Design History Study and Technological Transformation in Nigeria

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Abstract

Nigeria as a nation for so many years has been formulating educational policies that will transform and reposition the national and technological needs, but unfortunately some of these policies seem not to have yielded any meaningful solution. This is most importantly because there has never been any data base on the vocational and technological design history which of course would have given a solid foundation for total transformation of the industrial base of Nigeria. This paper therefore, is focused on the relevance of the newly introduced design history study as the foundation that will propel and set the pace for technological and vocational revolution in Nigeria. The paper went ahead to suggest relevant steps that will be taken by stakeholders, these includes: working with government to make the study of design history compulsory in our education system and establishing the Nigeria institute of designers (NID) which will take up the responsibility of fashioning out policies and programmes that will put the study of

design history in the fore front of our educational development and technological transformation, Job creation and National development

Introduction

The Educational Development in Nigeria no doubt, has seen a lot of innovations from the colonial era even till date. All the subjects taught in Nigerian Schools from Primary to Tertiary institutions have all been changed or improved upon to meet the challenges of the time and the future of our great nation Nigeria. In all these, Fine Arts and Design is not left out in the wind of change towards repositioning Nigeria, in meeting the millennium development goals. The importance of Fine Arts and Design cannot be overlooked considering the role art has played in the development of Nigeria since Independence. Therefore, it is important to focus on the need to introduce design history as part of the study of Fine Arts and Design in Nigeria Curriculum from Primary to Tertiary levels of Educational system. This will enable students and lovers of art and other products appreciate the design inherent in these products for proper documentation and understanding of products aesthetic qualities.

So many questions have been asked concerning the recent introduction of the study of Design history by the Department of Fine Arts and Design of the University of Port Harcourt in 2008/2009 Academic session at Masters and PhD levels. Academics within and outside the University have been engaging in academic discussions, some in favour, others against the relevance of design history within the Arts and Design family.

The missing link has always been how to separate between Art history and Design history within the family of Arts. The Question now is what is Design History? It is within the context of this paper to properly answer this contesting Question and proffer better understanding within the context of Academic Discuss. It is always vital to mention that Design History is not new to Western World as a discipline but within Africa and Nigeria in particular, the study of design history is relatively new. It is on

record that the University of Port Harcourt has taking the lead among African Universities to start up Design History Studies. In United States and Britain including other European Universities have for a long time been awarding Masters and PhD in Design History.

I want to state categorically that the idea to start up a Design History programme in Africa was initiated after the University of Port Harcourt New Millennium Design History Conference in honour of a distinguish artist; Prince Demmas Nwoko in 2002, of which artist from Nigeria and neighbouring African countries were in attendance. This gave rise to the first published book on Design History called "Design History" in Nigeria. Compilation of all papers written by participants of the Conference and edited by J.T Agberia; a professor of Fine Art and Design in the University of Port Harcourt, Rivers State, Nigeria.

In the United Kingdom for example, University of Oxford has in recent time advertised for admission into its (MST) Master of Studies in Design History. The main objectives of the course is to document design concepts from 1851 till date and to have a focus on where Europe is heading to in area of design and technology for today and in future. In this context it is very important to have a clear understanding of what is design and the principles associated with design formation and design process.

What is Design and Why Does it Matter?

Every designer has a slightly different approach and different design specialism also have their own ways of working, but there are some general activities common to all designers and that is where the Double diamond Model of the design council comes in. These are:

Discover	Define	Develop	Deliver
Behaviour-led Design research	Creative work shops and idea Generation	Review ideas through culture thinking and design	Prototyping selection and mentoring

Discover: The first quarter of the double diamond model covers the start of the project. Designers try to look at the world in a fresh way, noticing new things and seeking inspiration. They see, deciding what is new and intrusting, and what will inspire new ideas. Specific methods includes: market research, user research, managing and planning and design research groups.

Define: The second quarter represents the definition stage, in which designers try to make sense of all the possibilities identified in the Discover phase. Which matters most, which should we act on first. The goal here is to develop a clear creative brief that frames the fundamental design challenge to an organization. Key methods during the define stage are project development, project management and project sign-off.

Develop: The third quarter marks a period of development where solutions are created, prototyped, tested and iterated. This process of trial and error helps designers to improve and refine their ideas. Key activities and objective during the develop stage are brainstorming, prototyping, multi-disciplinary working, visual management, development methods and testing.

Deliver: The final quarter of the double diamond model is the deliver stage, where the resulting production or service is finalized and launched. The key activities and objective during this stage are: final testing, approval and launch and target, evaluation and feedback loops.

The creative process is complicated, making it appear a little less mysterious.

The Context of Design

The main concept of our design utters a static perspective on the design process in the form of a design situation. We define a design situation at a certain moment as the combination of the state if the product is being designed, the state of the design process, and the state of the design context at that moment. A product is an artifact that a designer must produce to satisfying human need.

This need can be defined by the design context. This artifact can be an object or a process. Examples of products are cars, chairs, office equipment or machine and that of the process are social, design, production or logistics. The life of a product is represented by its product lifecycle.

This is a representation of the product evolution, starting from a statement about the need of the product, continuing with its design, production, use and ending with its decommissioning because the product itself does not yet exist during its design process, we use the terminology of a product being designed to indicate the production during the design process.

Note that the design goal may change during a design process. One or more designers can execute these design activities. In sequence or in parallel, using one or more design aids. Like theories, methods, tools, time and space.

A design context is described by the set of factors influencing the product being designed and the process at a certain moment, a good example of factors includes processes in the product lifecycle of a product being designed. The state of the design context is the set of values for all factors influencing the product being designed and the designed process at a certain moment. In combination, this means that design situation is the set of values of all properties describing the product being designed, and its design process.

Reyman (2006) noted that, designers are actors exercising design activities and that designers can change the properties of product being designed and the design process. A design activity is a transition towards the design goal at that moment. carried out by a designer, causing a change of the state of the product being designed in the design process. A special kind of activity is interaction with design context with stakeholders in the design activity can result in changes in the design context that can also cause changes to the state of the product being designed or the design process. Stakeholders are actors in the design context. A design task at a certain moment is a task to meet the design goal at that moment, starting

from the current design situation. One or more designers perform a design task by executing design activities. An alternative termination of a design task is a task to transform the current state of the product being designed and or the design process into a desired state, taking into account the design context.

A design task is often apportioned to stakeholders in the design context and design task has a specific design context.

Xian (2010), in his study of design, noted that contemporary design has its own new explanation in function that means function is not absolute, but animated, changing and it is the probable relationship between product and rite. The definition of function is not only in material but also in culture. Design will not only have useful value, but also convey on particular cultural connotation which makes the design symbol of a texture cultural system.

The most prominent merit of contemporary design lies in its open structure. It is free, even though sometimes is a kind of method of entertainment.

The design shows its great interest in tradition and uses a lot of elements of tradition. It is associated with history, culture, art and morality. The inextricably relation between contemporary design and the era background will imprint a deep age brand on structure, module, colour and decoration. Contemporary design, not only involves technical standards and functional needs, it also conveys the philosophy, ideology and complicated cultural phenomena of human civilization. It materializes the progresses of human civilization.

Consumers today, buy products not only for use but also pay attention to whether it agrees with their own aesthetic taste.

Design Philosophy and National Development

Design philosophy is the study of assumptions, foundations and implementations of design. The field is defined by an interest in a set of problems or an interest of foundational concerns in design, which connects to environment giving rooms to Nation's development.

Mark (2006) wrote in his principles and marketing philosophy that stressed three points, first was empathy. This is an intimate connection with the feelings of the customer. The second is focus. In order to do a good of those things that are decided to do; we must eliminate all of the unimportant opportunities the third and equally important philosophy is impute. This emphasizes that people form an opinion about a product based on the signals that it conveys people do judge a book by its cover, you may have the best product, the highest quality. The most useful equipment or electronics, if it is presented in slipshod manner, it will be perceived as slipshod and if it is presented in a creative and professional manner, it will be accepted in that manner. Design simplicity should be linked to making products easy to use. Design can be so sleek and simple that a user finds it intimidating or unfriendly to navigate. It is important to note that the main thing in design is that we have to make things intuitively obvious in order to attract users in our society.

FRANK LLOYD Design Philosophy

For Frank, design and form acquired a symbolic meaning. Architecture can embody qualities that harmonize with the environment. Architectural beauty is seen as a reflection of the harmony that manifests from the integration of design, plan, term and materials.

Frank "Organic" approach to design.

Architectural beauty is a natural outcome of the clear design plan of simple and harmonious relationships. All elements of structure should be designed with economy according to natural principles of geometric relationships and the unadulterated use of appropriate materials. Frank used different basic geometric forms, usually square and rectangles, to produce the distinctive forms, particularly in regards to the prairie house design. Frank "Organic" approaches to design of the exteriors was also carried to that of the interiors. In this way Frank is considered to be very

much part of the modernist agenda in the twentieth century architectural designers.

This approach formed a moving away of traditional conjunction practice in favour of men and innovation freedom in design philosophy. Frank design solution was to view all details of a structure as the product of a single independent mind including all major and minor ornamental and symbolic elements. An important aspect for design is the value that ornament should be based upon the abstraction of nature. He developed his own distinctive ornamental vocabulary. With it, he strove to unify the interior and exterior of a design through its decorative detailing. By employing this method, Frank sought to unify structural and aesthetic elements into a single compositive form, architectural beauty being the product of combining simple form and expressing harmonious relationships.

Design is essentially a rational, logical and sequential process intended to solve problems or to initiate change in man-made objects. During the inter-war-years, the Bauhaus movement attempted to knit the design process into a coherent whole, in that students were encouraged to study design in a way that was both total and detailed. That is, designers were expected to balance all the considerations that come to bear upon the design of a particular artifacts, system and environment.

According to Mays (2003), design rest on three elements; simplicity, credibility and the aspirations of the customer. The task for a designer is to create design that communicate the nature of the product and connect emotionally with the customer. He also noted that some of the car designs in recent times are an indication that the three elements are at work. He specifically mentioned the current designs of Ford Motor Company and that of France Peugeot. He is of the view that communicating the nature of the products, for example, means more than reflecting what the product does and its function, its integrity, the essential qualities it represents, the brand promise and its critical attributes that uniquely distinguish the product. There should be that willingness to explore new ideas of what a

product could look like based on other important factors in the customer's lifestyle. Secondly, he noted that we need to recognize that design does not communicate through shape alone, but in totality of the outlook and functionality of a given product.

The design process is not linear; it is rather a complex activity similar to a games strategy, but strangely, it is a game where the roles are continuously changing and that is what makes it so fascinating and mysterious. Technology widens the scope of knowledge, but is necessary to understand that technological development must no longer proceed without justification.

Technology must be tamed in order to realize things that have the simplest possible relation with man. We must reject technologically driven industrial goods that have no regard for human needs and no communicative rationality. Technology is not an end in itself, but a means of producing simple products capable of enhancing expressively the space around them. Paradoxically, the more complex technology becomes, the better it can generate objects with simple and organic shapes.

Design should be seen as a strategy that fishes in the realms of technological fantasy, its purpose is not to conjure up an image that emphasizes scientific and technical thinking, and therefore technology for its own sake, but to use technology as a means of aesthetic figurative interpretation and exploration of possible performances. Design should be approached with a view of making products capable of solving unsolved problems.

What is Design History Study?

According to Agberia (2002), "Design in its simplest definition articulates a whole range of relationship, which draws extensively from art and form into a definable plan. It is the hallmark of intellectually contrived intent, realizable in an articulate craftsmanship.

He further observed that the whole import of this is the finite inelastic imperatives, which involves product design, marketing and the

essentials of technology. Thus, emphasizing ergonomic, strength of material, durability, maintenance quality and cost effectiveness.

A tea cup, be it hand-painted or mass produce ceramics, offers a glimpse of the rituals of everyday life and historical experience. A designed object or space reflects the individual, the society for which it was created and as well as its creator. It expresses aesthetic preoccupations and articulate historical political conditions. Decoration challenges the hierarchies and disciplines and careers of artists, designers, craft workers, gardeners, and architects, such concerns reside at the heart of the study of design history. Design history, therefore, involves the articulation of design concepts and principles in a given environment and their practical realization into products of industry in time and space.

Design history provides students with a framework of interpretative skills useful to understand design It offers a grounding in the analysis of the techniques and materials deployed in creating objects or sites. It enables students to develop a grasp of historical context, encompassing the impact of the hierarchies within, and audiences for the critical reception of "decoration". It encourages the analysis of the historiography of political and aesthetic debates articulated by designers, critics and historians about design, its forms and purposes.

Ajie (2010) in the critical analysis of what design history and art history is all about, opined that design history can tell what happens in current trends in the evolution of design in technology. Art history only presents documented artifacts and no attention on aesthetic inclination. The main purpose is to have a record for today's students to appreciate the art works of yesterday. It has no connection or link to present today's art works. But design history has a link to what technological design was yesterday and today.Take an example of what television looked like yesterday and what design has done to today's television from the long back design to what is now known as flat screen and the LCDs. We can vividly see the link between the years of technological transformations

while Art Historian is in trouble to fix and relate the ancient art and art of today. That is why there is no clear documentation of today's art.

In supporting this conception, Mearouf (1999) in Agberia (2002) declared thus:

Through the hands and spirits of uncounted generations of craftsmen, many creation of the past continue to be creations of the present as well. This summarizes the example I gave concerning the technological development and designs of yesterday and today's television and other man-made products that are of great importance to the life of man on earth. Other good examples are the trend in modern design of cars, household equipments, shoes, ladies handbag, furniture, office equipment, industrial materials, buildings, road construction and others too numerous to mention, have taken their share in advancing modern nations in the areas of design historical documentation and interpretation

Summary

Design concepts will open up the relevance of design history in Nigeria. Design history is the study of objects of design in their historical and stylistic context with a broad definition, (Bales 1978). He further stated that design history had to incorporate criticism of the "heroic" structure of its discipline in response to the establishment of material culture as art history also had to respond to visual culture. Although visual has been able to broaden the subject area of art history through the incorporation of other aspect of arts including design history.

In a critical examination of the words of Kjetil (2010) in which he noted that design culture is not elite culture, but everyday for every body's culture. He further opined that, design history today is no longer primarily a history of objects and their designers, but is now becoming a history of the translation, transcription, transaction, transposition and transformations that constitute the relationship among products, people and ideas.

The five "T" has rightly described the concept is a summary of what the idea of the modern design is all about and that the concept of a good design

does not apply only to those who are wealthy but, for all classes of mankind. As Uzor (2011) noted that he never thought of design when he bought his Peugeot 404 in 1969, what was in his mind was durability and functionality.

Conclusion

Nigeria has today been listed among Nations that have embraced the study of design history just like Britain, United States of America and other European Countries that have long introduced design history as a field of study in fine Arts and Design. It is left for our educational planners to take advantage of the knowledge and understanding of design history to position Nigeria in the part of revolution leading to job creation.

Recommendation

Considering the importance of design history in nation development, it becomes expedient to make the following recommendations.

1. Design history should be introduced as part of first degree courses like Art History and Art Education in Tertiary Institutions in Nigeria.
2. Educational planners in area of arts and design should emphasize the study of design at Primary and Secondary levels. This will enable the children imbibe the esthetic culture at early stage of live.

4. The Government should establish Nigeria Institute of Designers (NID) that will comprise designers and design historians which will be charged with the responsibility of city beautifications and design assessment.

Finally, design history should be seen as the meeting point between art, science, and technology.

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