



DESIGN AND PRINTING OF NOK AND BENIN CULTURAL FORMS ON T SHIRTS USING THE HEAT TRANSFER METHOD

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Abstract:

The Nok people are considered the most primordial in West Africa and are believed to have influenced other civilizations in the region. The Nok civilization is trace to 200 AD ago, and also known for its individualistic terracotta figurines. The Nok inhabitants were proficient in agriculture, pottery and metalworking, their art is distinguished by elaborate designs and patterns. While the Benin kingdom had an intricate structure of government, with a powerful king at its head. This powerful pre-colonial state was founded in the 13th century and attained its crest in the 16th century. The Benin's were celebrated for their ivory and bronze figures which were often used for the service of the royal court and other important individuals in the kingdom. Both cultures (Nok and Benin) are imperative when Nigeria's cultural heritage is cited. They enthused art and cultural engagements throughout Nigeria and have significantly contributed to Nigeria's affluent and varied cultural setting. As it stands, their legacy can be noticed in museums and galleries throughout Nigeria, as well as in the country's vibrant contemporary art scene. The role of a graphic design is highlighted, importance of colour, heat-transfer method of printing, opportunities ahead, means inspired by opportunities ahead. Survey methodology approach is adopted, sample from a population, selected population, description of instrument and procedures, the study hope to promote the African Art value and economic empowerment. designers should pay attention to viability, impending trend and prospects of using historical figures in exploring their visual eloquence by availing them self to training where necessary on state- of the -act equipment,

for better understanding and promoting cultural identity that will, compliment the Afro culture globally.

Keywords: Nok, Benin, Cultural heritage, Graphic Design, Print.

Introduction

Nigeria is located at latitude 9.81990 and longitude 8.6752770 part of Africa in the Northern Hemisphere (Geodatos.net, 2021), and also positioned in West Africa, borders the Gulf of Guinea between Benin on the west and Cameroon on the east. It has a land mass of 923,768 square kilometers, that extends from the Gulf of Guinea in the south to the Sahel in the north (Maggaji. 2020). Different art traditions have flourished in Nigeria in the past and are still thriving in different part the country. In a quest for deeper understanding of art cultures and traditions, a lot of discoveries were made in various communities and villages in Nigeria. Nigeria is inhabited by many tribes, dialects and cultures, as can be observed in their forms, styles and materials that were used in the various art works; reveals the different cultures that made up the entity Nigeria (Oladokun, 2013). Adepegba (1982) in Makinde and Aremu (2014) identifies the form civilization to include Benin, Ife, Igbo ukwu, Nok and Tsode, Hitherto the Nok and Benin artistic heritage will take the centre stage in the discussion. According to Breunig (2014), Nok traditional art were mainly done using terracotta that comprises of human figures, animal figures and a combination of both human and animal figures.

The Benin court artists were proficient in the use of ivory for carving and bronze casting through the cire perdue process of casting. Without prejudice, looking at the rich anachronistic historical background of both cultures, designers particularly in the visual art, can access the window of the varieties of cultural heritage in both traditions vis-à-vis.

ART AND CULTURE

Art is the use of imagination to express conceived ideas, feelings and perspective particularly in areas like drawing, painting, graphic, ceramic, sculpture etc. (Wehmeier, 2000). Similarly, Mbahi (2005) posit that art is the discovery of order in nature. The observation of nature is the first law of existence that should be explored. Art is a medium of aesthetic awareness where students are thought to think and assimilate all the elements of design to be able to understand the beauty of nature and man-made things that can be seen in culture. In this context

culture, is x-ray as the collective reservoir of knowledge beliefs, attitudes, values, meanings, religion, hierarchies, notion of time, spatial relations, part, conception of the universal and material object and effects acquired by a group of people in the course of generations through individualities and group seeking. Culture is the cradle of human civilization as appertained to be a dynamic centre of the development of any nation. According to Awodiya (2016) that culture is the way of life of any group of people that comprises of all the hackneyed ways of learned behaviour from one generation to another through the means of language and simulation of art designs through forms, shapes, styles and colours.

GRAPHIC DESIGN

Graphic design will be primarily viewed here, from the angle of aesthetic influence and marketing. This plays a central role in attracting viewers using designed images, color and typography. However, graphic artist this days' work with user experience (UX). This implies that design must validate stylistic choices as regards image positions and font with a human centered approach. Which entail paying attention and seek to identify to a large extent with specific users while appealing designs that exploit usability are produced. Aesthetical inclination must serve a function in UX design art are not created for art's sake. Hence, graphic artists should diversify to visual design and be wary when designing for UX. by; consider the information structure of his interactive designs, to ascertain ease of understanding for user. The advantage as a graphic designer to create work that encapsulate the whole user experience, including users' visual processing aptitude For instance an else pleasing artistic design cannot offer users the satisfaction needed in several glimpse from any given perspective, its designer/s will have failed to marry graphic design to user experience. The span of graphic design in UX covers the notion and creation of striking designs that users find predominantly easygoing, significant and functional. "Design is a result of a problem. Art is a question to a problem." — John Maeda, President of Rhode Island School of Design

HEAT TRANSFER PRINTING

The recognition of Polyester fabrics to be suitable for printing, have completely changed the forms of printing: especially heat transfer printing, with the new technology where by images are printed on special paper before transferring them polyester by the means of heat transfer. This has developed the new

possibilities and approaches in printing, similar as the product of halftone goods. In all cloth printing, the nature and, particularly, the density of the print paste are important, and the thickeners employed must be compatible with all the other factors. In the conventional approaches, the thickeners are similar reagents as alginates, gum, methyl cellulose ethers, starch, sodium carboxymethyl cellulose and tragacanth. The mentioned thickeners work with colourful types of colour when applied, including direct cotton, handbasket, caustic, and reactive colourings, as well as colours. Utmost colourings are fixed by the means of storming or growing, also by a batch or nonstop system, and a more rapid-fire obsession is effected by flash growing e.g., allowing a shorter storming period by employing lower machines. After storming, the fabric must be completely washed to remove loose color and thickener, icing fastness to rubbing. Utmost cloth accoutrements can be published without special pretreatment, but hair cloths are generally chlorinated before printing. Covers (long, parallel wool fibers), published in stripes, are used for mixed goods, and published foundations produce shadowy goods. Tufted carpets are published by a process designed to insure good penetration.

COLOUR

In the words Viyage (2013), he opines that colour draws the attention of any viewer beforehand; hence the concept of colour must therefore be studied intensively by designers. It can equivocally be said that colour is the first noticeable element in terms of aesthetical appreciation and a fundamental factor governor's fabric choice. In the process of selecting a garment or fabric, the individual must have premeditated on a particular choice of colour, and will be attracted by that very colour to enhance further investigation after the point of attraction. Colour as viable component of fabric beautification and merchandising still stand strong as the marketing wheel for textile products. As such a comprehensive understanding of the theory of colour should be of essence to designers in both graphic and textile design which is based on their role in the combination and selection of colour for a fabric. Colours like red, blue and yellow, in its raw hue are not advisable to be use directly for design except for promotional designs. Secondary and tertiary colours can be applied based on the scheme which either can be analogous, harmonious, or monochromatic for instance; **Red scheme:** these are colour with red dominating the selection, such as brown, wine, pink, reddish orange. **Green scheme:** these are colour with Green dominating the selection, such as olive green, mint green, torques green.

Yellow scheme: these are colour with yellow dominating the selection, such as yellowship green, yellow ochre, orange. **Blue scheme:** these are colour with yellow dominating the selection, such as sky blue, ultra-marine blue, royal blue and navy blue. **Grey scheme:** these are colour with yellow dominating the selection, such as light grey, grayish-blue-black.

OPPORTUNITIES AHEAD

The expanding youth population according to This Day (2023) 60 percent of Nigeria's total population is under the age of 25 years, making it the youthful country in Africa. Which

Implies that as the demographic continue to grow so too does the demand for consumer goods, service etc. It is also observed that the influence of this young demographic is apparent in the rise of shopping promenades, chain stores across major capitals in Nigeria. According to the National Bureau of Statistics, that in 2020 digital payment in Nigeria was 204.9 billion naira, this figure is anticipated to grow significantly over the years. Also, the Nigeria Interbank Agreement System posits that mobile plutocrat sale increased by 600% in 2020 this by recrimination shows the adding reliance of citizens on digital payment platform technology. Central Bank of Nigeria in addition reported 89.2 million Nigerian citizens use mobile payment system, the payment system are adding and will continue creating request for the future. This is that future and the audience for any visual design product particularly "T Shirts" design.

Means inspired by Opportunities Ahead

The goal is to design and print Nok and Benin cultural heritage "Heads" on T-shirt. It is supported by a survey carried out by a group of National Diploma two students of the Federal Polytechnic Nasarawa. Who observed and took 370 picture samples of designs on T-shirt among students of the same institution. It was gathered that only one out of all the pictures had a Nigeria cultural heritage design on it. As sure the paper is informed by an in-depth, tacit knowledge that cultural heritage figure designs on T-shirt has the potentials of selling and creating awareness locally and gradually gain international recognition as it is the case with the music industry today.

METHODOLOGY

Methods and procedures of this study are presented as follows; selected population, description of instrument and procedures. supported up by survey methodology of a sample from a population.

The technique and process involved in executing the printing of Nok and Benin cultural heritage on T Shirts. The following were used for the work: Sketches, T-shirt, Laptop, application (Corel Draw and Adobe illustrator), Printer, Cutting machine and Heating machine.

Sketches

Are series of preliminary (rough) ideas made on a sketch pad before arriving at an acceptable and appealing design of Nok and Benin Art. Ruler is an important tool used for measuring.

T-Shirt

T-shirt is a style of fabric shirt named after the T shape of its body and sleeves, traditionally; it has short sleeves and a round neckline, known as a crew neck, which lacks a collar. It serves as the platform on which the Nok and Benin Art design was printed upon.

Laptop

The Computer is the main driver of the software (Corel draw, Adobe illustrator) that was used to manipulate and create design of the Nok and Benin Art on T-shirt.

Corel Draw (X7)

Corel draw (X7) is a vector graphics editor developed and marketed by Corel cooperation Ottawa Canada. Design software that is used in processing Photoshop and Corel photo-paint.

Adobe Illustrator

Adobe illustrator is a professional vector based design and drawing program. It is part of design work flow. Illustrator allows for the manipulation of everything, from single design element to entire composition of any design.

Print and Plotting (Cut) Machine

After the manipulation with a computer system in achieving a comprehensive design level, the result is taken for onward production by means of printing. The Print and Plotting (Cut) Machine has the ability to Print on large PVC (poly vinyl chloride) material and cut design out as well.

Heating Machine

A heating machine is regulates and maintains the temperature an acceptable level. it is used to transfer printed design from the PVC to a fabric like T-shirts.

PICTURES SHOWING THE OF THE PROCESS OF CREATING NOK AND BENIN DESIGNS ON TSHIRTS



Plate1: Creating of the designs in the computer using Corel DrawX7
Photograph byGeorge G. Odey (2021



Plate 2: Printing of the designs using the cut and print machine

Photograph by George G. Odey (2021)



Plate 3: Separation of the design from the paper

Photography by George G. Odey (2021)



Plate 4: Cutting out the design and letters before placement on the T-shirt

Photograph by Obi J. Robert (2021)



Plate 5: Cut out of each design

Photograph by Obi J. Robert (2021)



Plate 6: Placing the T-shirt for the heat transfer
Photograph by George G. Odey (2021)



Plate 7: Using the heat transfer machine to transfer the design on T-shirt

Photograph by Obi J. Robert (2021)

Plate 8: Final result of our design on T-shirt

Photograph by Obi J. Robert (2021)



DISCUSSION

The Printing of Nok and Benin Art on T-shirt was inspired after an observation was made concerning designs on "T - shirt" in the school premises and it was discovered that out of the hundreds of designs (from picture evidence) worn by the students of Federal Polytechnic Nasarawa, Only one out of these hundreds of pictures was a traditional related design which was from the Tiv extraction of Benue

State (black and white colour) on the map of African as designed, the team then decided to seek opinion from other students in line with the designing and printing of Nok and Benin cultural Heritage on “T - shirts” to promoting the African Art value and economic empowerment.

CONCLUSION

The paper concludes that designers should pay attention to viability, impending trend and prospects of using historical figures in exploring their visual eloquence on “T shirt”. These historical figures are obtainable and handy in our surroundings and can be sourced or acquired by expanding little resources. Designers should avail them self to training where necessary on state of the art equipment, this will compliment the understanding of element and principles of design and their proper application, which by implication will promote cultural identity, Afro cultural design influence in fashion design tend compliment the Afro Beat culture globally.

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