# ENHANCING TVET THROUGH REPURPOSING WASTE PLASTIC FOR ENVIRONMENTAL PROTECTION AND BEAUTIFICATION

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**Abstract**

*Discarded plastics, bottle tops and metal scraps are unwanted and seen as unusable materials which the originalusers have no further use of any more or consider valueless. They are considered as waste thus, disposedoff aftermain use. The thoughtless disposal of such waste amounts toquantumvolume of them. However, wastes can be managed through several methods which include burning, disposing them inside gutters, rivers, recycling and several others. If well managed, mankind stands at advantage economically, socially and more especially aesthetically. This paper therefore examinesthe use of discarded materialsparticularly plastics bottles, plastic bottle tops or covers and metal junks. The research focuses attention on the plastic sculptures of Oligbinde Rotimi. Promoting the concept of turning waste into objects of creativity and beautification is the aim of this study. Some works by this artist were carefully selected for formal and contextual analysis. The method used for this research include literature review of existing materials and observation of studio practice. The paper concludes by reviewing the benefits of recycling wastes to the environment and the economy. It recommends that art education across all levelsshould inculcate the knowledge of recycling in their curriculum.*

**Keywords: Aesthetic, Junks, Scraps, Plastic, Recycling**

## Introduction

Waste or discarded materials are common things all over the world, Nigeria inclusive. Popular and most dangerous among these items are nylon and plastics waste materials because they are non-biodegradables, that is, are not capable of being decomposed by biological activity, especially by microorganisms. (Sobowale,2015) Otherwaste materials which are threatening to drown civilization on the globe include metal junks like unused parts from machines, automobiles, vehicles and similar objects for both household and industrial use.

These used and discarded items are often dropped indiscriminately in the market, open sewage, roadsides and streets across towns and villages. The dangers of having these discarded materials around can also be injurious to our health and even cause damages to the ozone layer thereby causing havoc in the community. In order to avoid these dangers of having these discarded materials around, this study aims at promoting the act of repurposing waste plastics and metal junks into new objects of artistic and economic value. Contemporary art, especially sculpture has gone beyond the realms of traditional media like clay, terracotta, marble, stone, concrete, bronze, Plaster of Paris and more recently fiberglass and polyester to almost any visible object. Waste plastics and metal junks are few of them. (Ademuleya, 2012). Waste materials can be found everywhere within the environment we live. They are inevitable part of human life and they are being generated daily, almost every time as situations demand. In man's attempt to survive, create orderliness in his environment, he is bound to generate wastes that are useless; the solid wastes are not easily disposed because of their bulky nature. Plastic waste especially are not easily decomposed; they stay the way they are for years except if set on fire which directly pollute the atmosphere faster. Meanwhile, waste from plastics and metal junks are the largest because their products are the most used in any society. If the continuous spread of these waste through unabashed disposal is not checked through various waste disposal methods especially recycling and repurposing them into new things, they may end up destroying the environment and the entire globe (Aderogba, 2012). Hence, the need to document, study and analyze the recycled art works of Rotimi who is one of the emerging new generation of contemporary Nigerian artists. (Adamson, 2007)

Rotimi's work has not been scholarly documented and his art works particularly on recycling of plastic have neither been studied nor published extensively. The relevance of these works to artistic development, economic and environmental sustainability should not be ignored. Hence, the objectives of this paper include to scholarly analyze

the techniques used by this artist recycling waste plastic primarily to salvage the environment from damage and also to encourage environmental beautification and help in economic independence of the individual artist and the public at large.

Waste materials can be found everywhere within the environment we live. They are inevitable part of human life and they are being generated every time as situations demand. In man's attempt to survive, create orderliness in his environment, he is bound to generate wastes that are useless; the solid wastes are not easily disposed because of their bulky nature. The concept of waste therefore brought about the emergence of both governmental and private waste management corporations and organizations as well as creative ideas in recycling and repurposing of discarded items (Adamson, 2007).

The theoretical framework upon which his research is established is"the Representational Theory" which is a historically persistent complex of views that "see the chief, or essential, role of the arts as imitating, or displaying or setting forth aspects of reality in the widest sense" (Hepburn, 1999). The theory further states that a typical representational account sees art as portraying the visible forms of nature, from a schematic cave drawing of an animal to the evocation of an entire landscape in sun or storm to the contemporary multimedia art forms, (Osborne, 1998).

Many literatures have thoroughly addressed the subject matter of recycling and waste. Many scholars too have also worked on recycling artists, but none has researched into the works of Rotimi. The literatures reviewed for this study are divided into three which include those on plastics, waste cum recycling and found objects.

Aderogba, (2012), Science matters, (2020), and Adewunmi, (2008) discuss plastics in their works extensively. For example, Science Matters, (2020) penned that the world's first fully synthetic plastic was Bakelite, invented in New York in 1907 by Leo Baekeland who gave the name plastic to the substance. It further stated that it is (plastic) material consisting of any wide range of synthetic or semi-synthetic organic compounds that are malleable and so can be moulded into solid objects after subjecting it to some treatment like fire, or chemical treatment. On waste, Aderogba, (2012), Ademuleya, (2012) and Adewunmi, (2008) explained that waste materials can be found everywhere within the environment we live. This material is inevitable part of human life and it is being generated daily as situations demand. Ademuleya, (2012) opined that in man's attempt to survive, create orderliness in his environment, he is bound to generate wastes that are useless.These solid wastes are not easily disposed because of their bulky nature and the non- biodegradeableness of plastic in particular. According to Emgin (2012), Solid waste is widely defined as including non-hazardous industrial, commercial and domestic refuse including household organic trash, street sweepings, hospital and institutional garbage and construction wastes; generally, sludge and human wastes are regarded as a liquid waste.

Among the literatures reviewed on recycling are the works of Binder, (2008), Castellote, (2011), Emgin (2012) and Oligbinde, (2021). Recycling is the processing of waste materials into new products to prevent the disposal of potentially useful materials, reduce the consumption of fresh materials and the energy required for fresh production and reduce the effects of disposed wastes on the environment. The term recycling involves processing the used materials into new products, to fresh materials, reduce energy source utility, and then reduce water and pollution. (Oligbinde,2021, Adedoyin, 2021)



**Plate1:**Refuse disposal within human community in Abeokuta

**Photography Courtesy***: Google.com, 2021*

Binder, (2008) see recyclingas the third component of the 'reduce, reuse and recycle' waste hierarchy. The material usage in sculpture in terms of recycled waste materials exploration helps a lot in redressing environmental waste

accumulation dilemma. Nonetheless, assemblage in sculptural construction is the artistic expression which employs wastes, has led to an innovative and enormous use of improvisation, through exploration in visual language. Binder, (2008) discussed the recycling sculptures of El Anatsui and Castellote, (2011) also mentioned the philosophy behind Olu Amuda's Junk Sculptures He observed that Olu Amoda uses discarded materials and junk which he prefers to call 'Re-Purpose Materials', and that his art be looked at as 'Repurpose Material Art'. He further stated, Olu Amoda and other African artists even though make use of junk, devise different names for their waste materials and refuse that their artworks be called junk art.

Although Oligbinde's works were mentioned in the paper of Adedoyin, (2021), he has not been extensively studied, while several other emerging artists are not being scholarly discussed at all neither are their works studied yet, hence. These artists are better and their creative works are better studied now in case of unforeseen events. The just mentioned reason can be taken as one of the justifications for this research.

**Methodology**

The study is studio-based research. The methodology involves studio observations of the media, themes, techniques, procedures and styles of Oligbinde Rotimi's waste plastic sculptures. The methodology also include the collection of discarded objects be it waste plastic or metal junks is by scavenging and purchase in relevant quarters.Scavenging involves an outreach or field activity which also includes discretion and selection. During scavenging most wastes collected are found objects. This objects are the main raw materials for artists like Oligbinde Rotimi whose art works involve recycling or repurposing of waste items such as plastics bottles, plastic materials generally, used metals from automobiles, house hold items, office equipment, rubber slippers etc.

Most of the waste materials used by the artist in this study are found in target population such as residential and domestic dump sites, artisan and commercial workshops and unrestricted industrial junk yards where discarded objects could be sourced for desired concepts. In this regard, such environment is being rid of waste and contaminations as well as providing income for both the scavengers and the artists and also beautifying the environment.

**Materials and Stylistic Analysis of the Plastic sculpture of Oligbinde Rotimi**

In view of the above discussions on these two artists who are emerging artists of waste materials or discarded objects in Nigeria, it is necessary to throw more light to the topic of waste as regards the environment and art. Waste recycling is seen in two basic folds, first as a means of reducing the accumulation of unneeded items that were disposed and secondly a prudent conversion of what is waste at one end to wealth and beauty at the another end. We can call this trash transformation.

Filani, (1999) described the issue of transformation and the sustainability of the environment as a "convention term used by one end user, while it becomes another viable raw material to a new user". He further remarked that "Recycling applies to the conversion of a material originally meant for specified use.

**Materials**

| S/N | ARTIST | MATERIALS FOR ART WORK |
|---|---|---|
| 1. | Oligbinde Samuel Rotimi | **Plastic materials:** Pet bottle, plastic bottle covers, plastic spoons, plates, cups, used water tanks, plastics from discarded house-hold equipment like computer, refrigerator and other available electronics, nylon sacks and bags<br>**Metal**: rods, binding wires |

**Plate 2:** Common materials used by Rotimi for his Recycled Sculptures

Globally, since ages, artists have explored the environment to create and re-create objects for many purposes among whichaesthetic is one. In this case artist's use solidwaste which can be seen and touched. Such solid wastes include combustible wastes such as paper, wood, and cloth and non-combustible wastes such as metal, glass, plastic and

ceramic items. Other waste items are animal bones, vehicle parts, computer remnants, shoes, knifes, sawdust and other related items.

**The works**

All the works presented in this study are mainly sculptures. Plates 3 to 6 belong to Rotimi, while the remaining works were mined from the internet for the purpose further understanding of the subject matter. Plate 3 and 4 are relief sculptures while 5 and 6 are sculptures in the round also known as free standing sculptures. Meanwhile, relief sculpture is a sculpture done or mounted on a flat surface with mainly only the front view in display. Although, some relief type called Alto relief have projected parts which can be viewed in the round.

**Uplifting and Mask**

Uplifting spirit" (plate 3) according to Rotimi is the composition of discarded bottle covers and discarded compact disk to create a geometric form design which is mounted on a metal frame in squares graduating in sizes. The work is an abstract rich in meaning as it expresses meaning both in forms and in colours. The work identifies the various characteristics of each individual as presented by each single squares which examines how a man struggles from cradle till he ascends to the position of authority and fame, and also how he assists others in reaching new heights. The disks with their shinny surfaces and reflective attributes capture the characteristics of the masses with the unstable nature of people. Noticeably, each of the square has various colour scheme which indicate different things. For example, the blue dominated larger square at the bottom symbolizes the majority at lower part of social strater. As he progresses the colours becomes brighter till he attains relative freedom at the top of the ladder. Plate 4 which is titled The Mask is also a relief sculpture done with waste plastic of different colours. Mask in the African view has a connection with the head. The human head in African culture means a lot.





**Plate3**: Title -Uplifting, installation, 2018.**Plate 4: Title:** Mask

**Medium:** - Bottle covers and Disc **Medium:**- Assorted waste plastics

**Artist**: Oligbinde Rotimi **Artist**: Oligbinde Rotimi

***Photography:*** *Oligbinde Rotimi, 2021*

It is your creator, (Eleda in Yoruba language), it means the totalty of man. The head is the seat of wisdom. Hence, the most popular African art is the mask. Mask in the African settings informs the world about the content, attributes, and the spiritual implications or purpose of the head. This work is basically an exploration of waste plastics on a metal frame. Rotimi tests how plastic can be used to adorn an uninteresting metal frame to give it an expression of life, through the use of various vibrant colours and texture of different discarded plastic. The vibrant colours used on the mask also connotes the different expectations of mankind as members of the living habitat. For example, the green represents growth, yellow, vitality and strength, while white signifies purity, etc.

***Hard Work and Alert.***

Plates 5 and 6 are three dimensional sculptures made of plastic bottles and iron rods as reinforcement and binding wires as binders. These two art works are environmental sculptures as they are mounted outdoor. Plastics generally are amenable to weather conditions be it rain or shine. If man does not deliberately destroy it, or there is natural disasters like fire or storm, the sculptures will stand for long years.



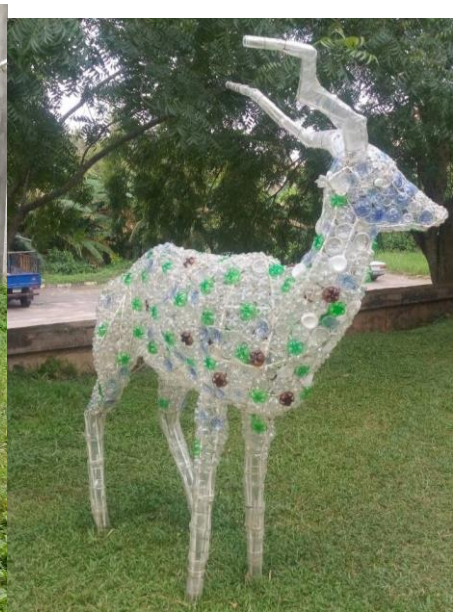


**Plate 5**: **Title:** Hard work

**Medium:-** Plastic *bottles*

***Size****: 9ft x 3ft*

**Plate 6:** *Alert*

**Medium:-** Plastic *bottles*

***Size****: 7ft x 9ft*

***Artist: Oligbinde Rotimi, 2018***

***Photography****: Oligbinde Rotimi, 2021*

The sculpture in plate 6 is the image of an ant but, the title is Hardwork. Several pet bottles were creatively put together to form the sculpture. Ant are known be hardworking and highly organized, hence the title Hardwork. The figure representation of the ant is a challenges to all mankind to rise and put to action all the knowledge acquired in the schools and several trainings to better humanity instead of using them negatively. Let us as humans influence our society positively, by making the right decision just like the Ants (Oligbinde, 2021).

Alert is the title to the sculpture in plate 6. It is the Sculpture of a deer made of waste plastic bottles, iron rods for reinforcement and binding wires for joining the plastics together. Alert in this content mean to be attentive, awake or to be prepared for something very important. It is a word used to create the awareness of sadness, sorrow and disappointment. The art piece representing the gesture of a deer being aware of the impending danger of his environment, causing it to be tensed as a result of the inconvenience caused by the human factor in his environment. This work is ironically pointing to the impending danger which poor management of wastes may bring to the society generally. *Alert* is executed in a publicly accessible epicentre place of Obafemi Awolowo University, Ile Ife, Nigeria,

therefore, the message is both to the members of the university community and all who come across it directly and indirectly. (Oligbinde, 2021).

**Conclusion and Recommendation**

The paper discussed the dynamism of art especially as it has evolved beyond the use of traditional materials alone to materials which are termed as useless and trash. It looked into the artistic use of discarded items as a means of salvaging the environment from waste and pollution. The study analyzed the plastic sculptures of Oligbinde Rotimi an emerging contemporary artist in Nigeria.

Recycling art is another way of educating the people about the need to take care of the environment and also creatively look inward to generate income through recycling of waste items. In line with the above, this paper recommends that both the government and private organizations should encourage businesses that revolve around recycling. School administrators and curriculum planners should input Recycling into the curriculums from the elementary to the tertiary institutions.

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