Evaluation of Nigerian Industrial Design Products:
The Potentialities of Cultural Identity and Aesthetics

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Abstract

The industrial design in Nigeria was a major source of export, income and employment for the country before the discovery of oil exploration and exploitation. This discovery of oil (Petroleum) led to government's negligence to the people's dignity – farming, thus resulting to corruption, poor management, white collar job perception, and certification preferences over vocational and apprenticeship careers. These were influenced by the Nigerian government policies and implementation. More so, the cultural identities and aesthetic values were also abandoned for religious beliefs while the foreign cultures were preferred over our cultural heritages. Though, the oil boom period promotes industrial and infrastructural development, and higher revenue income generation but Nigerian government failed to grow and develop the industries and comparative business advantage of the regional economy. These policies and actions portrayed by government caused the total collapse of almost all indigenous design industries leading to the present mono-economy situation Nigeria is experiencing today. This paper focuses on evaluation of Nigerian industrial design products and likewise, the potentialities of cultural identity and aesthetics.
Keywords: Industrial design, Cultural identity, Aesthetic, Government Policies.

Introduction

The product design has been part of us from beginning of the human existence. It is one of man's oldest engagements with life and with recognizable visual evidence dating 40,000 years back (Marceau *et al* (eds.), 1917: 6 – 21). In fact, new archeological evidence from South Africa may stretch the occurrence of product design to over 200,000 years.

Evidence from most of the Nigerian cultures, especially from Yorubaland showed that design was deployed in architectural, personal environmental, religious, political, spiritual, magical, educational, military, utilitarian and economic contexts (Kalilu, 1996). The structure of the Nigerian industrial design is typical of an underdeveloped country. Over half of the gross domestic product (GDP) is accounted for by the primary sector with agriculture continuing to play an important role. Within the context of evaluation, the researcher shall address how the industrial design products can respond to and deploy its resources to help achieve sustainability by responding to the challenges posed by sustainability and harnessing the opportunities offered by it in the Nigerian quest for sustainable development.

The oil and gas sector, in particular, continues to be a major driver of the economy, accounting for over 95 per cent of export earnings and about 85 per cent of government revenue between 2011 and 2012. The sector contributed 14.8 and 13.8 per cent to GDP in 2011 and 2012, respectively. It also recorded an increase in reserves to 37.119 billion barrels (bbs) in 2012 from 36.042 bbs in 2011. In contrast, the industrial design sector in Nigeria (comprising manufacturing, mining, and utilities) accounts for a tiny proportion of economic activity (6 percent) and the manufacturing sector contributed only 4 per cent to GDP in 2011. This is despite policy efforts, over the last 50 years, and, in particular, more recently, that have attempted to facilitate the industrialization process. In this paper we explore the evolution of the industrial sector in Nigeria over the last 50 years. To set the context we begin by providing an overview of the policy framework for industrial development from the 1960s to the present day.

At independence in 1960 and for much of that decade, agriculture was the mainstay of the Nigerian economy providing food and employment for the populace, raw materials for the nascent industrial sector, and generating the bulk of government revenue and foreign exchange earnings. Following the discovery of oil and its exploration and exportation in commercial quantities, the fortunes of agriculture gradually diminished while crude petroleum replaced it as the dominant source of revenue and export earnings. This is despite a drive for industrial development in Nigeria dating back to the early 1960s with the first National Development Plan for the period 1962 – 1968. In Nigeria, the industry has embraced both the traditional and contemporary production techniques, and sustainability as a concept is the property of biological systems to remain diverse and productive indefinitely for the endurance of systems and processes.

Definition of Industrial Design:

Industrial design is the application of arts and science for the improvement of aesthetics, architecture, ergonomics, functionality and usefulness of the specific product, (Alesagba 2011). Industrial design can be used

for the improvement of the competitiveness of a product and its manufacturing. The major role of an industrial designer is the creation and development of the most successful project solutions related to the shape, usability, physical ergonomics, marketing, brand development and sales. Industrial design is an integral part of the scientific progress and development of business. Sometimes, companies have to change the shape, functions and usability of their products in order to attract new customers and compete with other similar firms on the same sector of the market. Although everyone knows at least something about the foundations of industrial design, very few people are aware about the roles of this matter.

Culture Identity and its Importance

Although several scholars have tried to give different definitions of the term "culture identity" based on their understanding of the word, however, all have agreed that every nation or society is known for its own culture. This means that culture is dynamic as well as distinct among societies. Ukeje (1973) quoted by Ezikeojiaku (1997) notes that: "Culture Identity" is the fabric of ideas, skills, tools, aesthetic objects, method of thinking, of eating and of talking, as well as customs and institutions into which each member of the society is born.

This means that it is a descriptive and complex concept with wide ranging and comprehensive connotations, which refers to and reflects a people's way of living, permutation, ideologies, belief, *etc*. As such, culture identity refers to a social hostage that is, all the knowledge, beliefs, customs and skills that are available to the members of a society (Broom 50).

Nigeria is a multi-ethnic state endeared with rich cultures. Incidentally, as observed by Ernest-Samuel (2002), its major cultures seem to be decimated by geographic boundaries, giving birth to distinct cultures between the northern and southern regions of the nation. Since the importance of culture in any nation cannot be overemphasized, UNESCO has thus observed that cultural and economic independence and restoration are important spring boards to the attainment of sovereign status.

The importance of culture as enumerated by Ajayi (2007) can be enumerated as follows:
i. Guidance of societal behaviour
ii. Exercise of social control
iii. Serving as stamp that marks Nigeria from another society
iv. Interpretation and integration of Nigerian cultural values and institutions
v. Furnishing the basis for social solidarity and unity
vi. Serving as an architect and a moulder of social personality.
vii. Receiving, reserving and legitimizing cultural accretion and development from time to time.
viii. Storing the social heritage and values of the people.
ix. Serving as the foundation of effective socialization
x. Serving as avenue for learning leadership and political skills, laws, taboos and regulations.

Bearing all these in mind, culture can therefore be viewed as an icon of identity for every citizen or member of a community. Hence there is need for every government, administration or leader to protect and promote her culture and basic institutions since a distinct society can only be recognized by the culture which its members share.

Promotion of Cultural Identity in Nigeria:

Promotion of cultural identity should not only be a statement on a piece of paper called 'a policy'. It should rather involve patronage. The State should patronize our tradition and values, by integrating them in state actions. The cultural policy for Nigeria indicates that the State is interested in presenting, promoting, preserving and maintaining Nigerian culture, yet the Nigerian government encourages importation of foreign goods embodying foreign tastes and customs, to the detriment of available local products. Government Officials appear in state functions in safaris and French suits, while our traditional wears are reserved as 'costumes' for shows or carnivals.

Government houses are decorated with Italian marbles instead of the natural Paladiana marbles that are mined in our very soil. Loans are given to traders to import foreign rice and wrappers, instead of encouraging local industries that produce these products such as Abakili rice producers and *Akwette* weavers. Traditional cultural practices such as *Irumgbede* - the traditional female outing ceremony in some parts of Igboland have been abandoned because in the case of *Irumgbede* and other ceremonies like it, the allegation is that they encouraged indecent exposure of young ladies; yet today, State sponsor beauty pageants and expose young girls to near nudity.

Preservation of culture cannot be achieved by cultural extinction. If people do not practice their culture, it becomes near impossible to preserve or maintain it. A culture that encourages young girls to be chaste until they marry should be encouraged. Unfortunately, that culture is extinct in most parts of Nigeria. Our culture is suffering a setback owing to colonialism. As observed by Ugbeyavwighren (2008), colonialism not only dehumanized Africans, but also acculturated them. Hence today Christians condemn our cultural songs, annual

festivals and other traditional practices as being fetish and idolatry. Owing to what Ugbeyarwighren termed, 'the disoriented inward search for development impulses and oriented total dependence on imported impulses', on the part of Nigerian leaders, our cultural values have been westernized and some abolished.

For record purposes it should be noted that the conflict between Christianity for instance and culture is not with Christianity but with culture of the missionaries who brought the gospel. For instance Christ himself never condemned the culture of the Jews. Even Paul the Jewish missionary never prescribed Jewish traditions or robes for his converts in Europe. More so, as noted by Akpan (1984) many aspects of our culture fulfill Christian principles for instance:

   i.   Libation - grace before eating or drinking
   ii. Confinement and fettering of girls before marriage – chastity
   iii. Belief in re-incarnation - return to life after death.

Traditional religion ensured order in the society hence there was high morality. For instance, stealing, murder, adultery were all abhorred. These, basically form part of the Ten Commandments. Therefore, traditional African culture was not anti-Christian. As Akpan observed, the only uncompleted element in our culture was that it made no provision for the "salvation of soul" notwithstanding its belief in the existence of life after death. As such, the State should recognize, projects that promote our traditional religious values and cultural identity, instead of allowing international politics, or what Kalu Uka dubbed; the unmistakably denigrating contempt of our colonial masters to rob us of our identity.

Aesthetics: Definition and Meaning
Aesthetics is a branch of philosophy that is concerned with the notion of the beautiful and the uncomely. It strives to ascertain why a particular thing is regarded to be beautiful and why another is not. It owes its name to Alexander G. Baumgartner who derived it from the Greek word "aisthanomai", which means perception by means of the senses. Furthermore, aesthetics also written as aesthetics is described as both the study of beauty and the properties of a system that appeal to the senses, as opposed to the content, structures, and utility of the system itself. Although, these cannot be separated from the study, they are not its primary domain. Some theorists have defined it as the philosophical subject that is concerned with the nature of art and the criteria of artistic judgement. Indeed the word "aesthetics" has become an everyday term used to distinguish those objects which are delightful to look upon or listen to, from those which are not (Aleshagba, 2011).Furthermore, aesthetics is the study of the origination of beauty in a mind and their effect on that mind. This perspective is actually the dimension contemporary aesthetics is tilting towards. As the subject is now understood, it is composed of two parts – the philosophy of art and the philosophy of the aesthetic experience and the character of objects or phenomenon that are art.

In what way, if any, does the designer's intention determine the meaning of their products? What is the designer's style and what is its significance in the appreciation of the designer's work? Overall the nature of the aesthetic subject is such that there are diverse perspectives, views, thoughts and judgments that can generate or emanate from an encounter or experience with a single work of art; a view that aligns with the Yoruba adage that states that "it is impossible for the whole of humanity to think alike." Certain yardsticks has however being established as conventions for making aesthetic judgments. Prominent amongst these perspectives include is the objectivist view or school of thought led by T.E. Jessop. The objectivist view of aesthetic appreciation states that the value of a work of art needs not be based on or inferred from the attitude or nature of its designer or creator. It states that a work of art should be judged on its own merits without inference to anything imbibed of it. Often times in emphasizing a work's provenance, "the product is lost in the producer. The inseparability of the work of art from the artist is the justify principle." Aleshagba maintained that a judgment about a designer cannot always be transferred to the thing he has made, the reason being that most of what happens in and to him does not happen afresh, or have any direct correspondence in his work. Although other critics such as Curt Ducasse have maintained that the analysis of a designer's personality and life can definitely help the understanding of his work.

Ugbeyavwighren propounded the instrumentalist theory of aesthetic judgment which adjudges a work's value based on the usefulness of the product. For instance, to say a hammer is good. The instrumentalist theory identifies aesthetic value in terms of functionality and capacity. Ugbeyavwighren made a very profound statement about the aesthetic value: he says that for an object to have aesthetic value means that it has the capacity to produce aesthetic effect. The entire sphere of aesthetics is influenced by these different views, also the interpretation, appreciation and classification is determined by these thoughts.

Aesthetics have manifested in every culture and sub-culture throughout history and consequently it has survived the demise of each era of civilization from food through to music and architecture, all of our possessions and many of our experiences are purposively shaped by designers for aesthetics as well as other functional purposes. Aesthetic pervades all media, there is aesthetics in arts, music, performing arts, literature, gastronomy (food).It even exists in the sciences – information technology, electronics, video games, mathematics, neuroesthetics, industrial design, urban life, landscape design, architectural and industrial design.

The term has been acculturated by filmmakers to denote ingenuity in film production, in fact nowadays the term film aesthetics is so widely used in productions and in film studies.

New Product Development Stages

Fig 1: New Product Development Circle (Aleshagba, 2011)

Before a product can embark on its journey through the four product life cycle stages, it has to be developed. New product development is typically a huge part of any manufacturing process. Most organizations realize that all products have a limited lifespan, and so new products need to be developed to replace them and keep the company in business. Just as the product life cycle has various stages, new product development is also broken down into a number of specific phases.

Developing a new product involves a number of stages which typically center on the key areas as shown in Fig. 1. These stages are as follow:

The Idea: Every product has to start with an idea. In some cases, this might be fairly simple, basing the new product on something similar that already exists. In other cases, it may be something revolutionary and unique, which may mean the idea generation part of the process is much more involved. In fact, many of the leading manufacturers will have whole departments that focus solely on the task of coming up with 'the next big thing'.

Research: An organization may have plenty of ideas for a new product, but once it has selected the best of them, the next step is to start researching the market. This enables them to see if there's likely to be a demand for this type of product, and also what specific features need to be developed in order to best meet the needs of this potential market.

Development: The next stage is the development of the product. Prototypes may be modified through various design and manufacturing stages in order to come up with a finished product that consumers will want to buy.

Testing: Before most products are launched and the manufacturer spends a large amount of money on production and promotion, most companies will test their new product with a small group of actual consumers. This helps to make sure that they have a viable product that will be profitable, and that there are no changes that need to be made before it's launched.

Analysis: Looking at the feedback from consumer testing enables the manufacturer to make any necessary changes to the product, and also decide how they are going to launch it to the market. With information from real consumers, they will be able to make a number of strategic decisions that will be crucial to the product's success, including what price to sell at and how the product will be marketed.

Introduction: Finally, when a product has made it all the way through the new product development stage, the only thing left to do is introduce it to the market. Once this is done, good product life cycle management will ensure the manufacturer makes the most of all their effort and investment. Thousands of new products go on sale every year, and manufacturers invest a lot of time, effort and money in trying to make sure that any new products they launch will be a success. Creating a profitable product isn't just about getting each of the stages of new product development right, it's also about managing the product once it's been launched and then throughout its lifetime.

This product life cycle management process involves a range of different marketing and production strategies, all geared towards making sure the product life cycle curve is as long and profitable as possible.

Challenges of Industrial Design in Nigeria:

Sustainability and developmental challenges of industrial design in the 21st Century in Nigeria are grouped intotwo major categories: national and disciplinary challenges.

National challenges include: terrorism, kidnapping, murder, arson, robbery, insurgency and communal clashes (Musdapher 2012:1-2, Muzan, 2014). Multi-faceted financial and ethical corruption, nepotism, poverty, dwindling natural and human resources, perverted aesthetic sensitivity and sensibility, poor data base for scientific planning and projection, dependence on consumer economy, poor industrialization, relatively poor vocationalisation of the economy (Kalilu, 2010), and economic recession among others.

Disciplinary challenges on the other hand include: poor funding, non-vibrant curricula, fixed and unresponsive to developmental challenges, poor curricula implementation and course delivery, poor research orientation [to develop technology], dependence on imported materials and technology (the textile industry for example),Nigerian artists and designers not seeing and projecting visual arts as a prime driver of economy, lack of a regulatory body and a registration council to regulate workforce plan or to represent professional needs across its workforce.

These challenges impose serious hindrances onindustrial design in making profound contributions to national development. These challenges, if properly addressed hold the keys of opportunity for visual arts to

reposition both itself and the nation at large, but the Industrial design must first of all be able to sustain its own development.

Recommendation

Industrial design can be deployed to challenge the socio-religious, political, economic, environmental, technological and industrial problems of Nigeria and to achieve multitude of other purposes viz aesthetics, education, historiography, designing, planning, ideological orientation, military purposes, commoditization and advertisement, technological development, industrial production, political, socio-religious and spiritual refinement, extension of borders of critical sense of inquiry. This unique borderless nature makes the Industrial design a dynamic tool for sustainable development and powerful economic force, from clothing and fashion to the creativity and designing that go into every manufactured product that have grown into multibillion naira industries in the country. Governments of over 160 nations (Nigeria inclusive) agreed to increase market-attraction of sustainable investment and this would require Research and Development to contribute new products, new materials or reintroduce discontinued environmental friendly materials.

The Industrial design can help contribute environmental friendly products and packaging designsto reduce environmental degradation recycling of non-biodegradable wastes. Visual arts should be in the forefront in this regard (sculpture is already doing this),but the prospects for ceramics, textile art and printing are still largely unexploited.

In Nigeria, materials are still largely in their raw state and technologies not automated where as it is possible to industrialise the various hand weaving looms and it should be possible to industrialise the production of *Adire* and other tie and dye traditions. Calabash and gourd carving technology can also be automated and industrialised. Leather decoration technology can be industrialised and when the textile production industrial sector is revived, it is possible to advance the economy to garment industries. Industrial design is a major factor in sustainability and sustainable development, and a society or nation without industries is unimaginable as such a nation may not be sustained for long. For over 2000 years, long before Nigeria was created, the various peoples in the Nigeria's geographical space have been contributing significantly to the world artistic, technological and economic heritage.

A cursory look at the pre-20th century Nigeria Visual Arts ecologies indicate that apart from subsistence farming, economic activities and indeed development were largely tied to visual arts and the craft industries (Kalilu, 2010). We should note that occurrence and practice of these arts and crafts were largely tied to local availability of raw materials and the products are environmentally friendly; some of the reasons they were able to sustain the practices. Indeed, the all-pervading influence that visual art contributed to the development and sustenance of the various pre-Nigerian peoples when modern factory activities were not known. Contacts with Europeans, slave trade, colonialism and emergence of the Nigerian nation in the 20th century transformed the industrial design practices. Valorization and exportation of industrial raw materials (Ajayi, 2007:141), western education, and introduction of factory type industrialization and influx of relatively cheap industrial products caused the decline of the craft based industries.

Conclusion

To effectively achieve these, there is the need to keep abreast of global actions on sustainability and to create more opportunities for people to experience the visual arts outside the galleries as well as understand the Visual Arts audiences and their requirements. Also, there is the need to build more partnership between the design practitioners and the worlds of business, science and technology, and higher education and to build stronger relationships between the designers, the public and the commercial sectors in order to capitalize on the role of small-scale industries in incubating talents. Further, effort must be made to foster greater research and development collaboration between the designers and cognate disciplines such as Engineering, Applied Sciences particularly Geophysics and Textile Technology and to activate modernization and advancement of technologies in the Visual Arts. It will also help to advocate for a greater recognition of the contributions of the Visual Arts to the creative and knowledge economies of the country.

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