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AESTHETIC RECYCLING OF PLASTIC BASED WASTE AS ADAPTABLE MEASURES TO CLIMATE CHANGE: A PROACTIVE REVIEW OF ADENLE'S PLASTIC ART WORKS

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Introduction

Nearly all human societies are experiencing climate change one way or the other. Since the climate is an inherent variable for natural reasons, human societies have always had to develop coping strategies in the face of its unwelcome variations or because of weather extremes. Confirming this, United Nations on Intergovernmental Panel on Climate Change (IPCC, 2001), proclaims that there is now little doubt that, human induced climate change is happening. All societies consequently need to learn to cope with the changes that are predicted. The predictions, such as warmer temperatures, drier soils, changes in weather conditions and rising sea levels are being experienced now in Nigeria and many other parts of the world.

Climate Change

According to Idowu, Ayoola, Opele and Ikenweiwe (2011), "Climate change is an adverse environmental phenomenon that is causing enormous concern all over the world. It refers to some anomalies in the climate system that is a result of human activities. It also refers to a long-term shift in the statistics of the weather'. IPCC supports the above assertion, that the most general definition of climate change is a change in the statistical properties of the climate system when considered over long periods regardless of cause. IPCC further describes it as changes in patterns of temperature, precipitation, humidity, wind and seasons, which often affect more than just a change in the weather but seasonal changes over a long period. Such climate patterns play a fundamental role in shaping natural ecosystems, human economics and the cultures that depend on them. Idowu, Ayoola, Opele and Ikenweiwe further narrow it down specifically to changes in climate caused by human activity as opposed to changes in climate that may have resulted as part of earth's natural processes. Such activities that contribute to an increase in greenhouse gas levels, environmental and health hazards therefore include- burning of fossil fuels: oil, gasoline, gas, and coal; Industrial processes and mining, landfills, open dumps, septic and sewer systems; agricultural practices: fertilizer application and management and land use practices, such as deforestation.

Discussing the effects, Henderson, Reinery, Dekhtyar and Midgal (2018) infer that, "Global temperatures are expected to continue to rise as human activities such as bush burning, gas flaring, deforestation, continuous combustion in incinerators and open dumps, continue to add carbon dioxide, methane, nitrous oxide and other dangerous gases to the atmosphere causing ozone layer

depletion, leading to global warming". While the scientists, researchers and agencies proffer solutions and adaptability to unavoidable changes, society must wake up to important externalities in creatively managing its waste stream. This is because the effects of climatic change can be directed towards positive dimensions which can reverse the tide of toxic, non-biodegradable pollution, so that it will not overtake the planet.

Chris and Roger (2005) argue that, nine out of every ten dustbins are emptied into a landfill or dumpsite. In fact, nothing can be thrown away; we only succeed in moving it from one place to another. This paper therefore seeks to proffer aesthetically permanent solutions to streams of plastic wastes to support existing efforts of government in the campaign for reusing, reducing, recycling and redirecting.

Plastic Waste

"Plastics" is the term commonly used to describe a wide range of synthetic or semi-synthetic materials that are used in a huge and growing range of applications. A plastic material is any of a wide range of synthetic or semi-synthetic organic solid used in the manufacture of industrial products. Plastics are typically polymers of high molecular mass, and may contain other substances to improve performance and /or reduce production costs. Monomers of plastics are either natural or synthetic organic compounds (Woodford 2019)

Their malleability or plasticity during manufacture allows them to be cast, pressed, or extruded into a variety of shapes such as films, fibers, plates, tubes, bottles, boxes and much more.

There are two types of plastics noted by Arueyingho (2011) namely, Thermoplastics and Thermosetting polymers. According to him,

Thermoplastics are the plastics that do not undergo chemical change in their composition when heated and can be molded repeatedly; common examples of thermoplastics include acrylic, polyester, polypropylene, polystyrene, nylon and Teflon. While Thermosets can only melt and take shape once; after they have solidified, they stay solid, examples are epoxy resin, polymer resin, urea formaldehyde, silicone, polyurethane and phenolic.

Plastics offer advantages such as lightness, resilience, resistance to corrosion, color fastness, transparency, ease of processing, etc. These possibly might be the reason people tend to use them uncontrollably. Among this waste stream, plastic wastes, that are non-biodegradable, constitute 7% to 10%, this makes it a great concern to government, agencies, non- governmental organizations and individuals to recycle re-use and reduce the menace. Creatively adapting non-biodegradable plastics, which Okebukola (2008) referred to as a type of pollution caused by substances, on which biotic and abiotic agencies of decomposition are ineffective, will aesthetically enhance our environment in reducing the rate at which poisonous gases negatively affect nature and humans. Both degradable and non-degradable are part of the collection of plastics used in the creation of his works in this study.

Aesthetic Creativity from Environmental Waste:

Adenle John Oyewole has joined scores of artists to stem the vast rate of environmental pollution in a different style. His desire is propelled by the readily available stream of plastics at every meter of the environment. His works turn plastic waste into aesthetic and functional creations instead of allowing them to degrade the environment, create economic burden, consume growing amounts of energy and other natural resources and subsequently create health hazard to marine and human

life. Adenle's medium is mainly plastic wastes i.e. cellophane, plastic bags and bottles, kegs, bowls, buckets (otherwise known as domestic plastics), automobile plastics and industrial wastes. These waste materials were sourced from the community's automobile shops and plastic industries to convert their uses to art. With this effort, Adenle has succeeded in cutting short the usual chain of recycling of materials, which eventually end up in the dustbin.

The negative effect of this on the environment is huge, considering the plastic's average life span of 20 to 1,000 years before decomposition. In the selection of this medium to display visual dialogue, the waste stream of plastics do not go through the normal industrial recycling process as domestic items, but more importantly, they are recycled to translate them into aesthetically permanent art works that go beyond millions of years without any negative effect on human and marine life, environment and atmosphere.

Structurally, Adenle's plastics are adopted from a mixture of geometric and organic shapes juxtaposed and superimposed or surmounted to form a visually pleasing and aesthetically acceptable whole. He was able to do these through the processes of melting, gluing and assemblage. Some of these works have the features of relief: low, medium and high in nature, which are achieved through drilling, engraving, grating, burning and bolting. The combination of parts of different plastics find parallel with some functional African sculptures. Sometimes, these combinations produce shadows, which add solidity, depth and embellishment to each of the compositions. Formalistically Adenle's creative exploits on recycled plastic wastes have many technicalities that could inhibit the aesthetic enjoyment of an "uninformed" onlooker. Some works created from the adopted plastics have recognizable shapes that the viewer could give or gain personal interpretation from. Although his adaptations could make comments on events in his environment and global issues – social, religious, economic, political, insecurity, terrorism etc., most times, the viewer is allowed to have his or her personal and aesthetic enjoyment, depending on how visually informed he or she is.



Plate I, Title: "Sacrifice", Size: 93cmx 78cmx 12 cm, Artist: John Adenle, Date: 2011, medium: Industrial and Automobile plastic wastes, Source: Adaptation 2011 exhibition catalogue

“Sacrifice” is a depiction of what majority of people in the country go through or have to endure, in order for peace to reign. Symbolically, one finds that while the revenue of the country is being shared by the leadership class, the masses are encouraged to follow due process for whatever is their legitimate right. These under privileged masses send their children to schools in remote villages that are still many years behind science and technological developments (their sacrifice), while the rich send theirs to private institutions with up-to-date advancement in science and technology. Sacrifices of the masses are felt in their socio-political and cultural lives, while the leadership does not appreciate the commoner’s efforts.



Plate II, Title: “National Cake”, Size: 61cm x 61 cm x 7cm, Artist: John Adenle, Date: 2011, medium: industrial plastic wastes, bones, Source: Adaptation 2011 exhibition catalogue

This is a mixed media of industrial waste, plastic, and bones, in a radial arrangement. Conspicuously and intentionally located are the bones at the four edges of the artwork. At the center is the common Treasury, “Soup Pot”. After all the scrambling, diversion and looting of money and properties by the privileged few in the society, the consequences are glaringly exposed- unemployment, under-funded projects, unpaid salaries and allowances. Offshoots of the aforementioned are kidnapping, armed robbery, militancy, prostitution and other vices. These are common in Nigeria today, generating unpleasant forces.



Plate III, Title: “Force in Flight”, Artist: John Adenle, Date: 2011, Medium: Automobile plastic wastes, Source: Adaptation 2011 exhibition catalogue

“Force in Flight” is a combination of automobile plastic and metal. A cursory look gives one the impression of an object in flight probably coming home for a rescue. Today in Nigeria, especially in the past three years, the forces and counter forces in the country (Niger- Delta Militants and Boko Haram), are things of concern. Symbolically, Adenle seems to be saying that Nigeria needs a higher and greater force to neutralize and normalize these diverse and destructive forces in flight, so that we do not drive the vehicle of the nation in reverse gear.



Plate IV, Title: “Reverse Gear”, Artist: John Adenle, Date: 2011, medium: Industrial and Automobile plastic wastes, Source: Adaptation 2011 exhibition catalogue

“Reversed Gear” is a conceptualized work created from melted plastic and acrylic binder. The work is created to interrogate the nation, Nigeria. If Nigeria gained independence several decades ago, has she made any appreciable progress? Are Nigerians convincingly ready for growth and development? Are our leaders ready for meaningful progress? The inverted map of Nigeria as depicted by this visual document succinctly appears to reveal the stone-heartedness and negative acceleration of our vehicle of progress. Nigeria needs to annul the effect of “Reverse Gear”, so that, like other nations we would be able to see Day –light or Light of Day, progressively and not “Day-light devil”.



Plate V, Title:-“Day-Light Devil”, Artist: John Adenle, Date: 2011, medium: Automobile plastics, Source: Adaptation 2011 exhibition catalogue

“Day-light Devil” shown in Plate V is a composition of industrial plastics. Structurally, the artwork reveals a composition with three major outlets of attack- a tripodal arrangement. The beauty of the arrangement is reflected in the unification of its tentacles of attack. Today, in Nigeria the militants in Niger Delta and several of their Boko Haram brothers in the North do not wait for the fall of darkness before they unleash terror and destruction. Similarly, modern day armed robbers and kidnappers, including others that do devilish things, do such things during the day. They are Day-light-Devils. Nigeria needs divine intervention to arrest these dangerous trends.



Plate VI, Title:-“Force in Flight”, Artist: John Adenle, Date: 2011, Medium: Automobile plastics, Source: Adaptation 2011 exhibition catalogue

“Force in Flight” is an assemblage of automobile plastic, used torch light and used bulbs. There was a time in this nation, Nigeria, when people studied and passed their examinations using streetlights. The lights were always there and regularly too. Streetlights in most towns in Nigeria, today, are cosmetic installations. Adenle reminds us through this work of the inaccessibility of the common man to light (NEPA or PHCN), while the privileged have assorted power-generating plants, which may be triggered on, as soon as that of government goes off. Foreign companies that would have assisted this nation industrially relocated to smaller but more accommodating countries with effective power generation for business. Nigeria is assumed the giant or light of Africa. It is a paradox.



Plate VII, Title:-“Who Killed Me?” Artist: John Adenle, Date: 2011, medium: Industrial waste plastic, Source: Adaptation 2011 exhibition catalogue

“Who Killed Me?” reminds the viewer of the Biblical story of Abel in the Holy Bible (Gen. 4 verse 10) whose blood cried to God from the ground on which it was spilt. The work is a purely plastic composition which is melted. This is hinged on African cosmology that believes that the world is peopled by living and spiritual beings. These spiritual beings are believed to be intermediaries between the living and the gods. When someone dies, he or she goes into the spiritual realm. When such death is accidental or untimely, like that of Dele Giwa, Murtala Mohammed, Alfred Rewane etc. the spirit of those killed is restless and could ask “Who killed me”? In Nigeria today some people see themselves as dead or killed. For example some years ago, microfinance banks were prevalent and customers were wooed and lured with enticing interests on capitals deposited. Some people lost up to twenty million naira of their life savings. They were ‘killed’; some committed suicide while others could not and may not be able to recover from that loss or seeming “death”.



Plate VIII, Title:-“Angels Visit?”, Artist: John Adenle, Date: 2011, Medium: Industrial waste plastic, Source: Adaptation 2011 exhibition catalogue

This is an assemblage of different coloured plastics obtained from the factory. “Angel visit” is arranged on a long-shaped background showing a major figure as the central piece, in a supplication mood. Other objects surrounding the central figure are either assistants or objects of obeisance arising from the aftermath of sharing of the *national cake*, *forces in flight*, driving in *reverse gear*, *day light devil* and other vices in this nation. Adenle is convinced that Nigerians need “Angels” to visit, so that through them God’s mercy and blessings would rain on us all.



Plate IX, Title:-“Breeding 2010”, Artist: John Adenle, Date: 2011, medium: Automobile plastic wastes, Source: Adaptation 2011 exhibition catalogue

This is an assemblage of automobile plastic resembling a monster. Adepegba (2011) opines that this hydra-headed figure is **policy summersault**, meaning that life is full of unending problems. Each bigger problem has smaller ones as walking sticks. For instance in Nigeria, committees upon committees are inaugurated, probe panels upon probe panels to investigate grafts and crisis are formulated but shoddily implemented.



Plate X, Title: "Black and White?" Artist: John Adenle, Date: 2011, medium: Automobile plastic, Source: Adaptation 2011 exhibition catalogue

Plate X shows another art piece in bass relief. In this work, Adenle John reveals a forgotten truth. Black and White are neutral colours. No human being resembles any of these colours above. The real Black and White is what you have in Adenle's piece. Sometimes people believe or perceive that the races of the world are just two-the white and the black races. The white race seems to denote people that are more honest and truthful socially, politically and economically advanced. These are perceived as the Europeans, Asians, and Americans while the backs are predominantly Africans who are believed not to think of anything good.



Plate XI, Title:-“Tensed”, Artist: John Adenle, Date: 2011, medium: Discarded pieces of wood and melted plastic, Source: Adaptation 2011 exhibition catalogue

This work is a fabricated plastic from industrial waste achieved through cutting, gluing and bolting. The arrangement of the artwork outlines the Map of Nigeria showing jumbled components of all States. Confusion – upside down, inside out, a near anarchy situation. It is like children’s “jig-saw puzzle” but this time it has become a cabal’s toy, because personal interests override collective interests. Hope is not lost, however, because our God is able to handle any adverse situation by dousing or relieving our tension.

Conclusion

All art works shown from plate I- XI are made of plastic waste materials gathered from three sources: domestic plastics, automobiles plastics and industrial plastic waste. It is the opinion of these authors that plastic and cellophane waste recycling in an aesthetic manner may be able to complement the international concerns for a better environment and our government's campaign against deforestation and Ozone layer depletion that lead to climate change. It will reduce environmental pollution caused by empty water bottles, sachet water packs, broken buckets, cups, bowls, kegs, automobile and industrial plastic littering the streets, dumpsites, landfills, bus-stops and blocking our drainages or washed into bigger bodies of water heading into the Ocean and causing havoc to aquatic life and supply of water.

Recommendation

Global temperatures are expected to continue to rise as human activities such as bush burning, gas flaring, deforestation, continuous combustion of non- biodegradable plastics and cellophane in open dumps and incinerators continue. It is therefore, wise for government to take appropriate legislative measures on the production of plastics regarding chemical composition, reducibility, reusability, recyclability biodegradability of plastic products.

Government should educate the society on the need to sort their waste accordingly; it should use waste trucks designated to remove wastes on the streets; create landfill for degradable wastes, dumping yards for all kinds of wastes to be recycled or reused like metal, plastic, cans, glass and paper. It should also provide enabling environment for artists and other people interested in creativity to explore the waste and turn them into aesthetic spectacles and forms. This will in turn provide economic gains for the nation. Government, NGOs and other agencies should fund art residencies, after which the products should be showcased. Through this approach, human activities that have tendencies of affecting climate change especially through plastic pollution will be minimal.

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