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Chapter 11

Visual and Material Culture in the Context of Industrial Design: The Contemporary Nigerian Experience

I.B. Kashim

Additional information is available at the end of the chapter

http://dx.doi.org/10.5772/54548

1. Introduction

Industrial design is viewed as a synergy between applied art and science aiming at creating and developing aesthetic, ergonomic and functional values in produced artefacts. In the evolution of visual designs in Nigeria, a craft-based design practice has been most prominently featured with the culture acting as a motivating factor. The craft designs in traditional Nigerian settings consist of three dimensional elements such as the object form and the two dimensional features such as patterns, lines and colours. The visual designs on material artefacts have consistently infused culture-oriented aesthetics, thus adding to their local identity and commercial value for increase marketability. For the purpose of this paper, visual and materials culture is viewed as a direct application of industrial design with relevance to the productions of indigenous artefacts which are accomplished with technical expertise and covering wide areas of applied art and design, such as jewellery, interior design, ceramics, household wares, architecture, textile designs, leisure goods and woodwork. The Nigerian concept of industrial design embraces the creation of functional designs with intrinsic aesthetic satisfaction. This article explores the expanding field of material and visual culture insofar as it contribute to events, situations or other features relevant to defining human landscape as well as the social, cultural and natural environments, objects, images, ideas and practices.

In general, material culture can be defined as whole objects that are close to art in characteristics but which do not fully assume art's unadulterated-status. The study of material goods and artefacts, technology and other aspects of material culture have been given systematic attention, especially with prototype invention incorporated into the more generalized fields of work organizations, informal settings, cultural production and domestic settings, etc. All of these cause practical utility and aesthetic value to intersect in influencing material goods and the demand of conspicuous consumption.

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Crafts are symbols of Nigerian material culture and spiritual heritage. They are integrated into the living pattern of Nigerians as prized objects for the promotion and preservation of its tourism industry. Conservative estimates indicate that over 70% of the total population of Africa are rural dwellers, engaged in farming along with various craft production activities including metal craft, pottery, carving, textile, weaving, embroidery, leather work, calabash decoration, blacksmithing, bronze and brass casting and tie and dye. These constitute the major rural industries in the form of small- and medium-scale enterprises which are fundamental to stimulating the economic and industrial development of products for mass consumption. According to Ogunduyile and Akinbogun (2006), the introduction of industrial design into the school programme in Nigeria focused on promoting the developing small- and medium-scale enterprises that are expected to compete favourably with imported products, thereby, opening an avenue for creativity, innovation, jobs and wealth creation.

A comprehensive overview of the aforementioned areas has prompted various investigations - using the factors mentioned below - on which the contemporary status of industrial design programmes in tertiary institutions in Nigeria are based upon:

1. The development of prototypes and product systems that can be applied in satellite industries.
2. The application of modelling and simulation for the rapid prototyping of design products.
3. The fast-tracking of industrial growth and the transformation of raw materials into useful products.
4. The provision of appropriate local machinery.

2. Conceptual framework of the study

Africa is highly affected by the creative economic industries. The visual and material culture is influenced by the creative industries which in turn play a critical role in potentially contributing to Nigeria's economy. These contributions are significant to the issues of the eradication of poverty, rural and urban development, community livelihood and survival strategies. The research questions adopted survey tools to investigate and establish the relationship between material culture, artefacts, the creative industries and the commercial values of products. Interviews were conducted to establish the commercial value of the downstream activities of applied art and the crafts in their selection for their commercial value. Apart from interview questionnaires, schedules were used to collect in-depth information and data using structured, semi-structured and unstructured questionnaires. They were designed for a census of creative activities using sampling techniques.

3. Research questions

For the purpose of this study, the following critical questions arose, namely:

http://dx.doi.org/10.5772/54548

a. What are Nigerian creative industries and products about?

b. What are the relationships between art, culture and crafts?

c. What are the threats and solutions to the mass production of traditional crafts?

d. Are the contributions of art and crafts industry significant to the Nigerian economy?

e. What is the interventional role of government in the cottage industries?

4. Research methodology

The research questions were adopted to test the research aim. Quantitative, qualitative and experimental approaches were used as tool of investigation in order to establish the relationship between material culture, artefacts, the creative industries and the commercial values of products. Interviews were conducted to establish the commercial value of the downstream activities of the applied artists and craftsmen in their selection for their commercial value. Apart from interviews, scheduled questionnaires were administered so as to collect in-depth information and data. They take the form of structured, semi-structured and unstructured questionnaires designed for a census of creative activities using sampling techniques.

5. Conceptual definitions of visual and material culture

Culture is that which defines the way of life of a group of people and their interactions with the environment over a period of time. Moving from the abstract to the concrete and from the material realm to the immaterial domain, culture could be described as a thread that holds what a society finds valuable, meaningful and appreciable. Following the models of previous studies (Stephan, 2004; Schein, 1999; Lee, 2004; Hampden-Turner and Trompenaars, 1997; Spencer-Oatey, 2000 in Moalosi, Popovic & Hickling-Hudson, 2007), culture is firmly observed as being dynamic and multi-layered. From the perspective of the intangible elements, Lam et al. (2006) described culture as a set of values (conscious and unconscious) evolved by a group of people living in a society so as to shape that society with specific characteristics, identities, attitudes and behaviours. However, within the tangible layer, culture could also be understood in the social context of artefacts used within a particular environment.

Artefacts, as made-made objects, are a material medium for the communication of cultural values. It includes objects, processes, services and their systems. Since visual and material objects are part and parcel of such communication which gives rise to social forms, visual and material culture has emerged from the interaction between man and artefacts. Today, design artefacts have become an inseparable component of human society, a totem of cultural identity and an important source of reference for modern society. These artefacts are instrumental to aesthetic expression and socio-cultural interaction within a local context.

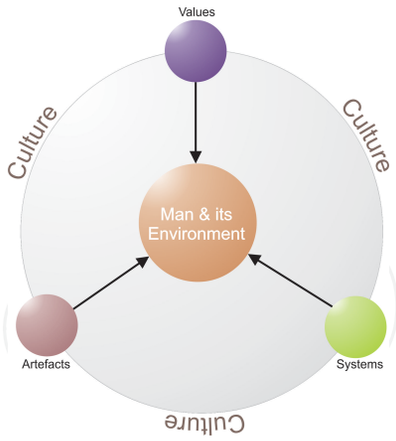


Figure 1. Design connecting the tangible elements of culture.

Behind every man-made object is a valuable concept, beliefs, customs, rituals, habits and ideas that shape its perception within a socio-cultural environment. Visual culture has been described as the artistic tastes and interpretation of what is aesthetically pleasing to an individual depending upon the surroundings and the environment. However, it is not just artistic differences that are influenced by environmental differences. In addition, there is the practicality of the visual statement. Based on the separate goals and purposes that need to be met by aesthetics and the way in which they are interpreted within a specific locale, visual rhetoric widely varies based on classical cultural differences. There are innate differences in the way people view images because our interpretations of aesthetics and practicality stem directly from our localized cultural experiences. The interpretation of design as visual and material culture enables a broad understanding and critical awareness of its meanings as material objects, images and cultural practices that position human beings in time and space.

The term "material culture" is often used by archaeologists as a non-specific way of referring to artefacts or other concrete things left by past cultures. Material culture means something else to art historians. Interestingly enough, when they speak of material culture they look at an object within its environmental and cultural context as things left by past cultures. The organization of cultural activities such as business or economic activities led to cultural industries. The idea of 'creative industries' originated from a concern with the cultural industries. The core of the cultural industry is its creativity (Kwanashee, Aremu, Okoi & Oladokun, 2009).

6. Nigerian visual and material culture

Nigeria is a large society that has different subcultures because it is made up of people bearing different value systems which influence each other to shape a specific culture for the society as a whole. The conventions and values that underlie Nigerian visual and material culture are rooted in the visual art and design forms and the key continuities and changes that characterize development from traditional to contemporary practices.

http://dx.doi.org/10.5772/54548

Industrial design education in Nigeria has focused on culture as a key drive for the design and exploration of materials in the areas of ceramics, textiles and graphical communication in order to express in handcrafted product prototypes both concept and simple design solutions. Industrial design practice tends to promote cultural significance in design formations with reference to local material explorations, ingenious material expressions and the embodiment of cultural values. Industrial design in Nigeria is craft-based and situated in the field of applied art.

7. Contemporary trends in visual and material culture

7.1. Textiles

The local textile industry is diverse, with such branches as spinning, weaving, knitting, sewing, dyeing, embroidery and printing, all of which are significant for clothing, a material culture that is a part and parcel of human life. Common woven fabrics in Nigeria are "Etu", "Alari", "Sanyan", "Fuu" and "Waka", which are used for different purposes ranging from day-to-day and ceremonial use, as in for religious purposes. Cloth weaving is an outstanding craft among the variety of textiles produced in Nigeria. The woven cloths are done on narrow looms in the south-western towns of Iseyin, Oyo, Ogbomoso and Okene in Kogi State; Akwete cloth is made in Akete in Abia State. They are woven materials produced in attractive designs with rich colours and made for male and females. Resistance tie and dye textile products are traditional indigenous crafts done in different societies in Nigeria. Examples are the Hausa traditional indigo dye carried out in the Northern Nigerian areas of Kano, Sokoto and Zaria. The Kano indigo-vegetable dyeing pits are one of the most fascinating aspects of the old city. Various designs are folded into the material before dyeing and the fabric is often beaten to achieve its shiny, attractive appearance. The techniques employed to obtain this look are unmatched around the world. Moreover, although the methods adopted are ancient, these lush works of art on fabric always remain extremely popular and continue to be in great demand.



Figure 2. A typical dye pit at Kano (2012).

Other styles of indigenous textiles are found in the Yoruba towns of Oshogbo, Ilorin, Ondo, Ibadan, Ogbomoso, Oyo and Abeokuta (Eicher, 1976). Local cassava starch is used as a basic resistance material. The blue dye is obtained from a local shrub and dyeing is carried out in large pots at Abeokuta, Ibadan, Ife and Osogbo, while in the northern part of the country it is done in open dye pits which are two to three metres deep. A local vegetable from which an indigo colour is extracted are employed as the colouring agent. This textile craft has been encouraged through the training of the less privileged in such national programmes as Better Life for Rural Women, which was later taken over by the Family Economic and Advancement Programme, set up in 1990. These programmes were meant to develop and encourage the talent and creative energy of women at the grassroots level of society. The Textile Traditional and Research Centre is located at Gbongan / Ife road, Oshogbo, Osun State of Nigeria. The National Research Centre is focused on the textile traditions of Nigeria with a view to encouraging the industry to grow, thereby promoting job opportunities and transforming the rural economy. Below is a sample of the popular *Alari*, as represented by the field research of Maiwada, Dutsenwai and Waziri 2012 (see Fig. 3). The *Alari* that is also *either* referred to as *Aso Oke* or *Aso Ebi*, that is (Commemoration Cloth) was described by Makinde and Ajiboye (2009) as significant attire used for social functions in Yoruba land.



Figure 3. *Agbada (Alari*) produced in Ogun State, Nigeria (source: http//www.aijcrnet.com).

Some other very interesting textile crafts made in Nigeria, especially at Nike gallery, Oshogbo in Osun State, have to do with experimentation with many yarns, which simultaneously change the way the yarn colours are viewed. They are made with a high percentage of wool and 20% or more fancy or strengthening yarns, such as silks, ribbons, cotton or even metallic yarns. Rugs are also made using 100% pure single-type yarns to get warm or beautifully cool cottons. They are designed to fit traditional and contemporary spaces. They are used for floor carpets, picnic rugs and therapy mats, blankets, throws and even duvets, wall hangings and corporate art pieces. Figure 4 shows her gallery logo, her elegant portrait in an elaborate costume and a sample of her batik cloth.

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Figure 4. Artist and Designer Nike Davies Okundaye (source: http://www.nikeart.com/main.html).

Ojo (2004) reportedly worked extensively on appliqué and quilting. He described it as a product of the expression of traditional resources which provides an avenue for problem solving in a particular stylistic artistic vacuity and has been identified as bridgehead craft for matching and contacting the confluence of handcraft and the brain. Quilting is about the joining together of layers of fabrics by the tiny running of stitches, while padding is secured between the two outer layers; appliqué is the principle of stitching a multi-colour piece of fabric to a contrasting background in order to illustrate stories depicting communal events.

In culture and musical costumes, they are both used in embellishing masquerades and as garments for creating identity by some Nigerian musicians, such as "Lágbájá". They are used in bedding, cushions, pillowcases and head rests, etc. They are found to match manufacturer's specifications in the mass production industries as featured in areas such as the lapels of footballers' boots, goal keepers' chest and knee protectors, while life jackets, sports wares and hand gloves are now being manufactured using the a textile process that assist in the process of machine quitting technique. A typical example of a culture costume by Lágbájá is shown in figure 6, below. If you were to call out the name Lágbájá in Yoruba, you could be calling for somebody, anybody, everybody or nobody! The Nigerian musician Lágbájá has made a commitment to always wear a mask on stage so as to hide his identity. He is described by the phrase: 'The man without a face who speaks for the people without a voice'. His masks and costumes have many different designs. Generally, Lágbájá's music blends jazz, afrobeat, highlife, juju, funk and traditional Yoruba music, using horns, guitars and keyboards along with traditional Nigerian instruments. Sometimes, the music is purely instrumental but when there are lyrics, they are in Yoruba, English or a combination of the two commonly spoken in Lagos. The lyrics focus on issues relating to democracy and fairness in society; the titles of the songs themselves get the desired message across. (See Fig. 6)



Figure 5. Works Produced at the Traditional Textile Research Centre located at Gbongan / Ife road, Oshogbo, Osun State.



Figure 6. Lágbájá - one of Nigeria's contemporary musicians.

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Lágbájá is definitely one of Africa's most exciting contemporary artists, whose elaborate masks and stage costumes link him to the ancient tradition of Egungun: ancestral masquerading spirits who help guide people towards truth and peace.

7.2. Jewellery

Jewellery is very significant to adornment within almost all traditional cultures in Nigeria. Various investigations have been made into beadwork and clothing and other metallic materials used for adornment. According to Adesanya (2010), the jewellery in Yoruba land is made out of different materials, ranging from beads, cowries, plant seeds, annual bows, ivory, leather, stone and metals (including bronze and silver), the latter of which this article places emphasis on as its practice cuts across some major ethnic groups in Nigeria who mass produce them for economic survival. Jewellery and metal work as professions have long historical standing, symbolizing wealth and power. The Nok, Ife, Benin and Igbo-Ukwu have made significant contributions to the development of jewellery. Emeriewen (2007), in his assertion of the paradigm of the Benin Art School experience, refers to the products of metal design as the fabrication of aesthetically functional objects referred to as metal work and craft. He analysed the contribution of the Benin Art School in metal product design in the area of making decorative gongs, lamp stands, flower pot stands, maces and gavels, as well as the contemporary use of metal design for public place furniture. A sample of such metal products in bronze from Benin is highlighted in figure 7, below:

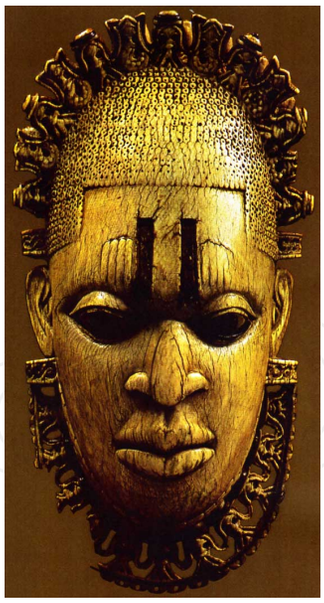


Figure 7. Benin ivory mask (a symbol of Nigerian craft artistry).

7.3. Ceramics

Ibude (2010) has made an extensive exploration into the development of a prototype solid fuel kiln for cost-effective ceramic firing at a Nigerian university. He conceptualized this kiln's

production as a critical intervention into the exceptional functioning of the ceramic industries, largely due to the high cost of fuel and the inadequate supply of electricity to meet up with local consumption in Nigeria. The construction of a wood-fired kiln from the researchers' pilot study indicated that it is cheaper to operate in an environment that has significant forest areas and sawmilling activities. He collected the kaolin that he used locally to fabricate a refractory insulator and the dense bricks that he used to build his kiln. The kiln utilizes hardwoods as fuel as it produces better heat (more calories) and the cost of operating a wood kiln was very cheap when compare with gas, electricity and kerosene. The kiln was a prototype that became a source of reference for the development of wood kilns in tertiary institutions in Nigeria and technical manuals.

Adelabu (2011) developed computer-aided ceramic glaze formulation using locally sourced ceramic materials in Nigeria. He focused his study on developing standardized indigenous glaze recipes based on local raw materials in the states of Ondo, Osun and Edo through the aid of a sampled computer-aided software packages namely Matrix V6.01 and Hyperglaze software (authored by Lawrence Ewing and Richard Burkett respectively). This was done so as to establish a better technique for the process of glaze formulation in Nigeria and proffer solutions to prevailing problems of glaze composition encountered by ceramic students and practioners in Nigeria. All of these packages used to develop the Nigerian version of glaze preparation have been developed internationally in order to assist students in their glaze chemistry since the late 1970s. He developed a prototype test kiln that was used to fire the glaze product as highlighted below in figure 8: the product design established awareness as to the current software solution for ceramic glaze experimentation in Nigeria which has not hitherto been used by practicing ceramists in Nigeria.

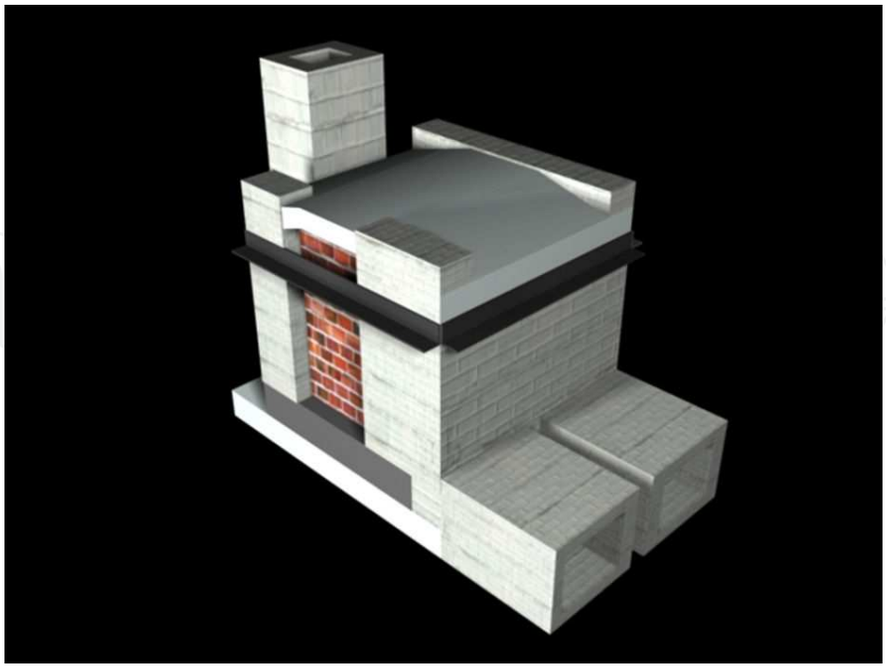


Figure 8. A typical model of a kiln design constructed for the purpose of ceramic firing research (Adelabu O.S, 2011).

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Kashim (2004) explored the richly endowed national ceramic resources to develop her capacity for high-tech, value added manufacturing activities in the production of ceramic hardware, such as ball mill lining, porcelain milling balls and pestles and mortars. This production was made through the identification, selection and synthesis of local raw materials available in Nigeria to ascertain their suitability for those whiteware ceramic bodies popularly referred to as porcelain. The prototypes were replicated using the Jigger Jolley machine and the process of slip casting using the plaster of Paris mould. Examples of the works produced include cylinders, pestles and mortars, decorative pieces, ball mill pebbles and lining. An example is the Benin Mask in figure 9, below, which indicates the outcome of the research effort. Levi O'bem Yakubu, a 1979 graduate of industrial design with a focus on ceramics from the famous Ahmadu Bello University (ABU), Zaria, is the founder and chief executive of the Makurdi-based Dajo Pottery Limited, a multi-award winning ceramic industry in Nigeria and world acclaimed company. He has contributed significantly to ceramics production in Nigeria using various production methodologies (see Fig. 10) Other prototype contributions are also in respect of oil burner used to fire ceramic kiln at Federal polytechnic,Auchi. See Fig. 11



Figure 9. A typical cast piece of a Benin Mask in porcelain.



Figure 10. Levi O'bem Yakubu, Chief Executive of Dajo Pottery Limited, Makurdi, Benue State, Nigeria (2012).



Figure 11. Ceramic test kiln, constructed by a Higher National Diploma student of the Federal Polytechnic, Auchi, Edo State, Nigeria (Ogunduyile, S.R, 2006).

7.4. Graphics

Graphical design is all about us, in our daily newspapers, on our commute to work, on book covers and in logos, websites, advertisements, bill boards, product packaging and posters, etc.

Graphics has been used as a tool of communication, like journalists in media organizations, radios and newspapers, and so is an artist in advertising. The mode of communication requires the use of graphical signs and symbols as a medium through which creativity is expressed, generating a societal response that is either positive or negative. Apart from the fact that products are advertised over and over until the public develop a strong feeling of acceptability for them, traditional graphics' inscriptions are influential media products that are vital to society for information dissemination, education, entertaining the public and contributing to

http://dx.doi.org/10.5772/54548

the economic development of commercial products. Figure 12a presents a graphical logo and slogan from March 2009 by a former Nigerian President, Umaru Yar'Adua, unveiled as a part of the administration's efforts to rebrand the country's image globally.



Figure 12. A graphical logo for a Nigerian rebranding project.

8. Craft designs

8.1. Calabash decoration

Calabashes - or gourds - are the fruits of several varieties of creeper, some of which are grown along with farm crops. Their creation involve carving and sawing, burning (pyro-engraving) and scorching with heated metal tools, colouring with karan dafi dye and whitening with clay.



Figure 13. Calabash decorations by Cynthia Oldenkamp (source: http://www.uni.edu/gai/Nigeria/Lessons/Calabash.html).

8.2. Woodworks

Osogbo, Benin, Oyo and Akwa have been acknowledged as centres of woodcarving and technology. The carvers have flourished extensively in the southern part of Nigeria from time immemorial, making figures for shrines, masks, portraitures representative of the spirits of the sky, sea, earth, forest, stream, fire and thunder. Many of the old carvers' works are found in museums and public places. Prominent among these woodcarvers is Lamidi Olonade Fakeye (figure 14), who introduces decorative doors into modern architecture (carved doors in low relief) using Yoruba graphic symbology through the mix of traditional interlaces, circles and linear designs based on curves and squares, blending them with figurative images. He was an apprentice to the master carver George Bamidele Arowoogun. In 1978, he became an instructor at the Obafemi Awolowo University in Ile-Ife, Nigeria, where he unveiled his incredible statue of *Odudua* (a Yoruba legend) nine years later. Between 1989 and 1995, Lamidi served as artist-in-residence at several prestigious American universities. He uses a lot of political themes in order to promote national unity among the Yoruba, Hausa and Igbo. Examples of his work can be found at:

1. The Kennedy Centre panel door for the cultural centre, Washington DC, USA.
2. House posts for the Edena gate house of the Oni of Ife's palace, Aderemi Adesoji's at Ile Ife in 1955.
3. Catholic Chapel door at the University of Ibadan.



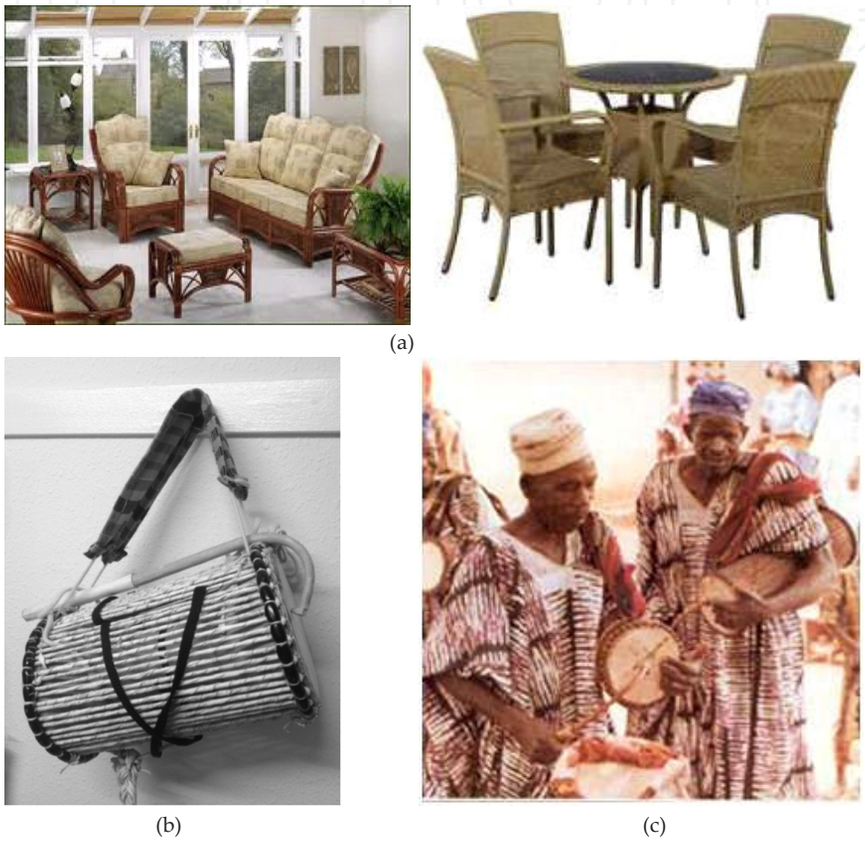
Figure 14. Great Master Carver Lamidi Fakeye (source: http://37thstate.tumblr.com/post/20410112677/great-master-carver-lamidi-fakeye).

8.3. Cane works

Cane work is one of the major craft industries in Nigeria, with its raw materials of cane and willow sourced from the forest. The production method is conducted through weaving by crossing them over and under one another at right angles in three-dimensional forms, such as

http://dx.doi.org/10.5772/54548

for upholstered baby cots, side tables and hamper baskets. The prominent production centres are Lagos, Abeokuta, Ibadan, Onitsha and other commercial centres. The industry possesses the functional capability to serve human needs in homes, offices and outdoor engagements as their processes have unique characteristics which distinguish them from machine-fabricated substitutes (Kayode, 2004).



(a) (b) (c)

Figure 15. a) Typical Nigerian cane furniture (2012), b) A Yoruba talking drum with the stick hanged on it, c) Yoruba drummer beating the drum, Source: http://yorupedia.com/subjects/education/yoruba-music/

8.4. Leather works

This is used as a Yoruba talking drum called "Dundun" - a double membrane hourglass-shaped tension drum. They are used in activities such as ritual performances, ceremonies (burials, marriages and chieftaincy), for communication in heralding a visitor's arrival and as a source of information for kings and villagers. The production relied upon wooden frames and leather membrane fastening with rope. They are operated with a drum stick referred to as "Opa Ilu" made from a wood called "Ita" or "Agboyin", which has the characteristics of been curved at one end permanently at such convenient that it can be used to beat the talking drum. The talking drum has a percussion stick (a 1 – ½ foot long beating stick with a curve end knob)



Figure 16. Leather works made in Northern Nigeria (bags, sandals and wristwatch straps).

9. Entrepreneurial product development

The concept of sustainable product development should satisfy public demand for services. It addresses both the demand and supply side of the economic equation. Product designers are traditionally concerned with the relationship between manufactured artefacts and people, enhancing the link between the environment and society through environmentally friendly products. It seeks to do this by attaching sustainable criteria to the quality and value of products.

Skilled and talents are used creatively in the production of traditional crafts items which gave birth to the creative product industries. The industries have their origin in individual creativity, skill and talent, which have a potential for wealth and job creation as well as the generation and exploration of intellectual property (e.g., blacksmithing, goldsmithing, pottery, leather-work, woodwork and calabash engraving).

http://dx.doi.org/10.5772/54548

The crafts belong to cultural industries which place emphasis on those industries whose inspiration is derived from heritage, traditional knowledge and the artistic element of creativity.

10. The dilemma of the interface between local crafts and modern technology

In most countries with advanced design practices, industrial designs are registered in order to be protected under industrial design law. As a general rule, for registration, the design must be "new" or original. Generally, a rule may vary across countries but "new" means that no other identical or very similar design is known. In the Nigerian context, industrial designs are yet to fully evolve into modern creative expression, despite a vast heritage of a rich visual and material culture which is manifested well in the arts and crafts. With a seeming limitation in access to modern technological design tools, industrial design practice had been side-tracked into placing more emphasis on the profusion of cultural elements in local objects' functions over the development of technical features which are also indispensable tools in optimizing product quality and efficiency. In the recent trend where Nigerian product users are increasingly exposed to the aesthetic and functional capabilities offered by modern design products, the appreciation of local products tends to be disfavoured. This is not to say that local design products are performing poorly on the functional level, but there seems to a technological gap that must be filled by local products in order to favourably compete with the highly standardized design products. Of course, industrial design in Nigeria has the potential to increase the value of manufactured products, improve living conditions and provide the continent with a weapon to wage a war on substandard products from other continents. However, industrial designers must wake up if they are to harness the rich cultural heritage within their borders with the necessary technical know-how so as to become relevant in the socioeconomic advancement of the 21st century (Ogunduyile & Akinbogun, 2006).

11. Conclusion

The concept of sustainable product development in Nigeria captured the subject through notions of development, poverty, trade, population, social and cultural conditions. All of these matter in addressing the supply and demand of economics. This study further observed that early industrial designers' work was primarily focused on physical products but, today, this requires applied behavioural science, rapid prototyping, statistical knowledge and the ability to develop experimental designs.

The study reveals further that the development and diffusion of domestic and improved technologies in cultural products' design within small-scale industries offers a lot in terms of enterprise productivity, employment generation and import substitution. The development of product designs is significant to the economic life of any nation. It has the tendency to

increase the value of manufactured products, improve the living conditions of the people and create an appropriate competitive standard against the dumping of foreign goods in Nigeria.

It is therefore recommended that encouraging the commercialization of indigenous craft-based technologies require the following:

1. That a development bank should assist in the funding of projects while commercial banks should provide credit services to cater for entrepreneur with limited resources.
2. The government should encourage the flow of technology-related information, especially for new products, process development, competitive initiatives through the encouragement of tourism (as in Kenya) and access to international market opportunities.

Nigeria is endowed with a diverse and rich visual and material culture which forms the core of its national heritage and which cannot be underestimated in the global context. In the post-colonial era, the fast-growing pace in global design and the technological shift calls for a cultural reinvention and adaptation suitable for contemporary tastes and standards. Local designs will not perform on the global front where they are unique marked by cultural values alone; the embodiment of their aesthetics must be redefined in the design process to create both highly functional and emotionally rewarding products.

Author details

I.B. Kashim

Address all correspondence to: ibykash@gmail.com

Department of Industrial Design, Federal University of Technology, Akure, Nigeria

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