stabile. The fibres are attached to one of the eyes and more fibres rolled and attached to the fixed fibres as hair and to create more point of the fibre the tail is attached with tied white fibre, copiously contrasting with the blue body of the creation. Apart from the fibres a creation resembling a barbecue (suya) is created by wrapping the metal crowns round a metal wire and alternated with diced slippers. Symbolically it represents that individual in the family that can synchronize and easily mobilize the rest of the family. This is contrary to the Loner who ranges in solitary.

Baby Tortoise

Step 1 Conceptual Stage

This particular Tortoise is conceived as the last in the series and size in this case plays a major role in creating a baby Tortoise, therefore the small casing of ceiling fan comes in handy

Step 2 Acquisition Stage

The dump sites have many wastes of ceiling fans machine parts and bicycle parts ,the small size ofthe ceiling fan coil casing is purchased .Welding electrodes ,sand papers fillers, Car paint and a liter of Thinner for reducing the thickness of the oil paint .

Step 3. Studio Work

Materials and acquired metals are brought into the studio to assemble

Figure 131: The Head of the Configuration.

Figure 132: The Body and the Tail of the Configuration

Attaching the two components of the composition, the main body and tail

The last of the series of the tortoise metaphoric sculpture statements is the simplified baby tortoise that is a configuration all metal form comprising the ceiling fan coil casing as the carapace, the bicycle chain casing as the tail and the machine part as the turned head that has the illusion of movement. The choice of colour as a finishing agent is subdued white with pinch of black.

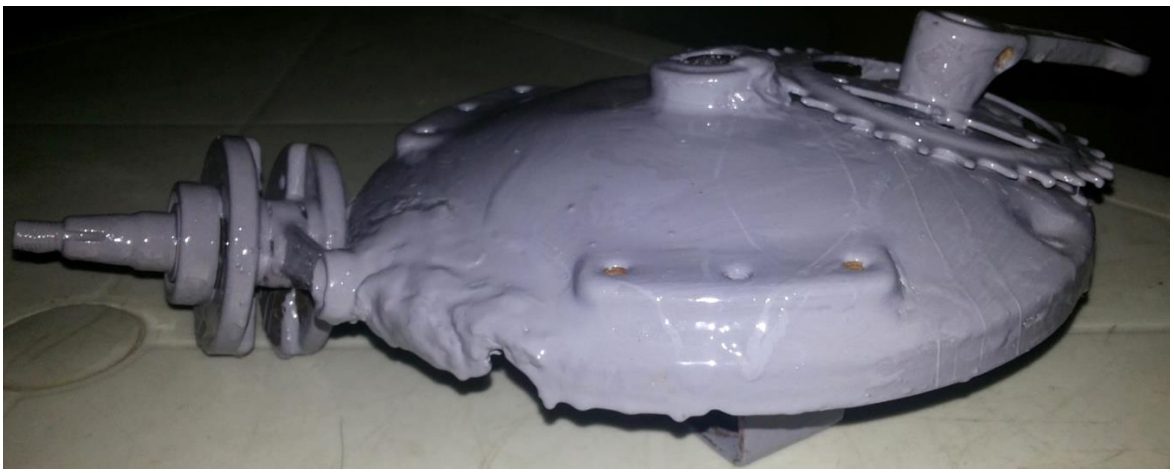

Figure 133:Baby Tortoise, Material, Discarded metal, Fan coil casing, bicycle part, 6.69cm x5.90 cm (1ft. 5ins.x1ft. 3ins,)2015

The tortoise series is a metal metaphoric sculpture statement just as George Orwell's Animal farm ,where animals are presented but x-ray the character of the human beings as they interface with one another .On the other hand the Tortoise series portray the family and the different characteristic features found in the individuals that make up the family unit: the father tortoise, the mother tortoise, the Red Hot ,the beautiful loner, the Synchronizer and the baby tortoise .The parents are both mobile forms the siblings are all static except the synchronizer that has radial movement perhaps to aid synchronizing within the family

4.10 Night Soil Woman -*Agbepo*

Step 1

This stage dwells in the conceptual level where the brain is put to use to work out the dream into reality and at this stage the bridging of the gap between the concept and the concrete is enhanced with working drawings.

Night Soil Woman- Agbepo

Figure134.Working drawing of Night soil woman- *Agbepo,* 2014

Step 2

Acquisition of materials from the Dump sites

Step 3

Assembling the materials in the studio

Step 4

Arranging the components and welding as illustrated bellow:

Figure134.Night Soil woman -Agbepo, hand joint

Figure. 135: Night Soil Woman, Head and bucket

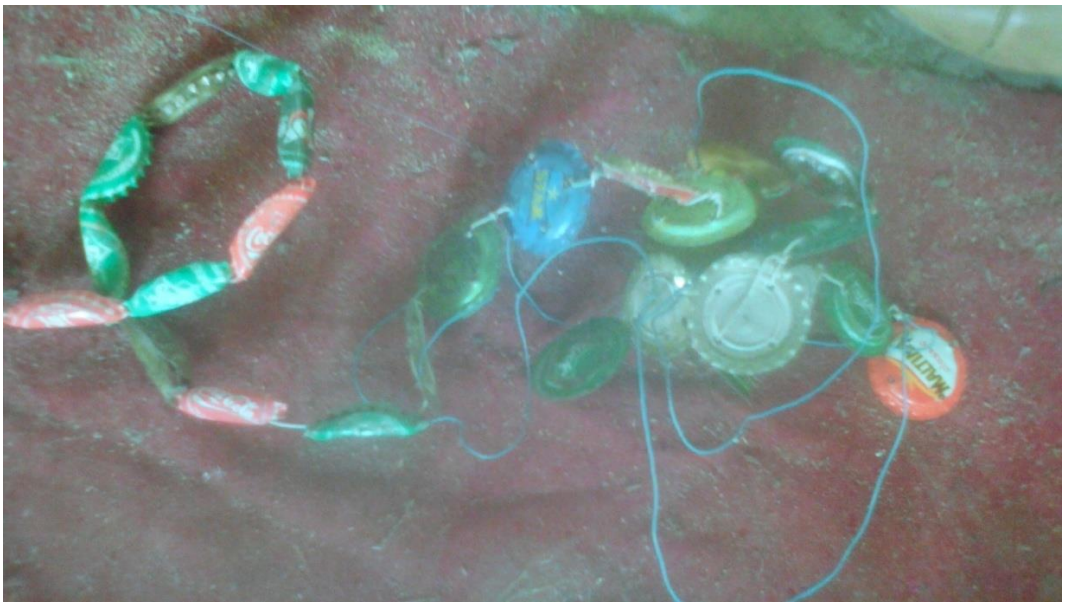

Figure 136: The Wrapping and Stringing Techniques Applied in the earring configuration

Figure137: Night Soil Woman, Components with Ceiling Fan casing

Figure 138: Night Soil Woman, Broom

Figure 139: Night Soil Woman, stringed crowns,

Figure 140: Night soil Woman (Agbepo) Parts

Figure 141:Night Soil Woman- Agbepo, Discarded metal, Hospital chrome plates, Fibre. Pipes, bottle crowns, 6ft x2.5ft, 2014

Also with a baby at the back cuddling to the fact that waste has entered a greater dimension in the time. It is a construction and assemblage of ironically a stainless steel as a bucket for the Faces and the head also is made of stainless steel, the other part, is tire wrapped with bicycle chain and a body of a motor cycle seat frame.

Agbepo – Onyebulunsi-

Onyebulu Nsi kazi nwunyeyo!

ObuNsi,Obu MoiMoi Oyoko

Night soil man where is your wife,

It is feces it is moimoi Oyoko!

The issue of waste in Nigeria now could be likened to the Night soil woman who is a symbol of the title and with a child. The story of the night soil life which is typified in this work tells the story of feces waste in the fifties where human feces were dumped in a big bucket and carried away by a night soil feces vendor. This night soil person carries this activity in the night to conceal his identity but often times the youths in the community apprehend him in other to catch some funs with the afore mentioned song.

4.11 Wedding Gown

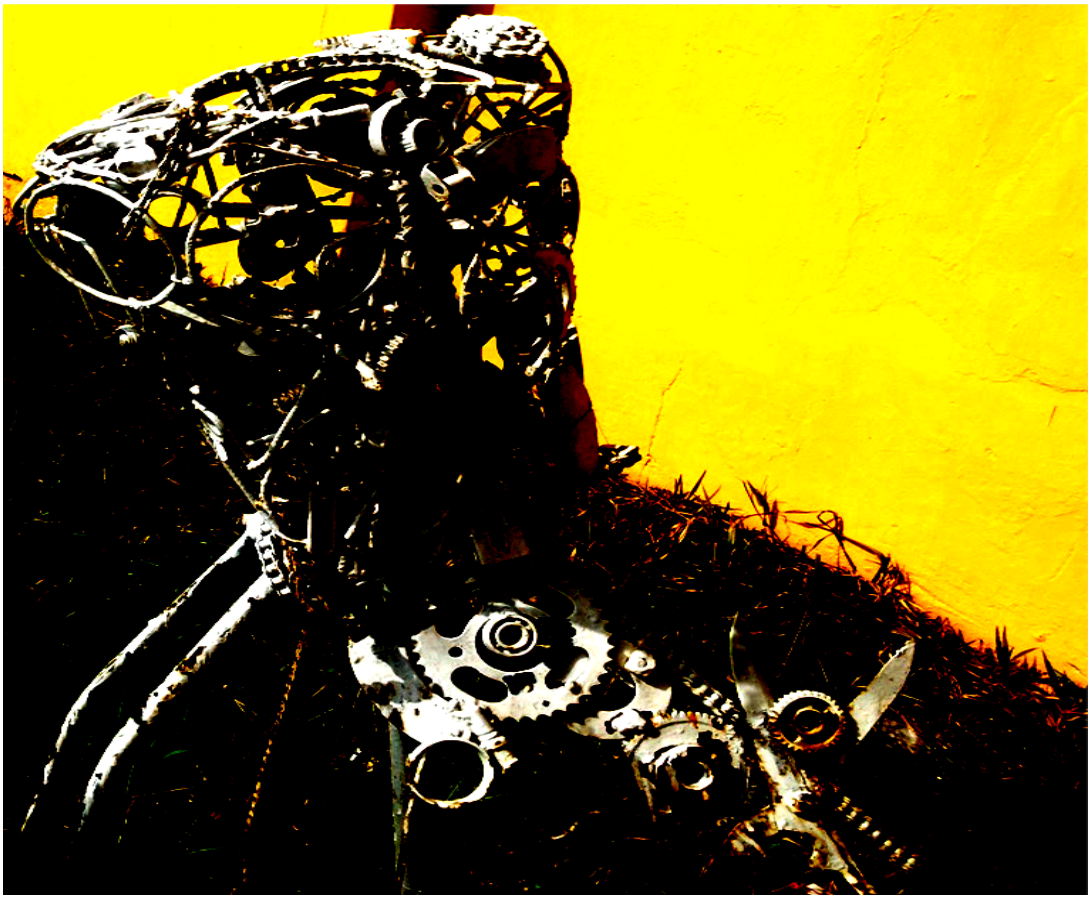

Figure 142:Wedding Gown, Discarded metal auto parts, scissors chains square pipe, angle bar, 6.69cm x 16. 14cm (1Ft. 5ins.x3ft.5ins). 2011. Photograph: Okogwu Antonia,2011.

A sleeveless body hugging metal gown made of waste metals of scissors, bicycle and auto parts is a story of a love affair that is fruitless and was not meant to be, hence a wedding gown in metal and it is only when it is worn that the wedding can take place. The frame is started with a $^{3}\backslash_{4}$ rod before the laceration begins like a puzzle and filling in the gaps with available metal beats that fit into areas within the gown. Some of the metal beats could not be welded into the spaces of gown and on close examination it was discovered they were casts. Chains were rolled into circular motive. A zip is created with the chain running through the top to the waist line with a beat attached as the head of the zip. This piece is also accompanied with a poem below:

So sorry my love all I can afford

Is this metal Wedding gown

Pure white!

Heavy? rigid!

Open and lacerated

Did I hear you say unwearable?

Wear it for me.

As a token of our love!

4.12 Dividing Space with Waste Metal

Figure 143:Dividing Space with waste metal, Discarded metal pipes, chains, Angle bars, square pipes, and Chrome door, 25.98cm x 23.62cm(5ft.2insx5ft,)2014-2015, Photograph: Okogwu Antonia,2015.

4.13 Multiple Platforms

Figure 144: Multiple Platforms, Discarded metal rods, circular wood discs (6).1in Rods,11.81cmx18.89cm(2ft. 6ins.x4ft.)2010.

Figure 145:Multiple Platforms,Discarded metal rods, circular wood discs(6),1in Rods,11.81cmx 18.89 cm (2ft. 6ins.x4ft). 2010.Photograph: Okogwu Antonia,2010

4.14 Play Sculpture Model

Figure 146: Sculpture and Play

The interplay between Sculpture and Play in children around ten years of age is explored in this study with a Play Sculpture Model with waste metals

Step 1

Conceptual stage involves working with materials in consideration of play for children and at his stage mobility to play knowing he nature of children and their active nature

Step 2

Acquisition of metals of various shapes are bought and brought into the sculpture studio

Step 3

Arranging the metals and welding them together to appeal to children

Step 4

Spraying 5he form with only two colours of black and sliver and attaching some stringed diced flip flops to catch the attention of the children due to their colourful nature.

Figure 147:Play Sculpture Model, metal, plastics, Dimension, 2014 Photograph: Okogwu Antonia,2014.

Figure 148:Play Sculpture Model 2, Bicycle, chains, seat and wheel, Metal rings, Chrome motor cycle fenders, metal basket and angle bar. 8.26cmx22.83cm(1ft.9insx4ft.10) ins, 2011.Photograph:Okogwu Antonia,2016.

A square metal frame serves as a base, followed by welding on of a bicycle wheel and the motor cycle fenders and seat carriers are welded in place. Chains are doubled and fastened to strengthen the composition the bicycle seat is placed in the centre while a circular metal basket is placed as a luggage compartment for toys. This circular basket with a pipe in the

centre is placed on top of the motor cycle seat casing. The pedal is done with circular conical wrapped chains on the two sides of the form. The handle is that of a bicycle but has two poles and welded firmly to the motor cycle fenders. Two metal rings are welded in the centre of the configuration for strength and to add to the embellishment.

This play model was purposely placed in places where people could interact with and it turned out that both adults and children ride on it.

Figure 149: Children from Abraka Modern Primary School Playing with Play Sculpture Model, 1

Figure 150:Children from Abraka Modern Primary School Playing with Play Sculpture Model, 2

Figure 151:Children from Abraka Modern Primary School Playing with Play Sculpture Model,3

Figure 152:Children from Abraka Modern Primary School Playing with Play Sculpture Model, 4

Figure 153:Children from Abraka Modern Primary School Playing with Play Sculpture Model 5

Figure 154: Children from Abraka Modern Primary School Playing with Play Sculpture Model, 6.

Figure 155:Children from Abraka Modern Primary School Playing with Play Sculpture Model, 7 Photograph: Okogwu Antonia,2016

Figure156: Children from Abraka Modern Primary School Playing with Play Sculpture Model, 7

4.15 Spiky

Figure 157: Title, Spiky, two wheels, five rings, bamboo pipes, Plastic diced slippers metal ¾ rods and beads, 17.3cm x 16.5'3cm (3ft8insx3ft. 6ins),2009-2011.

This was a discarded hair salon rollers carrier which has always exhibited some sort of appealing aesthetic order.

Crowns are made of Steel, and Steel is an alloy of two metals including iron that was originally designed in 1889 by William Painter Painter (1838-1906).William fashioned the caps after the British queen's crown of 1890 this revolutionized the bear bottle industry and all drinks turned to bottles simply to utilize the crowns It was originally made with twenty four teeth and later reduced to twenty one (www.crown cork. com).These crowns are everywhere and are churned out as waste every day in Nigeria and is popularly called counter.

In this configuration the crowns were picked up washed with detergent water bleach and Dettol to make them germ free .Holes are perforated in the centre of the crowns. At first perforation was done with auto drill but the power dependency of this could be frustrating hence the use of just nails and hammer to continue the perforation. Waste metal wires from burnt tires are used to string the crowns and circularly attached with lighter gauge wire that are more flexible to aid the sewing of the various strands of the stringed crowns together. This piece exposes the quantity of waste generated in drinking bottled soda drinks and alcoholic bottle drinks that are consumed daily. The following bottle crowns were found in University of Port Harcourt community:

4.16 Crown Mat

1. Star
2. Maltina
3. 33 Export

4. Sprite
5. Guilder
6. Coca cola
7. Heineken
8. Fanta
9. Legend
10. Harp
11. Orijin
12. 7 UP
13. Schweppes
14. Hi- Malt
15. Grand Malt
16. fayrouz
17. Dubic
18. Miranda
19. Smirnoff
20. Vita-Milk
21. Dew
22. Palm boost
23. Amstel malt
24. Malta Guinness
25. Fanta Apple
26. Ace Passion
27. Kings reward
28. Guinness
29. Malta Gold
30. Natural Fruit Flavour
31. Pepsi
32. Turbo King

Figure 158: Working sketch

The bottle crowns are collected, and pierced with nail after much attempt has been made with the power driven drill that did not yield better result due to constant power failure and too much vibrations. The crowns are placed on a firm hard surface facing down and a nail driven in the centre with a hammer. Metal fibres are used to string after which the age long three string weaving is done ,coupled and fastened This same three string technique in weaving is the same applied in traditional hair weaving often called Bob Marley hair style in Nigeria.

The random stringing of the different colours of the bottle crowns gives off a polychromatic effect that is highly attractive. The metal fibres a tested for tenacity by simply applying press on it and if it is so bristle it does snap and in other words might not be strong enough to carry the weight of the metal bottle crowns. The configuration is dusted and

Lacquered to prevent rust As soon as it is placed for interactive session with the audience for four days some wondered what it was while others stopped to touch and want to take photographs while others marvel at the level of madness that could lead someone to pick up the quantity of the bottle crowns.

4.17 Woven Crowns

Figure159: Woven Crowns. Discarded metal bottle crowns.28.34cm x 1.57cm (6ftx4ins,2014.Photograph:Okogwu Antonia

Figure 160: African Woven Hair, Courtesy; www.ccalagos.org/newslettes

Figure 161:*CrownsMat,*Metal, 25.82cm (7.7ft), 2014, Photograph: Okogwu Antonia,2014.

4.18 Metal Crowns Mat.

Step 1. Conceptual Stage

Soda drink bottle crowns are so many and liter the environment and they are easily available in large quantity. Their availability in large quantity in different colours provoked the thought of accumulation since they are in small pieces.

Step 2. Acquisition Stage,

The bottle crowns collection is done in two faces, Collecting from shop attendants and cleaners of bars and picking them as you go around

Metal crowns mat is a configuration of a circular radiating rededication of the stringed crowns. The innermost radius is configured with the positive and negative stringing pattern while the rest was done with positive stringing and knitting to accommodate more strings. In the same vain there is no conceived regular stringing that was conceived rather the instinctive explorative sprint was brought to bear.

The coloured crowns were not arranged rather just randomly stringed in recognition of dada spirit of irrationality though this same play off and speaks ironically. The volume of crowns gotten points to the volume of waste generated daily from the bottled drinks in University of Port-Harcourt community. The crowns are better pick before the introduction of rust, if otherwise, the work of cleaning and de-rusting becomes imperative.

4.19 Okonjo Iweala

The possibilities of the various configuration of the crowns on this piece, typifies a general female icon that consistently has tied her (gele) head gear in a particular manner and her insistent on remaining in that mode for most of her public appearance. The crowns are stringed, on a ¾ in rod and also wrapped around same. The symbolic inclination of the wrapped head gear (gele) with the two pointed ends of the gele originality gotten from northern Nigeria, Hausa women but adopted by Okonjo Iweala and popularized by her own version of this style endured her to the African women as a promoter of the African simple fashion

Figure 162: Stringing and Wrapping

Figure 163: OkonjoIweala, Metalcrowns.9.44 x 4.75cm, 14.17cm (2ftx1, 3ft.),2014

4.20 Multiple Rings

Figure 164: Multiple Rings, discarded metal pipes, angle bar, Crowns and metal Fibre,

16.14cm x 14.17cm (H. 3ft.5ins, W 3ft), 2012 Photograph:Okogwu Antonia,2012.

Figure 165: Multiple Rings Top View, discarded metal pipes, angle bar, Crowns and metalFibre, 16.14cm x 14.17cm (H. 3ft.5ins, W 3ft), 2012

Multiple rings took two years to complete because of its'complex linear simplicity.There aretwo sizes of the rings which are actually one inch circular pipes turned with motor tire wheel in to rings The biger two are arranged by the sides and the smaller rings are statagicallyplaced at the top and bottom for stability and the other rings are firmly secured in

the middle part of the composition. Later the bottle crowns are stringed and tied on top of the top ring forming three more rings .

The randomstringing of the different colours of bottle crowns giving it the adinkra woven cloth multicolour look.The king of ghana adikra symbol is called Adikrahini symbol which has three concentric circles.The receptivity of the circular forms is the perception that they are viewed as complete .Strokes and curves are two opposite elements of graphicsand children learn how to draw strokes before trying their hands on curves portraying that the curves are more engaging than the strokes.

4.21 Ijela

Figure168: Ijele Masqurade for Late Uche Okeke, Courtesy,www.worldigbocongress.com/

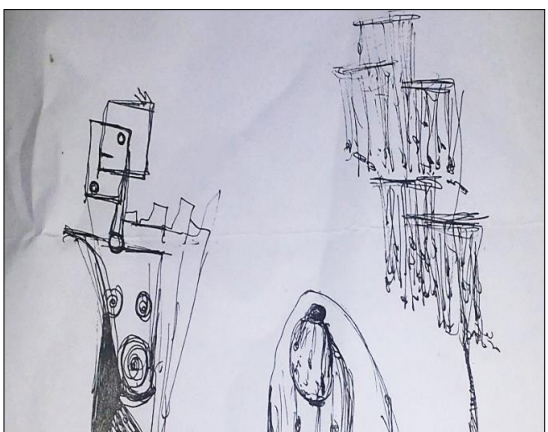

Figure 169.Worknig Sketch 2

Figure 170:Ijele,Discarded Metal pipes, angle bar, Crowns and metal Fibre6ft x 2, 5 ft.2012-2014.

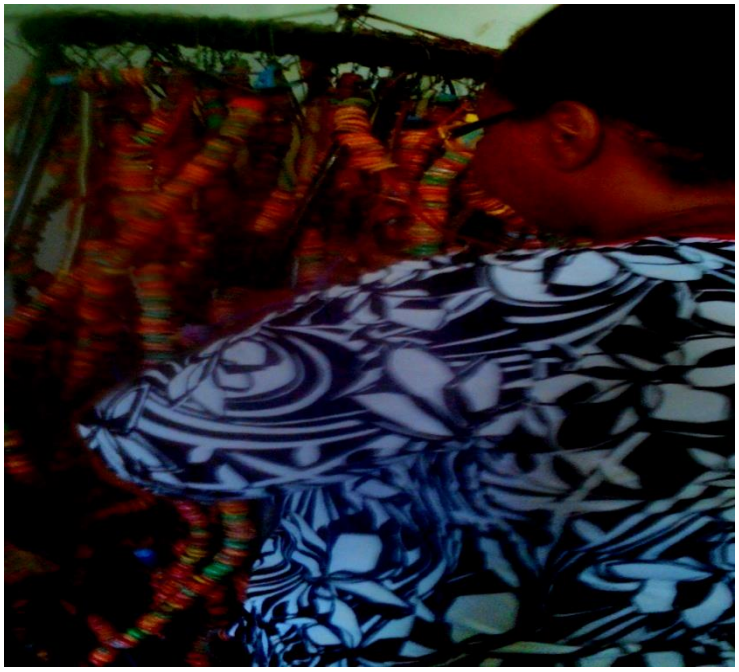

Figure 171:Attaching the strands of stringed Crowns

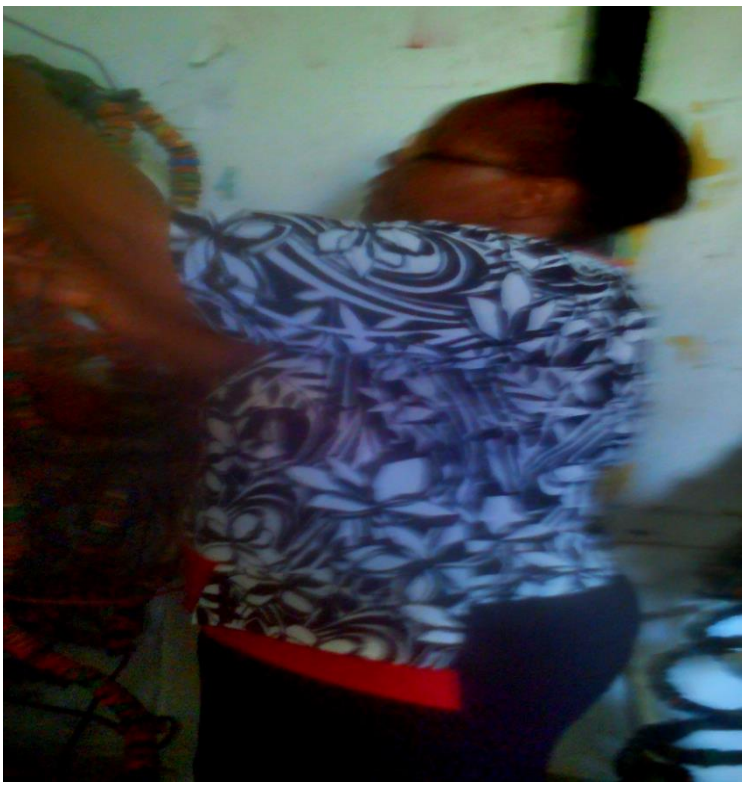

Figure 172:Attaching other Waste Plastics and Metals

Figure 173:Ijele,Discarded Metal pipes, angle bar, Crowns and metal Fibre.

28.34 cm x11.41cm.(6ft.x2,5ft), 2012-2014.

Figure: 174*Ijele*Metal, Fibres and Plastics, 28.34 cm x11.41cm.(6ft.x2,5ft), 2014- 2015.Photograph: Okogwu Antonia,2015.

The concept of the Ijele as an eco-art piece is informed from the supreme superior masquerade in Igbo culture. The colourfulness of the Ijele takes up the colourful bottle crowns symbolic of the crown of the queen of England as the supreme *Ijele* masquerade of the Igbo culture that can only appear for the titled people and the royalty. The movement is symbolized by the two tires of the bicycle on top and the wheel barrow tire as the ground connected by a hallow pipe of I cm. The wear and tear effect of the bicycle tires is shown as the spokes dismembered in some areas while some are still in place. The connection to the base wheel barrow tire is permanently fixed so as to bear the load of the numerous metal fibres and the bottle crowns that are pierced by nail and stringed and held with stoppers of plastic bottle covers or diced slippers. The random stringing without any pre-considered colour scheme arranges its' self to a colourful configuration as the various struggled lines sway to the bearing on the movement of the bicycle tire.

The found metal fibres are coated against rust but undue exposure to the weather outside before they were recovered for this Ijele configuration took a toll on some areas which are quickly identified through observation and hand feeling of bristled portions of the fibres. The variation of the length of the strings is purposeful in other to alter balance and lead the eye away from monotony.

The stringing of crowns in respect to the thrust of the thesis that includes the use of waste metals, and five that also recognizes the dada spirit as well as the philosophy of aesthetics by Gadamer digs deep into the story of waste of crowns and metal fibres in university of Port-Harcourt community with a teaming population of about 200,000 people

4.22 Curtaing Wastes

Curtaing Wastes is a creation that bears in mind the architectural interior with the intention of creating space breaking as curtains with wastes of metal fibres and plastics interior

Figure 175: Curtaining waste, Discarded bottle crowns, diced Slippers, Plastic bottle covers' and perfume plastic bottle. Metal fibres and metal square pipes, 43.15 cm x11.81(8ft.6ins. x2ft.6ins),2014/2015, Photograph: Okogwu Antonia, 2015

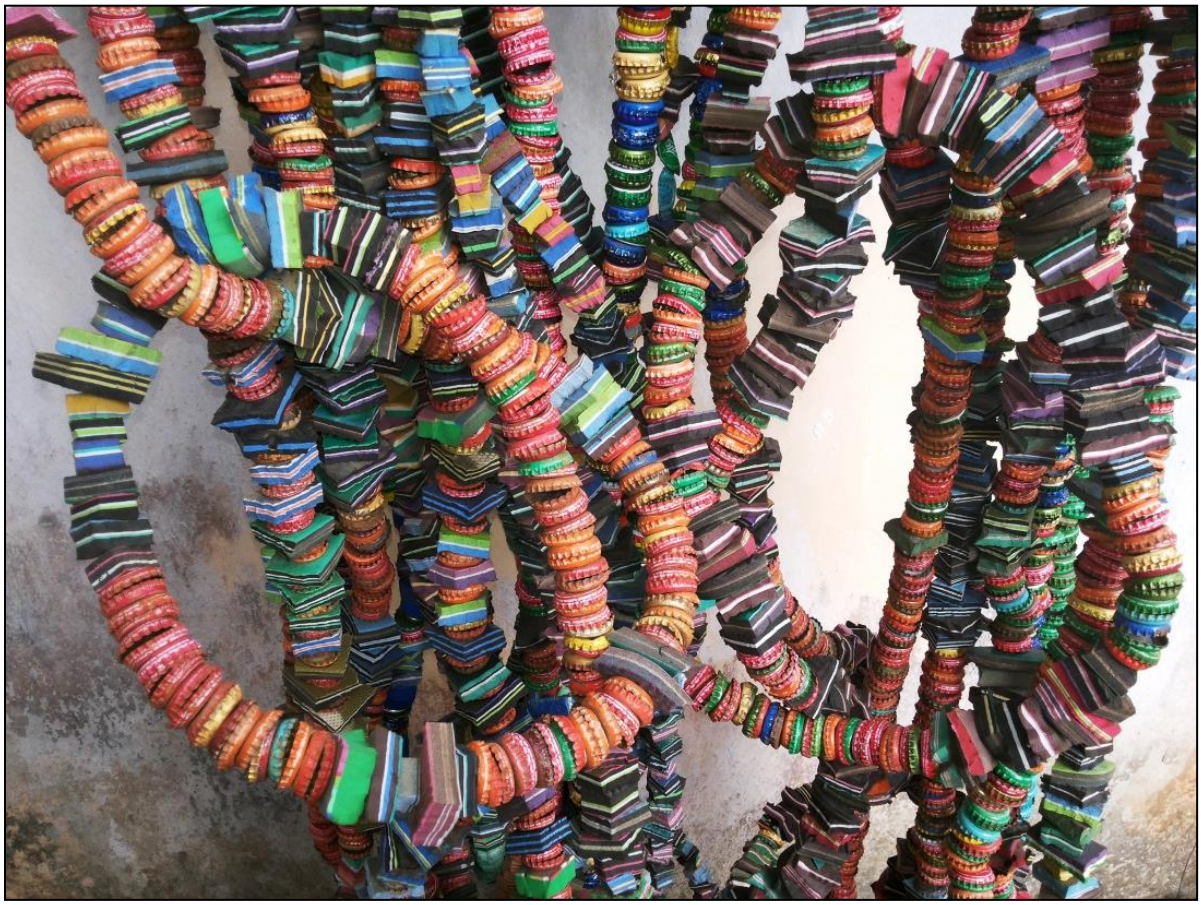

Figure 176: Curtaining waste(detail)

Super fluid drapery that has lewd alluring polychromatic form that combines the circular bottle crowns that are metal with the rectangular diced slippers that are also exposed to the colours within .The seamless combination of metal and plastics engages wastes in curtaining.

The intermittent loops created to break the monotony of the strands that run vertically down from the square pipe that hosts all the strands of the curtain that is purposely painted black, also to create a break from the colours. The converging of the strands forming loops on the grown heightens the effect of the drapery forming a pool on the ground.

4.23 Forms in the Firewood

Figure 177:Forms in the firewood, Discarded metal bottle crowns and 3\4 rods,54.98cm(L-5ft. 6ins),2014

There are forms in the stacked fire wood where intense seeing with the application of creativity yields result that proves that there is more to the stacked wood that the ordinary eyes can see.

This is the origin of this creation that has utilized the piercing and stringing method to achieve this form. Sharpened 3\4 rod is used to pierce hole in the bottle crown and same size of rods are used to string the crowns and arranged horizontally.

4.24 Mermaid

Step 1 Conceptual Stage

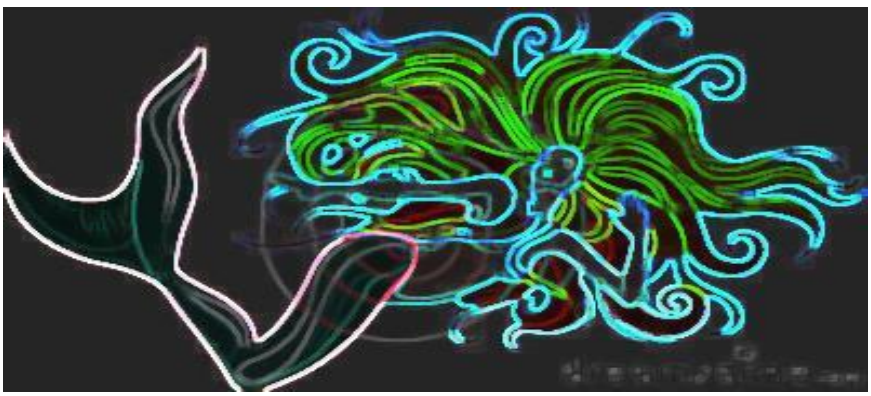

Figure 178:AndreyMatyweRed Haired Mermaid.400x222px,Courtesy, Dreamstime.com

Step 2

Gathering of the various components of the composition

Figure 179:Broken Industrial Water Pipe in University of Port Harcourt

Figure 180: Stringing Diced Flip Flop

Figure 181:Stringed Diced Flip Flop

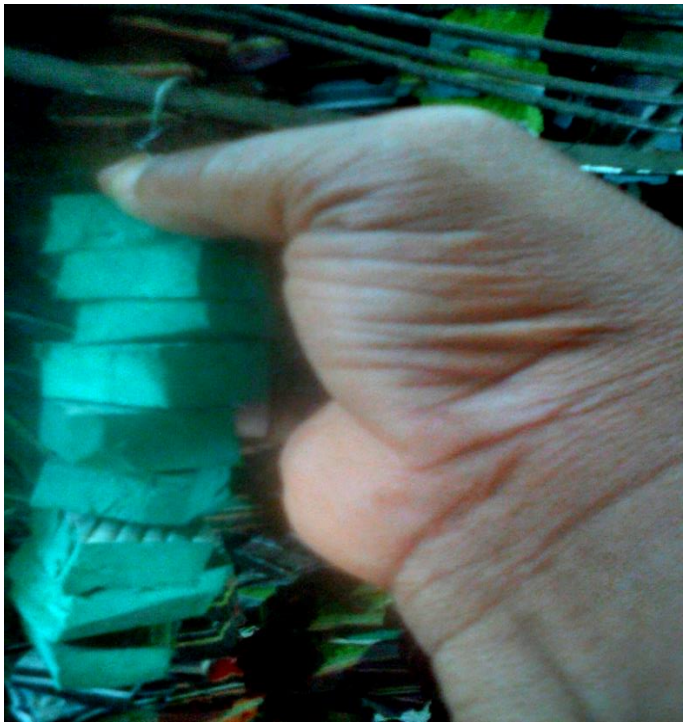

Figure 182:Attaching the metal string to the metal Fan Casing

Figure 183: Mermaid, Diced Flip Flop, Ox Fan blade Shield, Water Pipe and Metal Fibres, 30.70 cm x 19.68 cm (6ft, 6insx4ft. 2ins).,2014

The Mermaid according to the Oxford English Dictionary is a mythological creature with a woman's upper body and a tail of a fish of which Andrey Matywe captured in his work, Red Haired Mermaid Most often in this allegorical creature, emphasis is laid on its' long hair and its biomorphic nature. In this study creation of the hair is the focal point.

This particular creation is a massive interactive metaphor of waste, man and his environment. The components of this assemblage are Fan shield, broken industrial water pipe discarded from University of Port Harcourt, metal ring, diced slippers and metal fibres. In the waste dump sites twenty sacks of discarded slippers were purchased in different colours, sizes and stages of degradation. These slippers are soaked and detoxified with bleach without which one is infested with invisible creepy crawlies that can be quite disturbing. Some are mended by the former wearers with pins, nails and stuffs like that .One has to take care and watch out for such to avoid being injured. After washing the slippers are dried and the dicing with sharp pen knives begins. There is a lot to be considered at this stage in terms of safety because of the sharpness of the pen knives .The upper parts of the slippers are removed to just release the down part that has contact with the ground. The beauty of the dicing is that many colours that one could not see in the slippers get exposed by dicing.

4.25 Tyre Configuration

Figure 184:Tyreconfiguration,Material, Discarded Metal Pipes, rods, plastic sheet and Tyre, 2011-2013

Metal fibres mainly sourced from old tires and are cut into six yards per piece and the diced slippers are stringed randomly .The stringing is done by using the sharp end of the metal fibre to forcefully pierce the Flip flop. This forceful piercing call for caution on the fingers. After the stringing, the strands of the diced slippers are attached one after the other to the rim of the fan shield, making and following the circular nomenclature of the Shield. As one threads and allows draping down the colours enfold the massive attachment of a Mermaid's hair. After which the stand is sewed up with the metal fibre along the line of the tear adding aesthetic value to the creation .It is a token or a symbol of the water situation of the University of Port Harcourt community. Aging pipes exposed and water scarcity in a citadel of knowledge with problems of knowledge of provision of simple elementary need of man which is water in such a beautiful city yet full of knowledge but have problems tackling the issue of water.

Figure 186:Tyre configuration, embellished top2Tyre, Pipes,3/4 serrated Rods, 2014

Figure 185:Tyreconfiguration, embellished top1Material, Tire, Pipes, 3/4in.ferreted Rods, 2014

Figure 187: Tyre configuration, 2 Unembellished Tyre

Figure 188:Tyreconfiguration: The beaded transparent top. Discarded Metal Pipes, Rods Perspex, BeadsandTyre.2011-2013

Figure 189:Tyre configuration, Discarded Metal pipes, rods, plastic sheet and Tyre,10.23 cm,2011-2013

Tyres that are discarded are many in Nigerian environment and really constitute bulk plastics wastes that are not degradable waste in the environment. They come from Bicycles, Motorcycles, Cars, Wheel barrows and Caterpillars. In this configuration there are five Tyres. One is a big SUV Tyre of 10.23cm. 2 ½ inch pipes are inserted in three intervals forming a triangular tripod at the base of the configuration in figure below. The curves and the strokes meet in this configuration, of circle and the triangle in a harmonious tango of aesthetic variation.

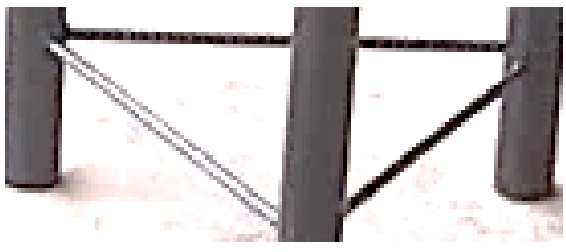

Figure 190:Triangular base of the tyre configuration

The Shrub

Step1.

This particular piece was inspired in the Dump site as many discards of metal wires presented themselves. Right there in the refuse dumb are these tangled metal fibres ready to be crushed and weighed and added as part of the goods to go to the recycling factories. It is understood that this waste was sourced from a factory that produces metal hangers for the fashion and clothing industries. The first impression was its spiky unorganized mass on the floor of the dump site. There the inspiration came to acquire them.

Step 2

The entangle mass got sorted and straightened out and wrapped one after the other round the base. Some were picked and an attempt was made to wrap them around and released as spikes and then forced into a metal stand of square pipe and wrought iron rolled into three coils as stand for the creation .The spiky nature of the work requires some tact to configure because it could hurt the fingers. When placed in a location for interaction with the audience in an observed monologue, it was observed that the people stayed away from it.

Step 3

The curled rod at the base is sprayed with oil paint.

4.26 The Shrub

Figure 191:The Shrub, Discarded metal fibres Rods, Square hollow pipe.H.3ft. 5ins. 2011 Photograph: Okogwu Antonia

Figure 192: The Shrub placed in the court yard

4.27 Analysis and Appreciation of Recurrent Sculpture ideographs within the Study

At this juncture the study attempts to congregate, synthesize and decipher information from the body of the research work in order to find out re-occurring indices, idioms and ideographs. Wastes of Metals, Plastics and Fibres have been engaged in this study copiously in over thirty pieces of work, some purely metal creations others are mixed, and all attempted to imbibe the underlying principles and philosophy of Dada and Gadamer aesthetics respectively.

4.28 Analysis of Titling of Sculptures in the Study

According to Savedoff (2012), titles can dictate what a work of art means therefore it is considered very important in interpretation, on the contrary there are art works that are untitled though this is

not the case with the works in this study that has diverse titles ranging from waste conscentization titles like Curtaining waste. Agbepo – *Onyebulunsi*to family: Family Portrait, Tortoise series and topical titles, Manised labourer. Most often the titles open up the thought realm which could be followed by the observer or overlooked to basically relate with the works. Titles do not really have to say everything about the work but could lead the beholder of the art work.

The titles also give away the issues of wastes as some of the tiles of the works like cycling, Agbepo, the Web and the content of the Crowns Mat all projected to point to the wastes state of the environment

4.29 Knotting the Philosophies of Dada and Gadamer's Hermeneutics-Aesthetics in Eco- Sculpture

The major components of discuss here are the Dada movement of the twentieth century that helped to usher in art in the twenty first century that de-emphasize the classical foundation of art and a philosophical phenomenon called Gadamer and his projections in theories on aesthetics .Having stood on these academic frames to project this study Alexander Kremer(2013)views Gadamer's philosophy as anti-foundationalism just as dada that is regarded as the art of nihilism. In other words the works of Gadamer tends to agree with the philosophy of Dadaism. More so Gadamer is priced academically to associate with the following:

1. Experience regarding art works
2. Integration of aesthetics into hermeneutics
3. Legitimatization of the humanist tradition
4. Universality of hermeneutics central position of experience and the art works relational mode of being.

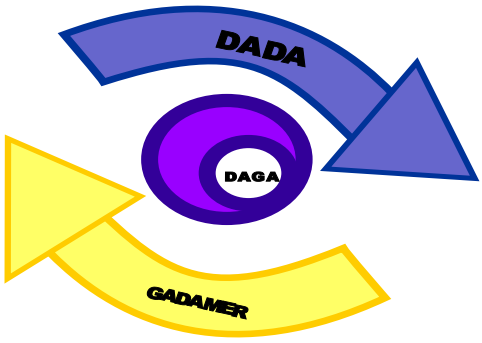

Figure 193: The meeting point of Dada Philosophy and Gadamer's Aesthetics and Hermeneutics (Illustration)

Quite a number of people see art as imitation of nature, mimesis : some highlight the quality of expression which has the ability to ingest others going by Wordsworth notion that all good poetry is the spontaneous over flow of powerful feelings (Wilkinson.1991,2). Others look at art from the formalistic point of view propounding the formalistic theories such as another variation of the formalistic theory as significant form. The present dispensation and the concept of art uphold the view that art is not fixed concept rather ranges with era and people. Aesthetic quality takes in harmony, symmetry and balance:

1. **Chance**

Subversion of craft, control and internationality seem to be characteristics of this element called chance which is are occurring decimal in creation of works of art in Dada movement (MoMa.2015) .Chance as element in art has always been there but got to a prominent pride of place in Dada. It is one element that cannot be ignored in experimental art and since this work followed the exploratory mode of research is bound to experience or encounter this during the course of research, though the definition of Jean Arp that the law of chance can be experienced only in a total surrender to the unconscious .One can dare to say that modern art has elevated this element more than the earlier era where technique was stringent and less relaxed.

2. **Ready-mades**

Ready-mades are art works that are found already made but brought to the fore as art pieces with or without any input by the artist that found them. They are those retinal arts that have ideologically based, as against visually, thereby challenging the notion of what art is and what is

not, no wonder Robert Fulford defined ready-made as angry nihilism. There are five types of ready-mades;

1. Un-altered objects
2. Assisted ready-mades
3. Rectified ready-mades
4. Corrected ready-mades
5. Reciprocal ready-mades.

In this study the works try to down play this area of Dadaism by incorporating the ready-mades into compositions. In the sculpture composition in Fig .76 the found chrome door is engaged in a room divider configuration while the chrome bucket is used in the Night soil woman composition.

3. Juxtaposition

Juxtaposition in art is one of the elements that are associated with dada art usually used to bring about the effect of contrasting of opposed element in design. This element is very noticeable in the Mermaid the riot of colours of the hair as against the smooth tubular shank of the mermaid.

4. Condensation
5. Challenge of originality
6. The setting aside of the influence of aesthetics and personal preference revolt to instinctual sensibilities the focus is shifted from the viewer(Mama.indstate.edu/ucrs/dada/principles.html)
7. 'Unfinishness' is another characteristics of Dada Art that is widely incorporated in the Design exploration exhibited in the Tyre series, intentionally done to engage the spectator.

All in all, the creative act is not performed by the artist alone, the spectator brings the work in contact with the external world by deciphering and interpreting its' inner qualifications and thus adds his contributions to the creative act'-Duchamp

This becomes even more obvious when posterity gives final verdict and sometimes rehabilitates forgotten artist. Principle of chance according to Max Ernest is the act of employing random, accidental stimuli to awaken patterns with the subconscious, without quotidian ideas of what reality is and should be unconventional techniques closing the eyes behind the world and tap on into the subconscious. In Dada the artist is not a creator but assembler of some great components. Aesthetic contemplation is no longer passive but active endless new reconfigurations of works meaning of which Dulthery considers incomplete (Watkini, 2013)

4.30 Analysis and Appreciation of the recurrent sculpture ideographs within the Study

4.30.1 Poly Chromatism

Sculpture classically engages forms and down plays the use of colours but in the engagement of the forms in this study the introduction of multi colours brings out the nihilistic spirit in conforming to Dadaism.

The Manised Labourer, the Ijele, Crown mat, Tortoise series and even the Tire series all are forms heavily infused with multi colours disregarding the classical monochromatic tendencies. This element of chromatism could also be seen in the works of Jen Stark a Florida based artist, (Okmarzo, 2012).

4.30.2 Abstraction and Poly- Material in Sculpture

Abstraction is one term that is so abused in art that might need classifications in future for it to be understood. In this study abstraction could be seen if it is a continuum away from reality to be about five kilometres away from reality. The works recognize reality but quickly migrate five kilometers away to fine self-expression that is actually not encumbered by detailed reality which is not really practiced in non- additive method of sculpture of which these works cold be said to lean on. One other word that does not really seat comfortably in Sculpture is the word mixed media which actually does not describe the work that has different materials because medium connotes something quite differently conceived in sculpture parlance.

4.30.3 Mobility

Mobility is an element in sculpture that is perhaps regarded as the fourth dimension whereby movement is introduced to creation and Calder is known to project this aspect of sculpture. The sculptures within this study used electrical, manual energy to introduce movement to the sculptures.

4.30.4 Elements of Curves and Strokes

These two elements cannot be ignored in creating straight or circular forms and these become visible in the works such as the curves and strokes in cycling that fully exploited these two elements.

4.30.5 Circling

The circle is a universal symbol with extensive meaning as follows,

1. Totality, wholeness, original, perfection, the self, the intimate, eternity and timelessness.
2. Understanding the use of circle symbol of a female mother earth spirit of the genuine energy and a space that is sacred.

4.30.6 Triangle and Associated Meanings

The triangle is a peculiar shape that is characterized with three sides and three points that are uniquely different that its' placement has variety of meanings and some are as follows; gender,creativity,harmony,proportion,ascension,manifestation,illumination,integration,subjectivity and culmination Creatively versatile is the triangle with three points or angles that also exhibit dynamism in design element what captures themes of magic, wonder and in the triangle meaning. None of the other basic shapes offer this kind of inherent duplicity. A square on its side, the symbol meaning remains the same. Same with the circle - rolling it around, it's still a circle. The triangle on the contrary proposes immense variables in meanings when tipped top from bottom. Numerology introduced into the triangle that has the number three, one and two also brings the shape into the interpretative realm of mysticism.

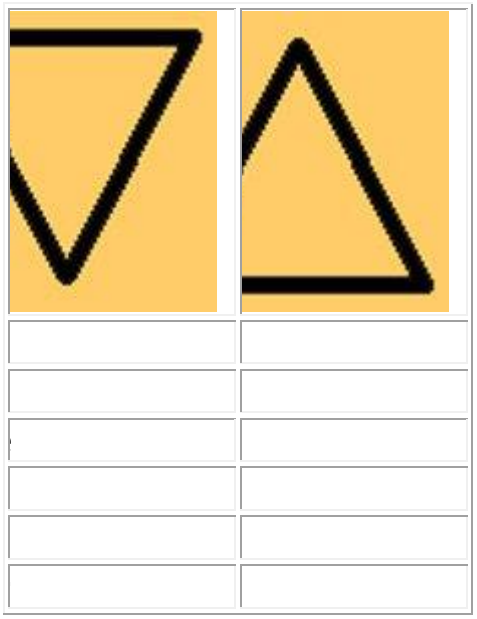

Figure 194: The Triangle and associated meanings,Courtesy,www.whats-sign.com/triangle-meaning.html.

4.30.7 The Circle and the Triangle in a Tango

The circle and the triangle are two different shapes and putting them together in a design as is witnessed in the tire series where the curliness of the tire is carried by the triangular metal stand create unusual synergy or marriage in design. The tango when not properly engaged could be disturbing or even offensive .This is so because one is edgeless and continuous while the other is endowed with sharp three edges and three planes. It is agreed that contrast in design is commendable but the contrast when not properly harnessed could mar the total design. This is not so in the tire series, the placement of the two components of divergent contrasting forms has united them together without any design problem.

4.31 Philosophies within the Study and their Bearing on the Study

There are philosophies x-rayed in the study that have aided elucidation of this research and they are the Dadaism and Gadamer aesthetic/hermeneutics philosophy, of which the conceptual frame was built on. Rebeshchenkova Humanitarization, that tore open the other spheres or areas of

associated Eco –studies in other words the twenty first century and even beyond this epoch could be considered as Eco-studies era considering the massive de-humanitarization consequences inherent in the ecological crises globally. Proffering engagement in re - humanitarization is Laura Lynn Jansen's triple R philosophy in wastethetics that sees an escape from the ecological crises in reduce, recycle and reuse. Ecological crisis is the essential part of the total crisis of the modern civilization. It is the consequence of the number of the causes, including dehumanization of society, moral decadence, loss of need in the beauty and so on that gave rise to Eco-aesthetics of which Milena Popov (2015) examines and relates with Eco-politics.

4.32 Safety Issues in the Sculpture Studio

The Sculpture Studio is a working space that requires all safety precautions in handling most materials and power tools. First aid kit or box is required in the studio. The first precaution is to understand the tools and materials and the working spaces provided. In this sphere the apprenticeship method that is enshrined in the sculpture space is paramount. In other words skills in the sculpture studio are passed on from one seasoned studio master to an apprentice without which trials and errors carried out exposes the apprentice to danger.

Figure .195: Title, First Aid Components.

The various materials have their chemical components that require knowledge before handling. In terms of welding the proper welding kit must be used especially the goggles, the sparks could damage the eyes. After engaging in welding for two hours continuously, one is expected to take a glass of milk or Trevo to help clear the system .Also the casting of waste plastics is dense with dangerous fumes that are injurious to the human body therefore should be done with caution and in safe open space not in an enclosure.

Figure 196: Title, Trevo

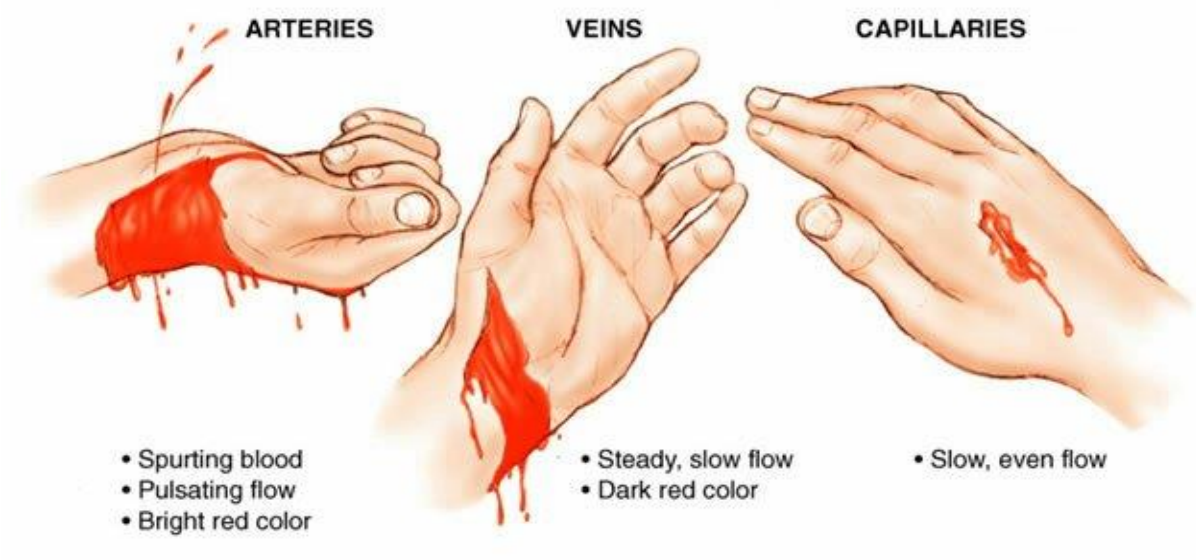

Figure 197: Title, Injury illustration

Figure198: Hand Injury in University of Port Harcourt

Rusted metal should be handled with gloves to avoid being pierced by it, which can cause tetanus. Spraying of the art works call for nose mask because of the chemical component of the paint that could affect the lungs. Disinfecting of plastic wastes especially the plastic slippers is very important due to the nature of the waste plastic slippers, the places where they are dumped and the former users.

The use of tools and equipment in the studio must adhere strictly to the safety procedures that could be found in the manual of such tools or equipment. In the course of time some electric wires get exposed that endangers the sculptor to the possibilities of electrocution, such wires should be changed to avoid problems .In course of this study the dicing and piercing should be handled carefully even with gloves to avoid injury to the body.

In summation the issue of safety in the sculpture studio cannot be over emphasized in respect of the spaces, materials, the techniques and the tools

Safety Apparels

Figure 199: Safety Wears in Sculpture Studio

Figure 200: Fire Extinguishers

Figure 201. Graphic Reprentation of different contents of Fire Extinguishers,Courtesy: www.directsigns.uk

Figure 202: Fire Blanket, courtesy:www.ic-international.com/

Fire blanketis textile material chemically treated to resist fire and can only be effective in small fires that are less than 1000 degrees centigrade used to snuff off oxygen from small fire especially on persons that have already caught fire .

Figure 203. A Bucket of Sand

Architectural space Design and safety in the sculptural studio

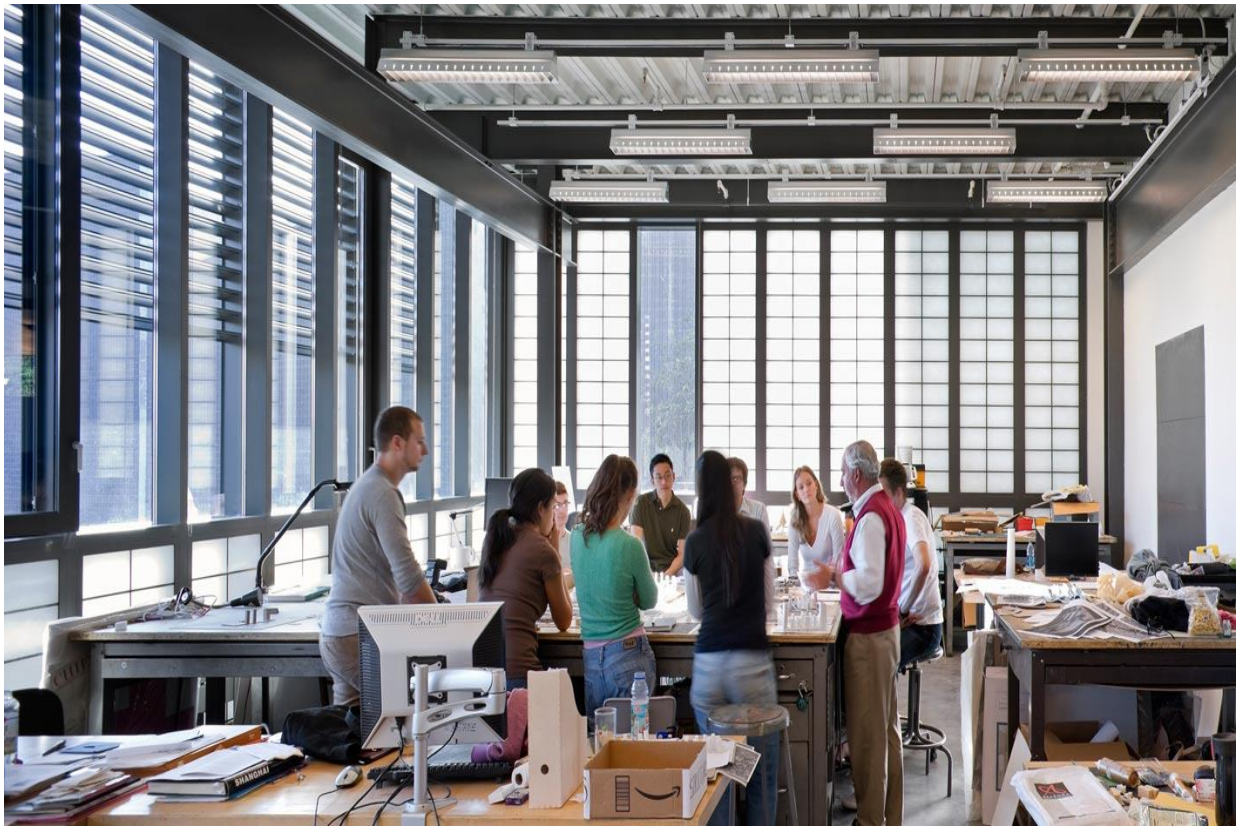

Figure 204: Space and Ventilation

Figure 205: Working Space

CHAPTER FIVE

SUMMARY, CONCLUSION, CONTRIBUTION TO KNOWLEDGE

5.1 Summary

1. Eco- sensitivity, sensitization and Appeal to Conscience in Sculpture Practice

The three materials, waste metals, plastics and fibres were used as mixed- media in making green sculptures that are ecologically sensitive. These environment friendly sculptures help to sensitize the Nigerian public on the Reduce, Reuse, and Recycle as eco-trinity response to modern ecology friendly lifestyle. Reaffirming Kindersley's (2010, 551) view of raising awareness of man's place in both the natural and urban environments, and also highlights the wastefulness and posed danger to the ecology of this consumer oriented society.

2. Diced Discarded Slippers.

Slippers that are diced expose the hidden polychromatic sandwich under layer, which are stringed and clustered as material for resurfacing sculptures in the round as well as relief sculpture which is in line with the philosophy of Dadaism to undermine the classical tradition of mono - chromatism in sculpture practice.

3. Stringing and Cumulating of Crowns as Medium in Sculpture in the round in Sculpture Practice.

The size of the crowns informed the stringing method utilized creating a body that is wrapped round a skeletal form to create chromatic configuration that are no longer looked at as wastes but desirable forms that could be brought home.

4. Seamless Interjection of Metal Crowns and Plastic Diced Slippers in Sculpture Composition

Chromatic deceit of combining metal which is heavy and plastics which is lighter in weight is achieved in creating sculpture. More work on material aspect of sculpture is recommended to continue to enrich this area because this is one area of strength of Sculpture that has an edge over other areas of art that are limited in materials. Studies in other waste materials like paper, wood, straws and sand should be explored. Waste slippers should be further studied for utilization in household utility products. Amixture of casting of plastics and lead creations could be further investigated on.

5.2 Conclusion

The environment, unemployment and security issues dominated the twenty first century studies according to the problems confronting the entire world .Accordingly this study pitched its tent on finding uses to which the wastes in the environment can be transformed into sculpture materials. It is not that the enormity of waste in the dump sites is the problem of the twenty first century world, but it is that the wastes have become a menace in the society. These wastes in their different sizes, types and quantities attract the attention of any passerby and often times strike a negative note on majority of the populace. On the contrary, this supposedly negative reality endangered by the numerous wastes within the Nigerian environment is a source for artistic inspiration. Therefore this study catches in on this availability of the waste to use some of them from metal, plastics and fibres origin to create sculptures.

This research attempted to incorporate the three sources of waste to create outdoor sculptures and indoor utilitarian product sculptures with some cultural imputes in the designs.

The adopted methods of study chronicle the tools of enquiry as well as the tools of practice. In other words, it is a hybrid study of theoretical philosophy and the practical studio practice of sculpture therefore reportage design also assumes the nomenclature of both. The area of study, the research design, method of data collection, make up the methodology while the other section deals with the studio practice, materials, methods and practices.

The study presents the practical studio engagement with the three materials: waste metals, plastics and fibres. Some are mobile Sculptures automated by electricity and manually applied

energy, while others are not. Some are so poly chromatic in the Dada spirit that contrary to the typical monochromatic nature of sculptures and the reportage attempts to follow the comprehensiveness of the theory of Gadamer's hermeneutics and aesthetics. The analysis of the works critically study the titling of the Sculptures in the study in an attempt to knot the philosophies of Dada and Gadamer's hermeneutics-aesthetics in Eco- Sculpture

Having sufficiently exploited these three waste materials of metal, plastics and fibres in over thirty pieces of sculptures both in relief and in the round, the static and mobiles in this study, new sculptures were attempted using the theoretical frame of Dada and Gadamer aesthetics philosophy to project what could be called DAGA sculptures

5.3 Contribution to Knowledge

The study of sculpture presupposes three major aspects of form, technique and material. This work has further added to the body of knowledge in area of material of waste metal, plastics and fibres. This study will not only add to the body of knowledge but also open wider the frontier of study of waste materials as available source of material in sculpture studio.

Dada and Gadamer aesthetic philosophy to project what could be called 'DAGA' sculptures.

i. This work has added to the body of knowledge in the area of available material for sculpture practice.

ii. The three types of waste materials (metals, plastics and fibres) used have been made environment friendly by engaging to create art works that are aesthetically appealing as against their original state of being a menace in the environment.

iii. The study establishes a seeming perception of reduced weight in the combination of metal, plastics, and fibre in sculpture production.

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