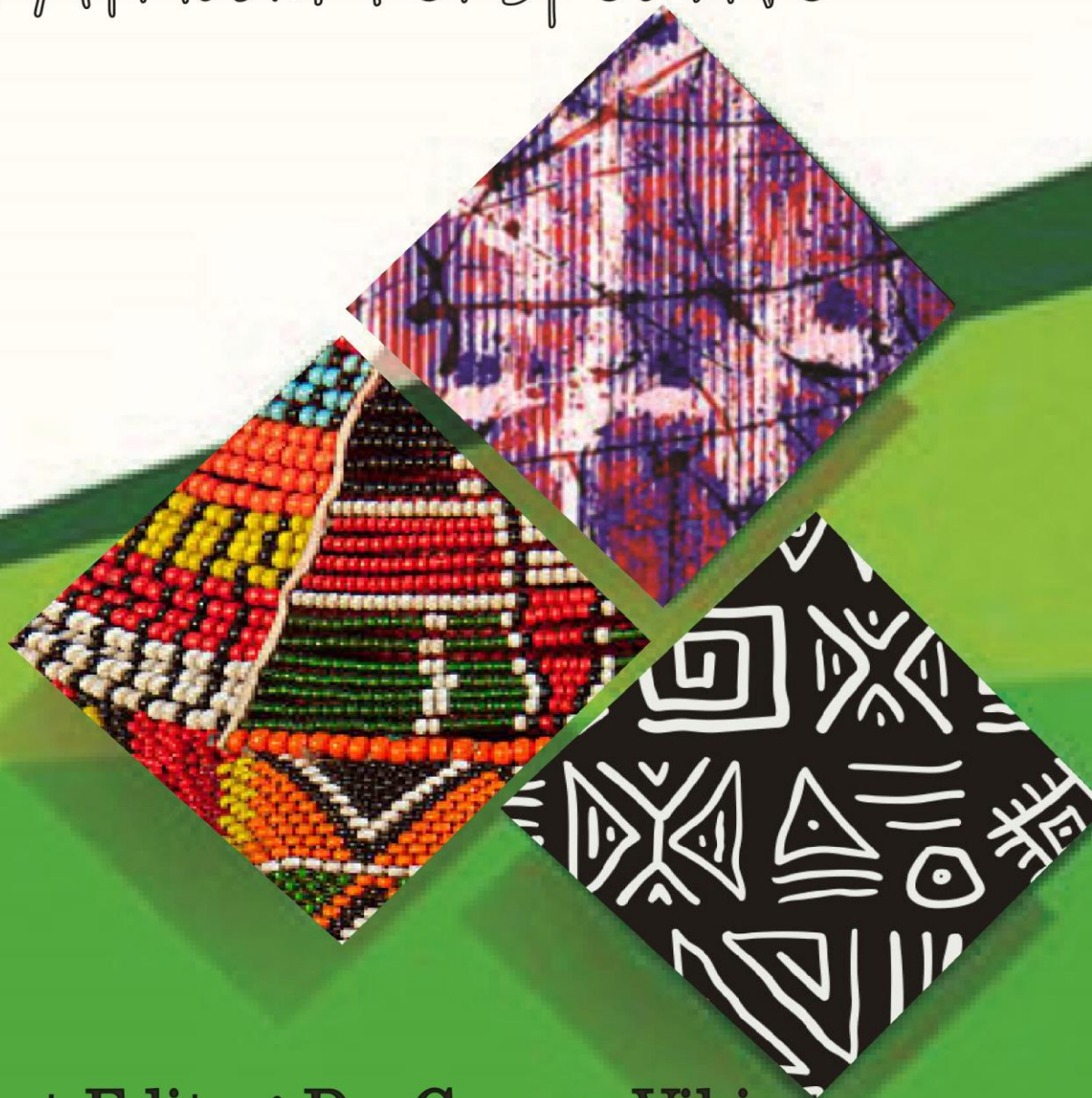


Design for All

Art Research and Practice: An African Perspective



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Guest Editorial



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During the Arts Research Africa Conference in March, 2020, Samuel Ravengai from the University of the Witwatersrand, South Africa, presented a paper that discussed the theory of “Afroscenology.” Afroscenology refers to, *‘the performance practices developed by African practitioners and Africanists, and which respond to the African playing cultures by incorporating their performance traditions, forming work that is unique to Africa and its diaspora.’* (Ravengai, 2020:51)¹.

While presenting the paper, Samuel posed a question, how can Artistic Research offer the opportunity to create knowledge based on African practice and produced from the African context? This publication is in response to that question as it presents a collection of papers on Artistic Research and Practice (ARP) with specific

reference to Africa. The different African countries the papers come from are as far west as Ghana and Nigeria to Kenya in the East.

Since the recovery of the African continent from the restrictions of the 2022 Covid-19 lockdowns, it is worthy to note that there has been a general upsurge of ARP generally in the Global South and Africa in particular. The uptake of ARP in Africa can be placed in different categories: curating as artistic research; creative research in architecture and design; artistic research in the medical humanities; dissemination and archiving of artistic research; performance as research in Art and Design, research through material culture and indigenous performance, the nexus of Art and Science and peer review/assessment of artistic research from postgraduate programs.

This publication presents papers in a few of the said categories. Three papers in the category of research through material culture and indigenous performance: Kéhîndé Adépégba & Abati Oluwaseun Isaac have a paper about Form and Meaning in Yorùbá woodcarvings in Nigeria; Abati Oluwaseun Isaac *et al.*, have written a paper on 'Innovative re-use of Waste Materials in contemporary Nigerian Art,' while Tolulope Oladimeji Sobowale *et al.*, have a paper that discusses 'the use of animals as metaphors in metal sculptures welded by a selected Nigerian artist.'

The publication also has two papers in the Creative Research in Architecture and Design category. These are a paper by Ruth Mwangi *et al.*, who discuss Human Centered Design and Community Based Conservation while Wanyama Ogutu & Mwaura Ndekere reflect on the aesthetic nature of the environment in selected picturesque landscape paintings. Finally, Dr (Mrs.) Faustina Emefa Agordah, *et al.*, have a paper in the category of performance as research in Art and Design.

They discuss Millinery Art skills of a group of fashion design students from Ghana.

The collection of papers in this journal therefore answer the varied nature of "Afroscenology" on the continent.

Enjoy the read.

¹Ravengai, Samuel. (2020). Artistic research in Africa with specific reference to South Africa and Zimbabwe: Formulating the Theory of Afroscenology. 10.17605/OSF.IO/K8V5R.



Kéhinlé Adépégba, PhD *is an artist, art historian, creative writer, and bilingual author. His career has taken him to The Polytechnic Ibadan, Obafemi Awolowo University, Ile-Ife, University of Lagos, Akoka and back to Ile-Ife where he is currently a Ph.D. student in African Art Studies. Kehinde has participated in various joint exhibitions and a solo exhibition on 28 August -11 September 2007 at the National Gallery of Art, Iganmu Lagos. As an art scholar, he has attended many conferences, where he presented papers some of which have been published locally and internationally. He has authored a number of books in Yoruba and English. Some of them include Ogbon Ologbon, Eku Eda (Yoruba plays), Okele Akobu (Yoruba prose), Journey to the city, Under the Orange Tree (children proses) and Contemporary Yoruba Wood Carving (art historical research book), among others. He has written over 50 reviews in exhibition catalogues of Nigerian artists. Kéhinlé Adépégba who lectures at the Department of Art and Industrial Design, Lagos State Polytechnic, Ikorodu, is the current head of the Department. He specializes in Graphics Design and art historical studies on Yoruba art and*

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**FORM AND MEANING IN YORÙBÁ WOODCARVINGS:
A REVIEW OF SELECTED WORKS BY BÍSÍ ỌLÓNÀDÉ
FÁKÈYÈ AND DÈJỌ ÒNÀBỌLÁ FÁKÈYÈ**

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Abstract

Yorùbá traditional woodcarving has existed for immemorial generations, though the perishable nature of woodcarving makes it impossible to ascertain when it started, it is one of the most prominent and profuse art practices of the Yorùbá. They are used majorly to service the pantheon of the Yorùbá gods like ẚàngó, Ògún, Ifá, et cetera, cults like Orò and Ògbóni, and other religion-inclined worships and acts of veneration. It is also used as an architectural support in the palace and the houses of Yorùbá titleholders. This paper examines the form and meaning of selected relief

panels of Bísí Ọlónàdé Fákéyẹ and Dẹjọ Ònàbólá Fákéyẹ of the popular Fákéyẹ family of carvers, with the view of understanding some of the socio-cultural beliefs of the people. Formal and contextual analyses were employed to achieve this objective.

Keywords: *Yorùbá, woodcarving, form and meaning, Bísí Ọlónàdé Fákéyẹ and Dẹjọ Ònàbólá Fákéyẹ*

Introduction

The Yorùbá occupies the Southwestern parts of present-day Nigeria in West Africa. This ethnic group occupies south-western parts of Nigerian and spreads into the eastern parts of the People’s Republic of Benin and Togo and also found in Diasporas beyond the African continent. They are subdivided into distinct groups such as Ègbá, Ìjẹbú, Èkìtì, Ìjẹ̀sà, Ìbàràpá, Ọyó and Àwòrì to mention a few as can be seen in Figure 1.

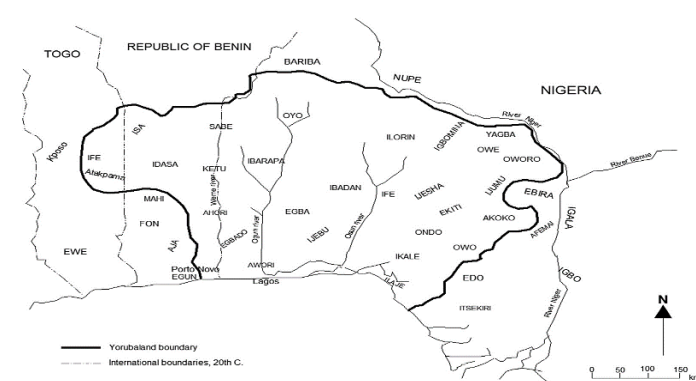


Figure 1: Yorubaland showing major towns and Yorùbá sub-groups in Nigeria, Republic of Benin and Togo.

Source: cambridge.org (July 18, 2020)

The Yoruba rich and composite culture is not in doubt and ranks as one of the best in Africa. As put by Adepegba and Abati (2017), the people's distinct political structure, social structures and

organizations, ways of life in the workplace, religious convictions, artistic expressions, and worldview have all been made clear by their culture. Their religious and temporal contexts are fundamental to this worldview. These two settings have frequently combined to become one, influencing the people's diverse sociocultural customs and creative expression.

The Yorùbá have been recognized in literature as the best and most prolific art-producing people in the south of the-Saharan Africa. Not only in terms of quantity but also in the quality of their creations (Bascom, 1969; Fagg and Pemberton III, 1982; Willett 1993; Lawal 1996, etc.). Regarding Nigeria, Pogoson (1991) asserts that the Yorùbá have a more abundant and diverse creative heritage than any other ethnic group in the country. Pottery, metalworking, woodcarving, beading, and textile design (tie and dye) are among the Yorùbá art forms for which they are well recognized worldwide. Their most widely renowned art practice is woodcarving. Corroborating the above, Adepegba (2007) notes that the art of woodcarving is the most phenomenal of all the Yorùbá art forms going by its impressive scale of production and diversity of expression.

The Yorùbá people inhabit the rainforest regions of Nigeria, where wood is a plentiful supply, and this has a significant impact on their prolific output of woodcarvings. The people's woodcarvings were influenced by their sociocultural and religious beliefs, particularly as expressed in the symbolic depictions of spiritual beings used in acts of reverence and worship. The likeness of a deity or spirit is expressed through Yorùbá woodwork, or woodcarving, as Underwood (1964) highlights. As such, most of the Yorùbá carvers' creations were utilized to serve the densely populated pantheon of the Yorùbá gods (Plate 1). The portrayal of social activities such as palm-wine tappers,

traders, equestrian figures, family life, etc., is another characteristic of Yorùbá woodcarvings. A portion of these representations mirrors the activities and occasions in the society.



Plate 1: A Gèlèdè dancer adorned with a carved and painted wooden headdress in OAU, Ile-Ife in 2005.

Source: Pelu Awofeso

Over time, the Yorùbá artistic tradition has shown dynamism in the face of influential external factors. Okediji (2008) states that the Yorùbá perceive themselves as perpetual pilgrims on a journey and this is reflected in the constant change and transformation of their art forms. Therefore, as affirmed by Adepegba and Abati (2017), due to contact of the Yorùbá nation with agents of Westernisation like education, Christianity, travelling, colonisation, new technology, etc. their woodcarving art has changed and is now referred to as neo-traditional woodcarving.

Though the contemporary Yorùbá woodcarving did not start where traditional Yorùbá woodcarving ends a transformation (and continuity) of the former has taken place. This change began in the early 19th century. Adepegba (1995) informs that the 19th and 20th Centuries have brought immense changes to the African life. Before

interaction with the compulsive agents of westernization, the shapes inherent in traditional African art transformed; as a result, new styles that followed European proportions and norms became the norm. New standards and criteria for creating artworks, new boundaries for assessing them, and new venues for artwork sales are offered since art was taught in walled schools instead of the old apprenticeship system. Formats of executing artworks also changed and this also affects the visual language of our art (Adepegba and Abati, 2017).

One of the events that reshaped Yorùbá woodcarving was the Oye-Èkìtì workshop, conducted by Father Kelvin Carroll and O'Mahoney and organized by the Catholic mission in 1947. Some Yorùbá carvers at the workshop created Christian themes using customary styles. Lamidi Fakeye was among the artists created by the workshop (Carroll, 1969). Adepegba (2005) states that the workshop's carvers created a number of door panels, house posts, and independent figures for use in religious organizations, private collections, and institutes of higher learning (Plate 2).



Plate 2: Baptismal font showing the Rising Christ by George Bamidele in 1985, a product of Oye-Ekiti experiment.

Source: Frank Willet (1971).

Although there are differences in the sub-regional Yorùbá woodcarving styles— Èkìtì, Ọyó, Abẹ̀òkúta, Lagos, and Kétu, to name a few—there is a common canon that sets Yorùbá carvings apart from other types of carvings from other places. This covers the unusual interpretation of hairstyles, costumes – *bàntẹ́ẹ́* (waist pant), *bùbá* (top) and *sòkòtò* (trousers), etc, line textures and patterns, and other details.

In addition, the representation of pieced eye pupils, nasal and aural channels, facial features, and the figure's 1:4 head-to-body ratio are all shared denominators. It is noteworthy that each artist's work may be identified, without signature, based on his or her unique style of carving.

The Yorùbá neo-traditional carvers: Bísí Ọlónàdé Fákéyẹ and Dẹ̀jọ Ònàbọ́lá Fákéyẹ¹, who were artists from Ìlá-òràngún town of the Ìgbómìnà sub-region produced works for religious, architectural, and other contemporary purposes. Some of their works are rich visual documentation of socio-cultural and political events and narratives of their times. This paper examines the form and meaning of selected relief panels by Bísí Fákéyẹ and Dẹ̀jọ Fákéyẹ with the view of understanding the socio-cultural beliefs of the Yorùbá.

Literature Review

The Literature review for this paper involved biographies and works by Bísí Ọlónàdé Fákéyẹ and Dẹ̀jọ Ònàbọ́lá Fákéyẹ. These are presented in the following sections.

¹ *Bísí Ọlónàdé Fákéyẹ and Dẹ̀jọ Ònàbọ́lá Fákéyẹ will also be referred to (for short) respectively as Bísí Fákéyẹ and Dẹ̀jọ Fákéyẹ sometimes in the paper.*

i. Bísí Ọlónàdé Fákéyẹ

Neo-traditionalist Bísí Ọlónàdé Fákéyẹ was born in 1942 into the well-known Ìlá-òràngún, Osun State, woodcarver family. At the young age of seven, he began a lengthy woodcarving apprenticeship with his father, then with his uncle Lámídì Fákéyẹ. He completed his teacher training in 1962 after attending Ife Divisional Teacher Training School following his contemporary school. Soon afterward, he decided to take up woodcarving for evidently private reasons. Later, in 1968, he relocated to Lagos.



Plate 3: Bísí Fákéyẹ at work in the late 1970s.

Source: Bísí Fákéyẹ (2005).

Following his contacts with academically trained painters in Lagos, he started incorporating modernist inclinations into his artwork². In order to appease his patrons, some of whom are elites and

² *Personal communication with Bísí Fákéyẹ in his Studio, June 2006.*

expatriates, he purposefully adopted the new mindset that followed Nigerian independence and FESTAC 1977.

This had an impact on his works (Adepegba, 2007; Adepegba and Abati, 2017). He was a member of the Universal Studios of Art where he worked for many years until his death. He exhibited widely, and his works grace the walls of many public and private spaces, including churches and government buildings. On October 8, 2017, he passed away to join his ancestors.

ii. Dẹ̀jọ̀ Ònàbọ́lá Fákéyẹ̀

Dẹ̀jọ̀ Ònàbọ́lá Fákéyẹ̀ was a member of the same Fákéyẹ̀ family and was born in Ìlá-òràngún, Osun state, Nigeria. His birthday is April 24, 1941³. From a young age, he demonstrated his artistic penchant. Like other young boys, Dẹ̀jọ̀ Fákéyẹ̀ started carving under his father's tutelage as early as age 8. Dẹ̀jọ̀ Fákéyẹ̀ completed his elementary education in 1959 and his modern education in 1960–1961, both with success. His exposure to Western schooling expanded his perceptions.

However, he turned his attention to carving full-time in 1962. Since then, there has been a constant demand for his carvings in Nigeria and beyond. Dẹ̀jọ̀ Fákéyẹ̀ decided to work with his uncle Làmídì Fákéyẹ̀ when he returned from his educational travels to France, America, and Japan. He rapidly assimilated the novel methods and concepts that his uncle had learned while studying overseas (Fakeye Dejo Onabolu's Facebook, 2024). His artwork is displayed in

³ Though some references states 1945 as his date of birth, but the date above was credited to the Facebook account of carver: Fakeye Dejo Onabolu.

numerous public and private spaces domestically and outside Nigeria. He has participated in multiple exhibitions.



Plate 4: Dèjọ Fákéyẹ posing with his work probably in the early years of his career.

Source: Dejo Fakeye Facebook (2024).

There are several connections between the two artists. Their father and their uncle Lámídì Fákéyẹ trained them both, and they are both the sons of David Adéòşun, who was also a skilled carver (Plate 5).

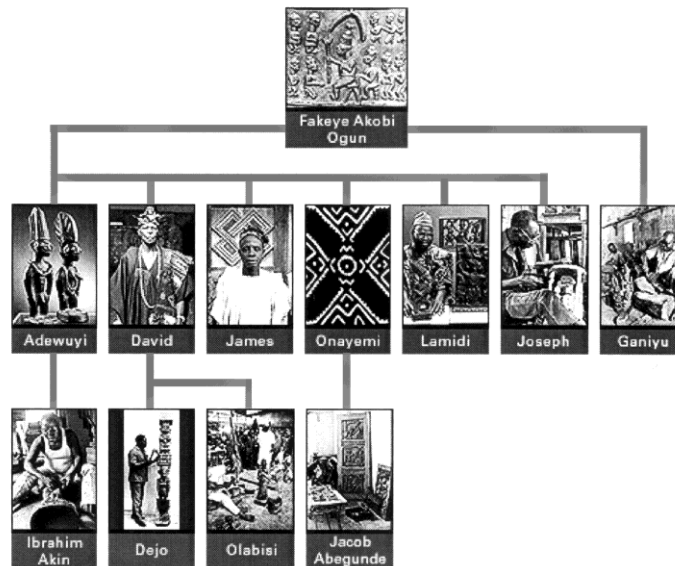


Plate 5: The 4th and 6th generations of the Fákéyẹ family of carvers.

Source: www.mnh.si.edu (2005).

Làmídì Fákéyẹ, who was impacted by the Èkìtì sub-style, contributed to the two musicians' success. As indicated in the plate, in Yorùbá woodcarving, Bísí Fákéyẹ and Dẹ̀jọ Fákéyẹ belonged to the sixth generation, which balanced traditional and modern periods. The analysis will demonstrate how similar the chosen works are to one another.

Analysis of the selected works of Bísí Ọlónàdé Fákéyẹ and Dẹ̀jọ Ọ̀nàbọ́lá Fákéyẹ

i. Bísí Ọlónàdé Fákéyẹ's works

Plate 6 (below) titled *Triumphant Warrior*, is one of the carvings by Bísí Fákéyẹ. It is a depiction of a Yorùbá warrior on a horse in a journey back home after a war. The year of execution of the work is not known but it is considered to be in the early 1970s giving the forms inherent on the works, which are equivalent to those produced in the early stages of his career.



Plate 6: *Triumphant Warrior* by Bísí Fákéyẹ. Wood. Size: 12 x 24 x 1 in. (30.48 x 60.96 x 2.54 cm).

Courtesy of David Owsley Museum of Art at Ball State University, USA (2022).

The work (above) reveals the warrior's triumphant entry after victory at war. The victorious war lord is dressed in the paraphernalia of power, which includes, a war tunic, usually attached with charms); an *idà* (sword) hanging around his neck, a *şakabùlà* (short native gun) in the left hand, and a staff of office in the right hand.

The warrior's horse is decorated with a garland of victory led by a servant guide. At the extreme left, the trumpeter-blower who apparently was part of the war, sings praise of the victorious warrior while carrying the booty of war on his head. The heroic song usually sang by musical attendants may include this common song:

Káàbò o, káàbò / Welcome, welcome

Ọmọ abíle sòrò, / The son of the one who speaks to the earth

Ọmọ abíle sòrò / The son of the one who speaks to the earth

Kílẹ lanu, káàbò / And the earth opens up, welcome.⁴

The figure on the right is a prisoner of war tied to the horse with a chain, with another booty on his head. The form as described shows a social perspective whereby the horse-rider warrior is rendered to be bigger than other figures, especially the head proportion, aside from being exalted on a horse. The emblem of power, control, and influence is his staff of office, sword and the short gun.

The figure that is smaller than this by size is the trumpet-blower depicted as decently dressed with a cap on his head, unlike other

⁴ *It is believed that great warriors are capable of doing great things including commanding the earth to open up.*

smaller figures, which are prisoners of war and horse guide with scanty dresses. This emphasizes the importance of dress as a symbol of honour, class and status among the people. Thus they say: *iríni sí ni ìṣọni lójò* (your appearance determines how you are honoured).

The act of war and the glamour associated with victory after war are also here depicted. Apart from glamour, which is visual, the work shows the physical booties of war on the head of the trumpet-blower in the picture. The picture of chains depicts captivity over enemies and the postures of the slaves are signs of their helplessness and capitulation in the presence of a victorious warrior. The stretched hands of the gallant warrior reveal his imposing reins of supremacy. For victors who are eulogies for success as *ó kẹru, ó kẹrù* (the one who captures the slaves as well as the spoils) are equally appraised with songs such as:

Jagun jagun ló ñ bọ/ Behold the arrival of the warrior

Jagun jagun ló ñ bọ/ Behold the warrior

Olórí ogun kò gbọdọ kẹyìn ogun /The warrior must not be found wanting

Jagun jagun ló ñ bọ. / Behold the arrival of the warrior.

The second artwork to by Bísí Fákéyẹ to be discussed is *Offerings to Priest* (Plate 7 (below).) It shows a priest attending to two kneeling women who come with thanksgiving offerings inside calabashes or bowls in appreciation of the gift of children from the gods.



Plate 7: *Offerings to Priest* by Bísí Fákéyẹ. Wood. Size: 12 x 18 x 1 in. (30.48 x 45.72 x 2.54 cm).

Courtesy of David Owsley Museum of Art at Ball State University, USA (2022).

The priest holds two staffs of office in both hands. The one on the left shows the image of a bird, which is the symbol of the spiritual presence of the *àjẹ* or *ẹlẹyẹ* (powerful mothers) believed to be capable of flying as birds in the night. Hence they are referred to as *olókìkì òru* (vocal birds of the night). Such typically use of birds represent the ever-present mothers as *aşe-búburú-şe rere* (ambivalent beings) to guarantee orderliness and harmony in the society (Adepegba, 2024). On a second look, the women are poised to collect medicine from the priest to be able to nurse their children to adulthood.

The work by Bísí Fákéyẹ reveals the belief of the Yorùbá in the priest as the intermediary between man and the gods and as a bringer of goodness from the spiritual realm by proffering solutions to human numerous problems. There are beautiful kneeling women on the right and left sides of the benevolent priest. The two objects held by the priest are symbols of the priest's authority. The kneeling women are showing attitudes of appreciation of his continuous interventions in making them mothers. Their new babies are strapped to their backs as evidence of the blessings. Their firm breasts, bead necklaces,

hairdos, and dresses portray the beauty and elegance of the two new mothers. All of these show they are in their prime and productive age and must not stop bringing forth children for perpetuate their family lineages.

As they bring offerings of thanksgiving, they are there to receive the blessing of the priest for protection over their children. As the people will always say: *yinni yinni, kèni lè ẹ̀ mîn* (repeated thanks to the benefactor, engender more benefits). As mentioned earlier the staff on the left hand of the priest is atop with a bird, which is an insignia of the presence of the *ẹ̀lẹ̀yẹ̀* who help to nurse and protect the children. The priest wears a small gourd containing powder charm round his neck, which shows his readiness to proffer medicinal care and his *bàntẹ̀ẹ̀* (short waist pant) is a sign of possession of *àṣẹ̀* (vital forces) to repel evils and overcome attacks.

ii. Dẹ̀jọ̀ Ònàbọ̀lá Fákéyẹ̀'s works

The work in Plate 8 depicts a polygamous warrior armed with a short gun and cutlass in preparation for war.



Plate 8: *Warrior with wives* by Dẹ̀jọ̀ Fákéyẹ̀. Wood. Size: 12 x 24 x 1 in. (30.48 x 60.96 x 2.54 cm).

Courtesy of David Owsley Museum of Art at Ball State University, USA (2022).

The women (his wives) on the right and left are paying obeisance to him while presenting calabashes of medicine for him to perform the last sets of rituals before setting out to war. The other woman is probably the last wife queuing up for her turn.

The form is a narrative of the polygamous nature of warriors among the Yorùbá. This is sometimes as a result of converting previous female prisoners of war into wives. The warrior in this case is armed with the paraphernalia of war and must receive the blessing of his wives. Women are beings whose love and blessings must be sought during this kind of situation. The dress culture of the Yorùbá is revealed in the warrior whose smart but full clothing is decorated with charms showing how poised he is for the battle ahead. Oríkì (praise chants) for such warrior is: *A tó fiṣé ogun rán, ọ wo kẹ̀mbẹ̀ rebi ijà* (the one that is worthy of being sent to war, the one who wears big casual shorts to a fighting ring).

Likewise, the women behind the warriors are supportive as they are involved with pre-war rituals. Sometimes they are continue to hold forth in performing some rituals at home until the warrior returns. This underscores the cooperation and harmony among the warrior's wives who must not let out the secrets of the husband's success. The position of the warrior as a husband is also symbolised by his ability to make his wives show obeisance and respect to him as their olúwa àtí olówó-orí-ọ̀kọ (lord and breadwinner).

The second artwork by Dejo Fakeye for discussion is *Kings offers forgiveness* (Plate 9 (below)) It is the depiction of a Yorùbá ọ̀ba (king) seated on his throne and placing his feet on a decorative stool.



**Plate 9: Kings offers forgiveness by Dejo Fakeye.
Wood. Size: 12 x 18 x 1 in. (30.48 x 45.72 x 2.54 cm).**

Courtesy of David Owsley Museum of Art at Ball State University, USA (2022).

He holds in his right hand an *irùkèrè* (horse whisk), the symbol of his authority, serving here as a gesture of greetings to the kneeling woman. His left hand is placed on the clasped hands of the kneeling woman that are stretched towards the king. The clasped hands represent a request for forgiveness, which the king obliges. The other figure is a servant who ensures that the king is comfortable as suggested by the hand-fan held in his right hand.

This work reveals the majesty of the Oba as '*aláṣẹ-ìkeji-òrìṣà*' (second in command to the gods). Thus they say in a popular song:

Kí lẹ̀ n fọba pẹ? /What do you take the king for?

Ọba ò / Oh king

Ọba aláṣẹ ọba / the king that wields absolute authority

Ọba / the king.

He is occupying an exalted position on a decorative throne of his ancestors and gorgeously dressed in a sitting position resting his two feet on a decorated stool. The kneeling woman is probably his wife

and this relates further to the relationship between the king (though exalted) and his wife or subject. There is an eye contact between the Oba and the kneeling woman.

The above highlights the principle of *ojú lẹ̀rọ̀ wà* (effectiveness of a word is guaranteed by the gaze on the speaker). While the Oba is on his comfort pedestal, he is expected to grant peace to his wife or subject by forgiving those who ask for forgiveness, after all, *tí ẹ̀lẹ́jọ́ bá mọ ẹ́jọ́ rẹ̀ lẹ́bi, kò ní pẹ̀ lórí ìkúnlẹ̀* (if the guilty knows it, he will not kneel for too long). The beauty of Yorùbá dress culture is projected by the richness of the figures' dresses as rendered by the artist.

Conclusion

The form and meaning of the selected works have been discussed and this has revealed the fact that African artists especially the Yorùbá have deep-seated visual context that reveals their belief systems, socio-cultural traditions, and lifestyles. The artists among the Yorùbá reflect the happenings and events in society and they try to narrate these to serve the purpose of visual documentation, information, and decoration. Bisi and Dejo Fakeye though contemporary artists are seen to have kept the Yorùbá culture and tradition alive with their works.

References

- Adepegba, Cornelius O., (1995), Nigerian Art. Ibadan: Jodad Publishers***
- Adepegba, Kehinde (2024), "Iba fun Obinrin: Monochromatic Mythography of Yoruba Female Power" in Methodology, Ideology and Pedagogy od African Art-Primitive to Metamodern (Ed) Okediji, M. USA: Taylor & Francis. Pp 113-130.***
- Adepegba Kehinde, (2007) Contemporary Yorùbá Woodcarving, Lagos: Aramanda Creations.***
- Adepegba, K. & Abati, O. I. "Yorùbá Wood Carving: New Characteristics New Uses" Journal of Humanities and Cultural Studies, Vol 2, (2017). ISSN 254-5540.***
- Bascom, Willians R., (1969) The Yorùbá of South Western Nigeria, New York: Holt, Rinehart and Winston.***
- Caroll Karrol, (1967) Yorùbá Religious Carvings, London: Godfrey Chapman.***
- Fagg W. (1982) Yorùbá Sculpture of West Africa, (New York: Alfred A. Knopf,).***
- Lawal, B. (1996). Gelede Spectacle: Art, Gender and Social Harmony in an African Culture, Seattle and London: University of Washington Press.***
- Okediji, M., (2014) Yorùbá Cultural Studies, www.universityofafricanart.org an Art Press Co. retrieved 12/31/2014.***

Pogoson, O. (1991) "The Esie Stone Carving in the Art History of Southwestern Nigeria" African Notes, Vol 15. No 1&2.

Underwood, L., (1964) Figures in Wood, London: Alec Tiranti Ltd.

Willet, F. (1993) African Art, An Introduction, Longman: Thames and Hudson.

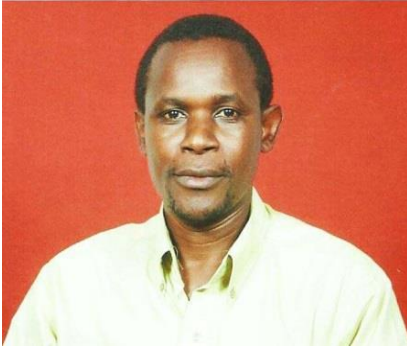
Bisi Fakeye, Personal communication, June 2006



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HUMAN CENTERED DESIGN AND COMMUNITY BASED CONSERVATION IN KENYA

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Abstract

Community based conservation (CBC) is part of the ongoing restructuring of land-use patterns driven by ideals of global environmental governance. Community-based conservation (CBC) is grounded on the concept of conservation of biodiversity with the community. It has been controversial because community development objectives are not necessarily consistent with conservation objectives in a given case. Conservation managers had to comprehend the need for engagement with local people, who commonly are hostile to wildlife conservation, to change their attitude for improved success of conservation programs. This is certainly true

in Africa, where rural inhabitants often view wildlife conservation as misguided because it puts the needs of wildlife above those of people. The researcher used case study approach of two community based conservancies in Northern and Southern Kenya to apply HCD to increase participation in biodiversity conservation. The study proposes Human Centred Design (HCD) as an alternative approach to conservation programs toward the inclusion of humans in the ecosystem, use of participatory approaches to natural resource management that evolves an understanding of ecosystems as fabric in which humans play a central part. Human Centred Design (HCD) has the potential of generating a valid conservation process, involving members as stakeholders in meeting their fundamental needs and expectations to overcome their social challenges and increase engagement by reducing conflicts arising from resource use restrictions.

Key Words: *Community based conservation, Human Centred Design, wildlife conservation, participation.*

Introduction

Increasing pressure to improve conservation outcomes of biodiversity with communities has prompted an emphasis on innovation. Design thinking has been proposed as a systematic approach to innovation in social issues, owing to its human-centered methodology that emphasizes compassion for the end-users. Therefore, a better understanding of the problem is developed for effective solutions. A key feature of design thinking is stakeholder participation.

Globally, public participation is viewed as a common phenomenon of environmental decision making in forestry, wildlife or water management and conservation. Participatory approaches occurred after a move in management from top down approach to bottom up discussion and involvement of stakeholders. This approach is will strengthen the sincerity of decisions in a transparent and trustworthy practice.

Creation of wildlife conservancy alters the rights of control, use and access of natural resources resulting into conflict with the community (Greiner, 2012). Community participation is considered an effective measure to protect the eco-environment and to improve people's livelihoods in protected areas. Rising debate as to the attention provided at a practical level in most developing countries is unclear on the impact of stimulating individuals towards achieving conservation goals. "Community conservation" is gaining ground over "fortress conservation" with many authors citing the advantages of empowering local people to enhance their potential as protectors of natural resources, creating a sustainable development for present and future generations (Lopez-Bao, Chapron, & Treves, 2017) (Kotharia, Camil, & J., 2013). The real challenge is whether participatory approach is successful in protecting biodiversity, how will non-participants benefit from conservation outcomes. Conservation needs to be participatory in nature.

International Union for Conservation of Nature: Sustainable Use and Livelihoods Specialist Group (IUCN SULi) emphasizes the need for a global cohesion to influence the community towards wildlife and habitat management. Community-based conservation (CBC) is an approach to biodiversity conservation in protected areas (PA) through participation at all levels with local communities.

Human Centred Design (HCD)

Resolution in biodiversity conservation, away from exclusive protected areas towards more people-centered or community-based conservation. This has been referred to as 'new conservation'. Human Centered Design (HCD) is a methodology that places the user at the core of design process. Explore user's needs, behaviors and experiences to create effective solutions to societal issues and challenges (Foundation, 2023). HCD works with four principles to solve societal challenges as described in the figure below:

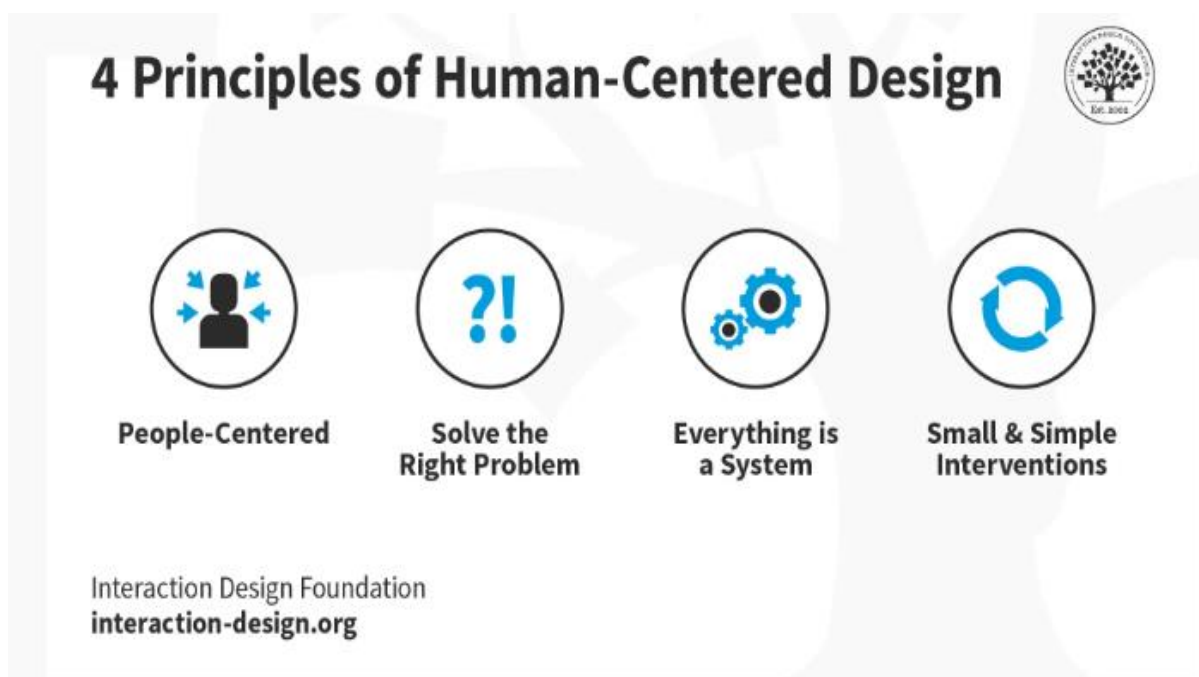


Figure 1. Principles of Human Centred Design

(Source: <https://www.interaction-design.org/literature/topics/human-centered-design>)

The description of Figure 1 is as follows:

People: focus on the people and design for the people.

Problems: understand and empathize the problems facing the community and collaborate with them to create a solution.

Create systems: society works in a framework where everything is interrelated.

Prototype: create solutions with the stakeholders and utilize community knowledge of indigenous systems.

As indicated in Figure 1, the first challenge for people-centred conservation concerns the ways in which different understandings, meanings and values of biodiversity, the environment and nature are integrated and applied in devising conservation priorities and action

The second challenge for real people-oriented conservation is to find fair and just means of including the plural values, knowledge and interests of the different stakeholders recognized above. In order to do this, we need to move beyond 'participation' as practiced normally in attempts to integrate conservation and development. Many forms of participation practiced are still passive and sometimes even coercive, and a number of recent publications have criticized and dissected the application of participation in conservation projects. We need to apply methods and tools for deliberative inclusionary processes that radically transform decision-making and management processes and open up co-management frameworks to allow for learning and collective action.

'Deliberation' means careful consideration or discussion. Decision-making and planning thus require social interaction and debate.

Deliberation implies that different positions of stakeholders are recognized and respected. Participants are expected to reflect on and evaluate and re-evaluate their and others' positions, and the process of deliberation aims to bring about some kind of transformation of values or preferences and to foster negotiation between participants in order to reach a decision. 'Inclusion' is the action of including different participants in these processes.

In conclusion, the policy and institutional landscape of conservation and development is rapidly and quite significantly changed and changing. A wide range of different strategies and approaches will be necessary in the future to reconcile and trade-off the needs and demands of global to local societies. These will include traditional protected areas, but increasing more integrated and people-centered approaches to biodiversity conservation.

Community Based Conservation (CBC)

Community Based Conservation (CBC) refers to wildlife conservation efforts that involve rural people as an integral part of a wildlife conservation policy. The key elements of such programs are that local communities participate in resource planning and management and that they gain economically from wildlife utilization. In part, CBC is seen as an alternative to the more exclusionary protectionist policies of the past, which often alienated rural people from conservation efforts. The new approach has been variously called 'community conservation', 'community wildlife management' and 'community based natural resource management', although it has been suggested that the first two of these descriptions should apply to protected areas, and the remaining one reserved for forest management, watershed protection. The approach is underpinned and informed by

the notion of participation and participatory development, and parallels a fundamental shift in development thinking.

The complexity of such interactions relies on the fact that triggering events and the social-ecological context influence people's individual and collective environmental behavior. Triggers of local people's engagement in both conservation projects and traditional management practices can consist of contextual conditions of a different nature and external to the communities, such as environmental degradation and situations of conflicts and disasters. Drivers can also include financial mechanisms and policy instruments to enhance community-based conservation. For instance, new market opportunities related to performing conservation activities can provide communities with economic incentives to guarantee the provision of certain ecosystem services, and state regulatory frameworks incentivizing the development of sustainable resource management can also lead to enhanced biodiversity conservation (Seixas and Davy 2008).

Local people's involvement in community-based conservation supported by external institutions can result from shared visions between communities and external actors about how to improve natural resource management for the benefit of local people (Schwartzman and Zimmerman 2005). Strong partnerships can act as catalysts and promoters of conservation by reinforcing local leadership and cohesiveness and often providing capacity building and funding to communities (Berkes and Seixas 2004, Seixas and Davy 2008, Shukla and Sinclair 2010). The encouragement of local people to participate in institutionalized conservation practices can also come from intrinsic motivations beyond economic incentives. A

collective sense of autonomy leading people to gain access to natural resources, decision.

If communities embrace wildlife conservation because of tourism and the benefits accrued from conservation programs, they may discard it if a better alternative crosses their path. Community based conservation seek to improve the relationship between people and wildlife and there is need for conservation programs to improve the livelihoods of the stakeholders.

Wildlife conservation

Wildlife conservation is the practice of protecting plant and animal species and their habitats. As part of the world's ecosystems, wildlife provides balance and stability to nature's processes. The current state of biodiversity conservation is largely the result of sociocultural systems that have emerged in adaptation to the environment. Factors such as increased wildlife population, human population, climate change, change of land use patterns and pollution and threatening the framework and survival of wildlife.

The role of humans in wildlife conservation is widely evident and recognized (Cortés-Avizanda et al. 2018), and insights from social science are increasingly used to describe interactions and relationships between humans, wildlife, and ecosystems. One aspect of wildlife conservation frequently discussed from a social science standpoint is the social dimensions of human-wildlife relationships. Interactions between humans and wildlife are often described in terms of conflict and coexistence. Protection of natural resources is often difficult due to persistent gaps in ecological data and complex conflicts between wildlife conservation and human livelihoods.

Conservation success (or failure) in many developing countries is often linked to human-wildlife interactions, which impact biodiversity and human populations in both positive and negative ways. Innovative solutions are needed to identify sources of conflict and promote coexistence between humans and wildlife.

Methodology

Study context

The researcher conducted research amongst the Maasai community who are pastoralists by nature. The case study was analyzed between Northern Kenya and Southern Kenya. In Northern Kenya the data was collected from Lekurruki community conservancy and in Southern Kenya data was collected from Mbirikani Group Ranch (MGR).

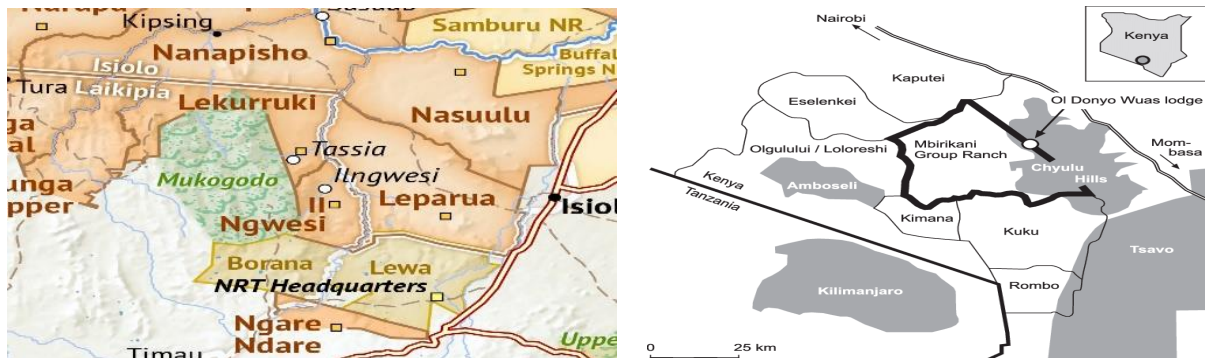


Figure 2. Location of Lekurruki and Mbirikani Group ranch

(Source: Research gate)

Data Collection

The researcher visited the community and collected data through observation, structured interviews and focus group discussions. The

study used surveys with local villagers to characterize the current state of community conservation participation in the area. Structured questions, created based on focus groups with local leaders in 2022, highlighted two key issues motivating community engagement in the region: tourism and culture. These issues, along with the broader goal of overall forest conservation, became the focus of the larger data collection effort, and camera, notebook, recorder and stationery were the tools that enhanced the data collection method.

Data analysis

Qualitative data were analyzed using a combination of grounded theory and social constructivism approach method to identify important themes that emerged during the interview conversations. The coding effort was driven by the researcher who conducted the field interviews and interacted extensively with the participants over a long period to understand nature and culture.

Few limitations were noted that are worth to mention language barrier was key and it necessitated use of a translator, way of life of the Maasai community needed research to be conducted after day's activities were over.

Results

Community Based Conservation

The Maasai community were thriving with wildlife since time in memorial and integrated it as a way of life. The two case studies had a local name Ekireketa Ingwesi which means to care for. The interviews were conducted between community leaders and members with a good proportion of 50% women involvement and 50% men

involvement in the interview guides. On the issue of herbivores or carnivorous which is esteemed highest by the members they cited both species play their role in the ecosystem and food chain hence the need to conserve both.

Tourism was a motivator for community participation in conservation programs since it brought revenues to the members. Challenge experienced, at the time, was covid 19 pandemic that reduced tourism in the area hence reduced income to the community and reduced income generation. The cultural boma Osirum at Mbirikani Group Ranch had widows who settled there permanently cited loss with the pandemic. In a year one lady cited she sold two beaded accessories for 6,000Ksh (USD 47) which couldn't sustain her household. The second lady, an aged woman in her 60s, participated through dance and showcasing of traditional attire informed us of a challenge due to lack of fees for her granddaughter since tourism was low.

According to Ogada (2019), tourism can be affected by many factors and conservation managers should view it as a variable that is dependent on community impact and not as a primary user of conservation. Another opinion raised by this author is "the misconception spread amongst the communities that makes them perceive donor-funded projects and developments as "benefits of conservation" rather than finite subsidies (Ogada, 2019).

Community participation

Passive participation was implied as a way of active participation by members. Data collected was grouped into two: women and children and men.

<i>Participation by:</i>	<i>Conservation projects</i>	<i>Meetings</i>	<i>Leadership</i>	<i>Awareness</i>
<i>Women and children</i>	<i>Minimal</i>	<i>Minimal</i>	<i>Minimal</i>	<i>Minimal</i>
<i>Men</i>	<i>Active</i>	<i>Active</i>	<i>Active</i>	<i>Active</i>

Women and children by culture are to be passive participants as the men lead. Children below 18 years do not participate in any way until inducted into adulthood. Rangers employed at the site at Lekurruki Conservancy are 33 in total with 30 males and 3 females. Leadership at the Lodge has 2/3 male representation and 1/3 female representation.

Annual meetings are held to discuss matters in the community and to be informed of conservation projects for development. Compensation meetings for example at MGR the men own the livestock hence attend the meetings vigorously, women do not own the livestock therefore minimizing their attendance in the forum. General Barazas (meetings) held every quarter had both genders attending the meetings. The interview guides had a question on: Do you speak at the meetings and half (5/10) women selected (often, rarely) rarely as an option.

Design with Human Centered Approach

The researcher held a focus group discussion with the community members and called upon prioritizing of issues in their day to day activities. The problems that arose were lack of infrastructure i.e. roads, electricity and tapped water. Insecurity due to livestock raiding with neighboring communities. Minimal compensation for loss of crop,

life and livestock attacks. Reduced income generation from tourism after the 2020 Covid pandemic.

The researcher introduced design to the members of the focus group and the following proposal were discussed:

Societal Issue	Human Centered Design solution
<p>Lack of basic infrastructure: reliance on donor funding</p>	<p>Human capital is a resource and the youth could be engaged in constructing pathways with basic tools not just as security personnel</p> <p>Bottom up approaches to community meetings since they receive annual revenues i.e money from carbon foot print they can channel to development of water and roads</p> <p>Involve county government in their operations so that they can provide machinery for road construction and piped water</p>
<p>Ethnographical disparities: women, children, men.</p>	<p>Annual meetings to be divided into men, women and children to achieve active participation by members</p> <p>Story- telling to be adopted in cultural bomas and lodges to create characters and heroes in the community and among childrens minds with an aim of cultural day that can be a calendar event</p> <p>Beadwork that visualizes the endangered species in the area hence having flagship species in Northern and Southern Kenya</p> <p>Diversification of projects i.e. Northern Kenya have bought youth motor bikes for enhanced transportation with tourism revenues</p>

Conclusion

The following are conclusions of the study:

First, inclusion of all relevant actors necessitates a very thorough and rigorous analysis of stakeholders: it requires that many different techniques are used to encourage people to participate and to articulate their views. Design justice as a framework recognizes the universality of design as a human activity hence the philosophy of nothing about us without us. Human centred design plays a vital role in inducting stakeholders who are community members from the decision making, planning and implementation of conservation projects. This will be measured by reduced conflict in the zones since projects are community driven. Government, Non- government organizations partnering with community members in their projects. In the words of Ogada 2019 “the inclusion of local communities as intellectual participants in conservation”.

Secondly, building trust in the process and between different stakeholders takes time but is vital for the success of both process and outcome. Participants have to be confident that their views are heard and noticed, and decision-making and priority setting have to be transparent and accountable. Human centered design is pegged on the principles of : define, experiment, test and implement these will make the process transparent and acceptable by most community participants.

Thirdly participation is adaptive and learning process. Consensus and agreement is not an end-point nor necessarily desirable. Participatory approach is an approach in HCD that incorporates the community heritage and traditional knowledge necessary for dealing with

conflicts and disagreements that do not impose 'consensus' on the user.

References

- Adams, W.M. & Hulme, D. (2001) *If community conservation is the answer in Africa, what is the question? Oryx, 35, 193–200***
- AWF. (2019, August). *www.awf.org*. Retrieved August 19, 2020, from Kenya/Africa wildlife foundation: <https://www.awf.org/country/kenya>**
- Bar-tal, D., & Staub, E. (2013). *Patriotism: It's scope and meaning. Research Gate, 3.***
- Dellios, A. (2019). *Community expectations and capturing community values in conservation management plans. Historic Environment, 65.***
- Godfrey, K. (2016). *Approaches to Community-based Conservation in Kenya: Case Studies from Amboseli, Maasai Mara, and Laikipia. Unpublished undergraduate research paper.***
- Greiner, C. (2012). *Unexpected consequences: Wildlife conservation and Territorial conflict in Northern Kenya. Human Ecology, 2.***
- Halakhe, A. (2017). *The ugly truth about wildlife conservation in Kenya. Kenya: Al Jazeera.***
- Hebinck, P., Kiaka, R. D., & Lubilo, R. (2019). *Navigating community conservancies and institutional complexities in Namibia. Routledge, Taylor & Francis Group, 64-77.***



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Innovative Reuse of Waste Materials in Contemporary Nigerian Art: Examining Techniques, Styles, and Compositional Contents in the Upcycled Artworks of Balogun, Popoola, Adenle, and Tejuoso

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Abstract

This paper explores the innovative reuse of waste materials in contemporary Nigerian art, focusing on the upcycled artworks of Adeola Balogun, Dotun Popoola, John Adenle, and Lanrewaju Tejuoso. Upcycling, a creative process that transforms discarded materials into valuable art pieces, is a powerful commentary on consumerism, waste, and environmental sustainability. The selected Nigerian artists employ unique techniques and styles, infusing their cultural heritage into their works while addressing critical environmental issues. This

paper comprehensively analyses their artistic practices, examining their upcycled artworks' techniques, styles, and compositional contents. Through a qualitative analysis, the study highlights how these artists repurpose everyday waste into visually compelling and meaningful art, contributing to the broader discourse on sustainability and environmental awareness. By comparing and contrasting their approaches, the study also uncovers their work's cultural and societal impacts, demonstrating how upcycled art in Nigeria reflects contemporary artistic trends and promotes ecological consciousness and sustainable practices. This paper aims to shed light on the significant role of upcycled art in the Nigerian art scene and its potential to inspire social and environmental change.

Key words: *Upcycled art, reuse, environmental awareness.*

Introduction

Upcycling has garnered considerable attention in recent years within the global art community. By enhancing the value and utility of the initial materials, this practice contrasts traditional recycling methods by creatively repurposing waste materials to create new and valuable items. Upcycling within the realm of art converts ordinary waste into captivating visual declarations, injecting mundane objects with renewed vitality and significance. This practice challenges established perceptions of art and materiality and is a powerful critique of consumerism and waste (Olga, 2023).

With its dynamic and diverse cultural milieu, Nigeria has witnessed a burgeoning enthusiasm for upcycled art. Both contemporary environmental concerns and long-standing African traditions of resourcefulness fuel this enthusiasm. Historically, African art has

consistently integrated elements of reutilization, utilising accessible materials to craft practical and emblematic artefacts (Plate 1). According to Livinus et al., (2020) present-day Nigeria sees artists carrying on this legacy by embracing upcycling to tackle urgent environmental issues while concurrently articulating their cultural narratives (Plate 2). (Livinus et al., 2020).



Plate 1: Kongo Power Figure (Nkisi N'Kondi: Mangaaka), Source: https://commons.wikimedia.org/wiki/File:WLA_metm



Plate 2: Bottled Life, 2008 by BRIGHT UGOCHUKWU EKE Source: <https://axis.gallery/artists/bright-ugochukwu-eke/>

The importance of sustainability and environmental awareness in contemporary art cannot be overstated (Halaçeli & Şanlı, 2023). As the global community grapples with the adverse effects of climate change and environmental deterioration, artists have assumed the role of environmental advocates, leveraging their creations to uncover and address these critical issues. Art has perpetually embodied human ingenuity, sentiments, and cultural diversity.

Throughout history, artists have employed diverse techniques, genres, and compositional elements to convey messages and captivate audiences (Oloidi, 2011). Art has traditionally functioned as a mirror reflecting the multifaceted aspects of human expression,

transcending eras, societies, and fashions. Within this realm of creation, the fusion of technique, style, compositional substance, and categorisation gives rise to narratives that engage, provoke, and inspire. They use upcycled art to prompt audiences to reevaluate their connection with the environment while simultaneously reducing waste and advocating for upcycling. This dual focus on art and activism positions upcycled art as an efficacious instrument for social transformation, amalgamating aesthetic ingenuity with ecological consideration (Halaçeli, & Şanlı, 2023).

Artists like Adeola Balogun, Dotun Popoola, John Adenle, and Lanrewaju Tejuoso propel this movement in Nigeria. Their works epitomise the inventive repurposing of abandoned materials, melding historical practices with contemporary tendencies to produce visually striking and thought-provoking pieces. This research seeks to illuminate the broader cultural and environmental import of upcycled art in Nigeria by scrutinising its techniques, styles, and compositional elements. It showcases how these artists metamorphose refuse into artistic gems that provoke and inspire.

This paper navigates readers through a captivating exploration of the essence of creative production, elucidating the intricacy of form and content from the standpoint of selected artists whose creations pertain to environmental sustainability. The symbiotic relationship between creativity and environmental awareness has engendered a distinctive study area where artists repurpose waste materials to craft aesthetically pleasing goods with renewed worth. This paper delves further into this subject, examining artists' techniques, styles, and compositional motifs. The paper therefore gives new life to waste materials, all while appealing to audiences looking for a fundamental link between art and the environment.

Historical Context of Upcycling in the Global Art Scene

'Upcycling' involves transforming waste materials or unwanted products into items of higher quality or value. Unlike traditional recycling, which often degrades materials for reuse, upcycling retains the original form, enhancing it creatively. This process not only extends the lifecycle of materials but also infuses them with new aesthetic and functional qualities, contributing to sustainability (Olga (2023). Werner (2023) writes that the historical roots of upcycling in art can be traced to early 20th-century movements such as Dadaism, where artists like Marcel Duchamp used found objects to challenge traditional art concepts. Duchamp's "readymades" redefined art by presenting everyday objects in new contexts, thus questioning the nature and value of art (Oligbinde et al., 2022).

The 1960s and 1970s saw developments in Environmental Art when artists like Robert Rauschenberg and Joseph Beuys used discarded materials to comment on consumerism and environmental degradation. These pioneers laid the foundation for contemporary upcycling practices in art, emphasising ecological and societal issues (Eric 2021). Today, there is increased environmental awareness that has made upcycling gain renewed interest in the global art scene. Contemporary artists now employ upcycling as a creative technique and a form of environmental advocacy, transforming waste into meaningful artistic expressions that challenge viewers to reconsider their consumption habits and environmental impact (Ericsson, 2018

Literature Review

Literature on upcycled art was reviewed. It was noted that several studies had explored the multifaceted nature of upcycled art, by

examining its aesthetic, cultural, and environmental dimensions. Barragão, (2022) for example, highlights how upcycled art can be a sustainable medium, promoting environmental awareness through creative reuse. Thorpe (2020) on the other hand, argues that upcycled art provides a tangible way to address waste issues, transforming discarded materials into valuable cultural artefacts.

Sung, Cooper, and Kettley (2014) discuss the broader implications of upcycling in the creative industries, noting how it fosters innovation and sustainability. They emphasize that upcycling challenges traditional perceptions of waste, encouraging a shift towards more sustainable production and consumption patterns.

Critics of upcycled art often point to its potential limitations. Some argue that the emphasis on material origins can overshadow artistic value, leading audiences to focus more on the novelty of the materials rather than the artwork itself (Sung, 2017). While initially perceived as a transient trend, upcycled art is proving to be a substantial art movement with significant environmental and creative implications.

Other studies highlight different aspects of upcycling; Hanna, (2022) writes about the importance of upcycling in creating designer items from scrapped vehicle parts while Hanieh, (2023) identifies factors that influence upcycled food consumption choices. Centaury, (2020) on his part emphasizes the value of upcycling in climate change artwork to reduce carbon emissions and promote environmentally friendly practices. Despite these critiques, proponents argue that upcycled art is significant because it merges aesthetic and ecological considerations. By using waste materials, artists create works that captivate visually and engage viewers in critical discussions about sustainability and environmental responsibility (Hayley, 2019).

Despite its rising prominence, the scholarly exploration of upcycled art is limited in Nigeria. Nigerian artists like Adeola Balogun, Dotun Popoola, John Adenle, and Lanrewaju Tejuoso are at the forefront of using discarded materials creatively, blending traditional techniques with contemporary styles. Their works highlight the cultural and environmental relevance of upcycling in the Nigerian context, emphasising the need for more focused academic research.

Adeola Balogun's sculptures, for example, reimagine industrial waste into dynamic forms that reflect urbanisation and environmental degradation. Dotun Popoola combines metal scraps with traditional sculpting techniques, creating pieces that narrate stories of resilience and innovation. John Adenle and Lanrewaju Tejuoso similarly use waste materials to explore themes of identity, culture, and sustainability, each bringing unique perspectives and techniques to upcycling.

This literature review sets the stage for an in-depth examination of these Nigerian artists' techniques and styles of upcycled artworks. This paper reports a study that aimed to highlight their unique contributions and the cultural and environmental significance of their artistic practices by situating their work within the broader context of global upcycled art.

Results

The following are results of variables tested when determining the Innovative Reuse of Waste Materials in Contemporary Nigerian Art. These include biographies of the four selected artists and the Classification of Techniques and Style of Upcycled Art utilized by the selected Artists

The Biographies of the four selected artists

1. Adeola Balogun

Adeola Balogun was born in 1966 in Abeokuta, Nigeria. He is a well-known sculptor who imaginatively uses abandoned materials. His artistic career is distinguished by a broad and solid educational foundation and professional expertise spanning three decades. His early school years began in 1978 at St. James Primary School in Ota, where he developed an interest in artistic pursuits. This early stage was critical in developing his appreciation for art and its transforming potential. He continued schooling at Yaba College of Technology in Lagos in 1993/1994, where he obtained specialised sculpting instruction, cementing his enthusiasm and skill set for working with various materials and techniques. He eventually became a lecturer at the college.

Balogun continued his studies at the University of Benin, earning a Master of Arts (M.A.) from 2001 to 2004. This phase honed his creative vision and broadened his technical knowledge. His pursuit of knowledge and quality resulted in a Doctor of Philosophy (Ph.D.) from Delta State University in 2020, demonstrating his dedication to academic and professional advancement in the arts. Adeola Balogun has been actively involved in art since 1993, focusing on using metal, e-waste, animal skin, fabric, and wood. His sculptures are renowned for their meticulous craftsmanship and imaginative use of discarded materials to create intriguing artworks (ScAN 2021). Balogun's art frequently examines issues of urbanisation, consumerism, and environmental degradation, providing profound insights into modern society's connection with the environment.

Balogun has made significant contributions to the world of upcycled art. His impressive ability to transform unwanted materials into visually stunning and thought-provoking artworks challenges traditional notions of value and aesthetics. Using recycled materials, Balogun creates appealing art pieces while raising awareness about the importance of sustainability and environmental responsibility. His work showcases the beauty and utility of materials often overlooked and discarded. In addition to his creative endeavours, Balogun has made significant contributions to academia. As an experienced instructor, he has impacted a new generation of artists by sharing his vast expertise and enthusiasm for upcycled art. His work as an educator complements his creative activities by promoting a better knowledge of the environmental and cultural relevance of using waste materials in art.

Balogun's artwork has been exhibited in numerous local and worldwide showcases, earning him attention and praise from art critics and enthusiasts. These events allow Balogun to engage with a broader audience while increasing awareness about the significance of sustainability in modern art. Balogun has participated in several prominent exhibitions and public commissions, such as the creation of the Michael Ibru statue in 2017, the late Ayangburen of Ikorodu statue in 2015, and the construction of the welded metal sculpture "Towards Achieving Distinction" (measuring 25ft), among others. These artworks have received substantial acclaim, demonstrating his exceptional skill and inventive approach to sculpture. Besides his artistic endeavours, Balogun has been honoured with other esteemed accolades. The accolades received by the individual include the "Award of Recognition" in 2018 from the Institute of African Studies, University of Ibadan, the designation of "Fellow" in 2018 from the

Society of Nigerian Artists (SNA), and the "Distinguished Master Artist" award in 2015. These prizes demonstrate his exceptional sculpting achievements and impact on contemporary Nigerian art.

His innovative methodology and dedication to environmental responsibility have been acknowledged in diverse academic and artistic domains. Adebayo (2015) states Balogun's art amalgamates traditional African aesthetics with contemporary environmental awareness. Okeke (2017) highlights Balogun's ability to convert wasted materials into artwork, encouraging viewers to reconsider their perceptions of waste and value. From his early schooling to his current position as a recognised sculptor and instructor, Adeola Balogun's artistic path demonstrates his passion, skill, and unique approach. His work contributes to the cultural landscape and is an encouraging example of how art can solve pressing environmental challenges. This research examines his techniques, styles, and compositional contents to emphasize upcycled art's more significant cultural and ecological implications in contemporary Nigerian art.

2. Dotun Popoola

Dotun Popoola, born in 1981 in Ondo State, Nigeria, hails from Ogun State. He is well-known for his exceptional ability to turn waste metal into attractive sculptures. His strong academic foundation and extensive artistic training firmly founded his creative journey. Popoola's schooling at Zion Africa Church School, which lasted from 1986 to 1992, instilled a deep appreciation for creativity and discipline. During his time at Auchi Polytechnic from 2001 to 2004, he honed his talents and gained a strong interest in sculpture. As a result, he began to experiment with other materials and techniques in his painting.

Popoola attended Obafemi Awolowo University, earning a Bachelor's degree from 2005 to 2008 and a Master's from 2009 to 2014. Attending this prominent university affected his creative vision and technical skills, giving him a thorough grasp of conventional and modern sculpting processes. Dotun Popoola has been pursuing his artistic practice since 2012, particularly emphasising the innovative use of waste metal. His work is characterised by his meticulous skill and ability to transform waste metal into vibrant and energetic sculptures. Popoola's painting and sculpting skills allow him to produce complicated artworks that blend vibrant colours and expressive forms, emphasising themes of rebellion and metamorphosis. Popoola's sculptures frequently depict animals and human characters, demonstrating a distinct combination of realism and abstraction.

The artist's work is well-known for its exact craftsmanship and vivid look, demonstrating his expertise in manipulating metal to portray compelling stories. Popoola's work investigates the ideas of resilience, transformation, and the possibility of regeneration in abandoned materials. Popoola contributed significantly to the world of upcycled art. He tackles environmental concerns and demonstrates the possibility of aesthetic and practical value in everyday garbage (Oligbinde, Adesanya, & Oyeniyi, 2022). The sculptures demonstrate the creative potential of upcycling while questioning conventional perceptions of value and beauty. Popoola's ability to repurpose abandoned metal artefacts underlines the need for sustainability in modern art, establishing him as a key player in Nigeria's art scene.

In addition to his artistic pursuits, Popoola has participated in several local and international exhibits and art festivals. Notable exhibitions include the West African Art Fair 2018, the Maiden Zcrap Art

Exhibition in Qatar in 2019, and the Global Art Festival in Gujarat, India, in 2020. He has held more than six solo exhibitions, participated in over 14 joint exhibitions, and featured in more than 30 group exhibitions. His work has gained international recognition and has been featured in over 100 publications such as the New York Times, Washington Times, BBC, CNN Africa, BBC Pidgin, Reuters, Al Jazeera, and Channels Television (ScAN 2021).

Popoola has also received numerous local and international awards, including the Director General's Award for Best Artist of the Year in the maiden NYSC arts competition in 2009. His accolades reflect his outstanding contributions to the field of sculpture and his influence on contemporary art. In addition to his artistic practice, Popoola has worked as a curator II with the National Gallery of Arts, Oshogbo outstation, Osun State, Nigeria, from 2012 to 2018. In this role, he curated various exhibitions and promoted Nigerian art and artists. Currently, Dotun Popoola works as a full-time studio experimentalist, continuing to explore and innovate within the realm of upcycled art.

Popoola's journey from early schooling to his current standing as a renowned sculptor displays his devotion, creativity, and creative thinking. His work improves the cultural environment and is an encouraging example of how art can contribute to more extensive ecological and socioeconomic discussions. This research looks at the methods, techniques, and thematic themes used by the artist to emphasise the more significant cultural and environmental value of upcycled art in contemporary Nigerian art.

3. John Adenle

John Adenle, a renowned sculptor and art educator, was born in Ogun State, Nigeria, in 1962. He is not just known for his innovative use of plastic waste materials, but also for his unwavering passion for art education and sustainability. His academic and professional background is a testament to his dedication, making him a pivotal figure in modern Nigerian art. Adenle began his teaching career in 1986 as an elementary school teacher, which provided the groundwork for his lifelong commitment to education. He continued his studies at Obafemi Awolowo University, receiving a Bachelor of Arts in Study (B.A. Ed.) from the Adeyemi College of Education in Ondo.

John Adenle's pursuit of additional studies led him to the University of Nigeria in Nsukka, where he earned his Master of Arts (M.A.) and Doctor of Philosophy (Ph.D.) degrees. These qualifications were critical to his professional development, giving him a solid foundation for his intellectual and creative pursuits.

Adenle's teaching career spans over two decades and includes a significant tenure at the Federal College of Education, Osiele, Abeokuta. From 1996 to 2016, he lectured in the Department of Fine and Applied Arts, impacting the institution's creative and educational landscape. He is a lecturer in the Department of Creative Arts at the University of Lagos' Akoka campus, where he continues to inspire and shape the next generation of artists.

The inventive utilization of plastic waste materials distinguishes Adenle's creative style. His sculptures are acclaimed for their elaborate patterns and conceptual depth, which address

environmental sustainability and consumerism. Adenle's transformation of plastic garbage into art challenges conventional conceptions of materiality and value, supporting an ecologically conscientious approach to art-making.

Adenle's art has been showcased in various exhibits, both locally and internationally, including the notable exhibitions' Age of Change' (2012) and 'Orisun Touring' (2012) in Abeokuta, and 'Adaptation' (2011) at Yaba College of Technology in Lagos. These shows demonstrate his active involvement in the art world and his dedication to using his work to address contemporary social and environmental issues. Adenle's collaboration with groups like the Sickle Cell Activism and Management Initiative (SAMI) further exemplifies his commitment to utilizing art for social change and activism.

Throughout his career, Adenle has garnered various awards for his services to art and education. His unique use of plastic in sculpture enhances the Nigerian art scene and provides a critical comment on the environmental consequences of plastic waste. By combining discarded materials into his work, Adenle highlights the possibilities for creativity and beauty in reusing trash, supporting a more sustainable approach to art and everyday life.

John Adenle's academic excellence, creative use of materials, and dedication to sustainability have all distinguished his career as a sculptor and art instructor. His work is a powerful testament to art's transformative capacity to address environmental and societal challenges, solidifying his position as a key figure in modern Nigerian art. His efforts continue to inspire and challenge artists and audiences to reconsider the role of waste materials in creative activities.

4. Lanrewaju Tejuoso

Lanrewaju Tejuoso was born in 1974 in Ogun State, Nigeria. He is a highly esteemed painter and installation artist. His passion for art was ignited in his early years, a spark that has since fueled his academic and career trajectory. His artworks, intellectually stimulating and addressing crucial global concerns, are a testament to his early artistic influences. Tejuoso completed his elementary education at Bode-Ijaye Primary School in Ijaye, Abeokuta, Ogun State, between 1981 and 1987. Subsequently, he enrolled in Ebenezer Grammar School in Iberekodo, Abeokuta, Ogun State, where he completed his secondary school between 1988 and 1995. After completing secondary education, Tejuoso pursued higher study at the College of Education Osiele Abeokuta from 1997 to 2000.

Tejuoso pursued a Bachelor of Arts in Art Education at the University of Nigeria, Nsukka, from 2002 to 2006, motivated by his artistic ambitions. His educational path equipped him with a strong basis in art theory, history, and practical practices, improving his creative abilities.

Tejuoso's extensive background as an environmental artist demonstrates his commitment to tackling crucial world problems through art. Since 2006, he has produced artwork that promotes awareness of climate change, drought, desertification, species extinctions, carbon emissions, and other urgent environmental issues. The artist's creations function as a means to educate and motivate a constructive transformation.

Tejuoso's artistic aptitude and unwavering commitment have garnered him acclaim at both the local and international levels. He has

taken part in various collaborative and individual shows, presenting his artwork to a wide range of viewers. Some notable exhibitions include "Waste to Life," an ongoing project on environmental arts at the Aroko Green Museum in Enugu in 2014, "Art 21" at the National Arts Competition in Nsukka in 2013, "Timeless Treasures" at the Silverbird Gallery in Abuja in 2012, "Orisun" with Wole Soyinka in Abeokuta in 2012, "Horizon of Hope" at the Life in My City Art Festival in Nike Lake, Enugu in 2011, and the 3rd National Visual Arts Competition in Abuja in 2010. Tejuoso's artworks have been exhibited in several museums, art galleries, and biennials throughout the globe.

Tejuoso's innovative use of waste materials, particularly plastic, in his creations defines his distinctive artistic style. By repurposing discarded materials, he not only produces visually striking sculptures but also underscores the importance of recycling and ecological practices. This unique approach sets him apart in the art world. Tejuoso's artistic talents have been acknowledged and commemorated in the art world. The artworks he created are part of the permanent collections of the Museum of Black Civilizations in Senegal and the Yemisi Shyllon Museum at Pan-Atlantic University in Nigeria. Tejuoso's standing as a famous artist was further solidified in 2018 when he earned top awards at the 13th Dak'Art Biennale, marking a significant achievement.

Lanrewaju Tejuoso is well regarded in the art community due to his exceptional talent, commitment to tackling significant global concerns via his artwork, and inventive utilization of discarded materials. His artworks stimulate and incite significant dialogues concerning our environment and the imperative for sustainable practices.

Classification of Techniques used by the Selected Artist

The study first aimed at determining the techniques used by Balogun, Popoola, Adenle, and Tejuoso in the creation of their upcycled artworks. By comprehending the techniques used by the selected artist, one can develop a deeper appreciation for its beauty and significance right from the collection process.

According to Mears (2018), environmental artists often begin to create art by collecting discarded materials such as plastic bottles, old newspapers, or scrap metal. The selection of materials is influenced by factors such as availability, environmental impact, and aesthetic qualities (Mears, 2018). The subsequent stage of the creative process involves the conversion of gathered materials into new forms. This process may entail various techniques, including cutting, shaping, painting, or integrating different components to produce a unified artwork (Botella et al., 2013).

Fürst et al. (2012) also observe that artists employ various techniques such as symbolism, metaphor, and visual storytelling to communicate their concepts. Additionally, environmental artists often collaborate with communities, organisations, or fellow artists to create expansive installations or public artworks. This collaborative approach facilitates awareness-raising and audience engagement in the creative process, as observed by Poole (2020). For the purpose of this study, there was a need to classify the techniques used by the selected artist for clarification.

Adeola Balogun, Dotun Popoola, John Adenle, and Lanrewaju Tejuoso's upcycled artworks use a range of inventive ways to express

their individual approaches to sustainability and environmental consciousness. These are tabulated in Table 1 below.

Table 1: Classification of Techniques of the Selected Artist's Works

s/n	Techniques	Responses							
		Adeola Balogun		Dotun Popoola		John Adenle		Olanrewaju Tejuoso	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	Welding/Tying	3	20.00	0	0.00	0	0.00	0	0.00
2	Welding/Tying/ Casting	1	6.67	0	0.00	0	0.00	0	0.00
3	Welding/ Painting	1	6.67	0	0.00	0	0.00	0	0.00
4	Welding	8	53.33	15	39.47	0	0.00	0	0.00
5	Melting/ Screwing	2	13.33	0	0.00	0	0.00	0	0.00
6	Casting	0	0.00	7	18.42	1	7.14	0	0.00
7	Casting/ Melting	0	0.00	0	0.00	1	7.14	0	0.00
8	Gumming	0	0.00	0	0.00	2	14.29	0	0.00
9	Gumming/ Screwing	0	0.00	0	0.00	1	7.14	0	0.00
10	Assemblage	0	0.00	0	0.00	1	7.14	0	0.00
11	Melting	0	0.00	0	0.00	8	57.14	0	0.00
12	Folding/Tying	0	0.00	0	0.00	0	0.00	15	51.72
13	Stapling	0	0.00	0	0.00	0	0.00	14	48.28
14	Sticking	0	0.00	1	2.63	0	0.00	0	0.00
15	Spraying	0	0.00	15	39.47	0	0.00	0	0.00
	Total	15	100.00	38	100.00	14	100.00	29	100.00

Source: Study Data 2022

The above Table shows that Balogun usually uses welding in his recycled artworks, accounting for 53.33% of his methods (8 out of 15 occurrences). This approach involves the fusing of metal components, which results in artworks that highlight the latent potential of waste metal resources. Balogun's major technology is welding, which is supported by other techniques such as welding/tying (20%), welding/tying/casting (6.67%), welding/painting (6.67%), and melting/screwing (13.33%).

Popoola, on the other hand, commonly employs welding in his work, with 39.47% of his methods including this technique (15). Popoola uses a variety of processes in his work, including welding (18.42%), casting (39.47%), spraying (2.63%), and sticking. John Adenle's

recycled artworks mostly use the melting process, accounting for 57.14% of his artistic approaches (8 out of 14 occurrences). This technique involves heating plastic rubbish, which makes it malleable and allows Adenle to mold it into innovative forms. Adenle also uses casting (7.14%), gumming (14.29%), gumming/screwing (7.14%), and assembling (7.14%), whereas Lanrewaju Tejuoso uses a variety of techniques in his recycled artworks, including folding/tying (51.72%) and stapling (48.28%).

Style of Upcycled Art made by the selected Artists

After evaluating the techniques employed in four artists' artworks created from materials that were reused, the research sought to determine the styles utilized by the chosen artists -Adeola Balogun, Dotun Popoola, John Adenle, and Lanrewaju Tejuoso in their artistic works. Table 2 shows the styles employed by each artist.

Table 2: Classification of Style of the Selected Artist's Works

s/n	Style	Responses							
		Adeola Balogun		Dotun Popoola		John Adenle		Olanrewaju Tejuoso	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	Abstract	2	6.67	5	29.41	12	80.00	15	50.00
2	Conceptual	0	0.00	0	0.00	1	6.67	15	50.00
3	Assemblage	0	0.00	3	17.65	2	13.33	0	0.00
4	Naturalism	14	46.67	1	5.88	0	0.00	0	0.00
5	Stylization	14	46.67	6	35.29	0	0.00	0	0.00
6	Idealism	0	0.00	1	5.88	0	0.00	0	0.00
7	Realism	0	0.00	1	5.88	0	0.00	0	0.00
	Total	30	100	17	100	15	100.00	30	100

Source: Study Data 2022

Table 2 indicates that the Balogun mostly employed realism and stylization techniques (46.67%) while making their upcycled artworks. However, a small percentage (6.67%) of the artworks were

produced in an abstracted form. Moreover, Popoola predominantly employs abstraction (29.41%), assemblage (17.65%), and stylization (35.29%) in the majority of their artworks, while just a few artworks are created utilizing idealism, realism, and naturalism.

Furthermore, the survey indicated that Adenle mostly utilized abstract techniques, with 80% of his artworks falling into this category. Adenle and Tejuoso both employ conceptual approaches, with Adenle minimally utilizing it to a 6.67% extent and Tejuoso to a significant 50%. Adenle's artworks were created using a combination of assemblage (13.33%) and conceptualization (6.67%) techniques. In contrast, Tejuoso equally employed abstraction (50%) and conceptualization (50%) as his artistic methods.

Discussion of findings on technique of upcycled Artworks

The data in Table 1 offers insights into the techniques that play a crucial role in the artistic process and contribute to the overall aesthetic and conceptual qualities of the upcycled artworks of Adeola Balogun, Dotun Popoola, John Adenle, and Olanrewaju Tejuoso. Welding is the most frequently used technique among the artists, with Balogun using it in 20% of his artworks and Popoola using it in 39.47% of his artworks.

Welding involves joining metal pieces together, and its use suggests a focus on manipulating and transforming industrial materials into artistic creations. This technique allows the artists to explore themes related to industry, craftsmanship, and the transformation of ordinary objects into extraordinary artworks. The use of welding may also symbolize strength, durability, and resilience in the artworks. According to Balogun,

"My artwork explored the profound impact of welding as a catalyst for transformation." I create artworks that push industrial materials by manipulating and fusing metal components. Welding lets me recycle and turn ordinary things into art. Welding is strong, durable, and can create new things from old. I use welding to express my deep love for superb creativity, inventiveness, and the aesthetic appeal of the unexpected."



*Balogun putting finishing touches to one of the upcycled artwork.
Photograph by Baloaun*



Popoola Welding Lion in his studio. Photograph by Poppoola



Tejuoso folding and tying soft plastic in his studio in Abeokuta



Adenle's melted installation plastic

Plate 3: Showing the selected artists working with different Techniques

Casting is another technique employed by the artists, with Popoola using it in 18.42% of his artworks and Adenle using it in 7.14% of his artworks. Casting involves creating sculptures by pouring liquid

material into a mold and allowing it to harden. This technique enables the artists to create intricate and detailed forms, capturing the essence of their artistic vision. The use of casting indicates a meticulous approach to the art-making process and a commitment to craftsmanship and precision. It also allows for the creation of multiple copies of the same artwork, expanding its reach and accessibility. According to Popoola, (2022),

"In my artistic process, I combine the meticulousness of welding with the fluidity of casting to produce artworks that exemplify a harmonious equilibrium between rigidity and fluidity." Welding helps me to create complex structures, while casting lets me to include natural textures and shapes. Through the integration of these methodologies, I want to elicit a feeling of balance and juxtaposition in my artistic investigations.



Peacock by Balogun showing the use of paints on welded metal



Who Killed Me by Adenle showing casted torso with melted plastics and paint.



Songo By Popoola show casted face of the warrior and the use of paint on the artwork

Plate 4: Showing Casted, Melted and use of paint on the upcycled artworks

Spraying is a technique used by Popoola in 39.47% of his artworks. Spraying involves applying paint or other materials through a

spraying device, resulting in a textured and atmospheric effect. The use of spraying adds dynamism, movement, and a sense of spontaneity to the artworks. It allows Popoola to experiment with different techniques and explore the interplay between control and spontaneity in the artistic process.

Melting is another technique used by Adenle in 13.33% of his artworks (See Plate 4). Melting involves transforming materials through heat, while screwing involves using screws as a means of attachment. These techniques highlight Balogun's experimentation with different processes and materials, resulting in unique and innovative artworks. The use of melting and screwing may also symbolize the concept of transformation and repurposing, as ordinary objects are melted and reassembled to create something new and unexpected.

Gumming is used by Adenle in 14.29% of his artworks (See Plate 3). Gumming involves the use of adhesive materials to attach different components together. This technique allows Adenle to create collages or assemblages of various objects, resulting in visually dynamic and layered artworks. The use of gumming may also symbolize the idea of bringing together disparate elements to create a cohesive whole, reflecting themes of unity, diversity, and interconnectedness. Adenle (2022) state that,

"Gumming and Melting is at the core of my artistic expression, symbolizing the process of transformation and fluidity in my works. By harnessing the malleability of materials through melting, I strive to capture fleeting moments of transition and metamorphosis. The organic forms that emerge from this process embody a sense of impermanence and evolution,

inviting viewers to contemplate the transient nature of existence."

Folding and tying are exclusively used by Tejuoso in 51.72% and 48.28% of his artworks (Plate 5), respectively. These techniques involve manipulating and reshaping materials through folding and tying, resulting in sculptural forms and intricate patterns. The use of folding and tying demonstrates Tejuoso's attention to detail, precision, and craftsmanship. It also suggests a focus on the transformation of materials and the exploration of spatial relationships. These techniques may symbolize themes of flexibility, adaptability, and the interconnectedness of different elements in the artworks.

Stapling is exclusively used by Tejuoso in 48.28% of his artworks (Plate 5 below). Stapling involves using staples as a means of attachment and can create visually striking and textured surfaces. The use of stapling adds a sense of structure and stability to the artworks, while also introducing an element of surprise and unconventional material usage. It may also symbolize themes of connectivity, permanence, and the power of small actions in the artistic process. According to Tejuoso (2022),

"My art is defined by folding tying and stapling. I make sculptural shapes and complicated patterns by folding and tying soft plastic, paper or fabrics. I use these methods to investigate space, form, and texture in my installations. Folding and tying represent flexibility, adaptation, and connectivity. I employ these approaches to produce artworks that convey movement, metamorphosis, and spatial connections. Folding and tying

requires accuracy and discipline, yet it allows me to realize my creative vision."

Sticking is used by Popoola in 2.63% of his artworks (Plate 5). Sticking involves attaching objects together using adhesives such as glue. (Plate 5). This technique allows Popoola to create collages or assemblages of various materials, resulting in visually complex and layered compositions. The use of sticking emphasizes the juxtaposition of different elements and materials, highlighting themes of contrast, harmony, and the integration of disparate elements into a cohesive whole.



Osuka by Tejuoso showing folded Fabrics. Photograph by Tejuoso



Oniko by Tejuoso showing Sticking technique. Photograph by Tejuoso

Plate 5: showing Folding and tying, Stapling, and Sticking Techniques

These hypothetical artist statements reflect the unique artistic approaches and techniques employed by each artist to corroborate the data in Table 1. The findings offer insights into the conceptualization of intrinsic, social and economic intention that informed the artists' creative practices.

The study findings are consistent with the findings of Mears, (2018) who discovered that environmental artists frequently employ assemblage methods into their recycled artworks. This approach is merging different products or materials to form unified creations that

encourage viewers to evaluate their connection with garbage. In another study, Johnson et al. (2020) investigated how environmental artists employ stapling to produce recycled works. The sort of waste materials utilized for upcycling influences the techniques used by artists.

The Kruskal-Wallis test is a statistical test that compares the average rankings of a ranked variable across numerous groups. In this study, the Kruskal-Wallis test was used to compare the approaches used by artists to upcycle environmental garbage into attractive products (Sung, 2017, Sung, Cooper, Kettley, 2015). The test findings revealed no significant differences among the four artists tested ($H = 1.0109$, $P = 0.79861$, $df = 3$, $N=60$), demonstrating that the artists use a variety of strategies to create their artworks, with no positive associations.

The absence of substantial distinctions in the techniques utilized by the artists may be ascribed to a variety of reasons, including the decision on what type of artwork to create, the type of waste materials, and the intended volume of composition (Sung, 2017). It is however important to note that an artist's technique selection may have a considerable impact on their artistic style and the visual impact of their work. Welding and casting, for example, are commonly connected with the creation of three-dimensional sculptures, but melting procedures can result in fluid and organic shapes. Understanding each artist's approaches provides insights into the intrinsic, social, and economic problems that define their artworks.

Discussion of findings on the Style of upcycled Artworks

Table 2 (Page 62) demonstrated a range of artistic styles among the chosen artists, which displays their unique tastes and creative methodologies. The analysis of the data provided insight into the distinct artistic identities and thematic themes that influence the artist's creations.

Balogun and Popoola's ability to convert waste materials into visually captivating and artistically meaningful artworks has contributed to the widespread recognition of realism and stylization in their work. Naturalism grants artists the ability to portray many aspects of the natural world, such as animals and humans. Stylization also empowers them to incorporate inventive and innovative components into their recycled artworks (see to Plate 6).



Phenomenal Factor 1 by Balogun showing a stylized bull with metals and e-waste



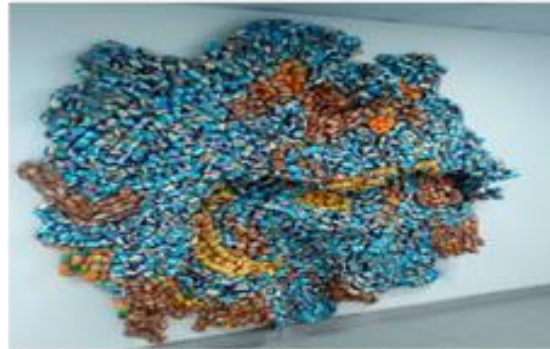
Ode Aperin by Popoolashowing animals and humans that is both stylized and naturalistic

Plate 6: showing Stylised, Realistic and Naturalism Styles

Additionally, Adenle and Tejuoso's works also involve conceptual art, which focuses on ideas and philosophical notions (Plate 7).



Ori Yeye Ni Mogun by Adenle showing the conceptual style photograph by Adenle



Daily Bread by Tejuoso showing conceptual art Photograph by Tejuoso

Plate 7: Showing conceptual art style

Balogun and Popoola demonstrate a preference for visual aesthetics and the tangible qualities of materials, but Adenle and Tejuoso place greater emphasis on intellectual themes in their upcycled work. Furthermore, the utilization of abstract aesthetics in the artistic creations of Adenle and Tejuoso serves the purpose of actively captivating the spectators' imagination and promoting contemplation on environmental and personal concerns. Adenle and Tejuoso's utilization of these approaches demonstrates a dedication to stimulating contemplation and discussion.

The study also demonstrated that the four Artists' styles exhibit variances that are heavily influenced by the specific location in which the artwork is made, as well as the materials utilized in its creation. The dynamic usage of style is influenced by several factors, including the time and location of its development. The choice of style is however not random, as it is determined by the artworks intended function and the available medium and technology.

The results are consistent with other research that emphasizes the widespread appeal of realism and stylization in upcycled artworks. A

research done by Glenn, and Allen (2022) revealed that environmental painters frequently integrate natural aspects into their artwork, employing naturalism as a stylistic approach to convey their environmental concerns.

In addition, Hayley J. (2019) undertook a thorough examination of recycled artworks from around the world and noted a notable prevalence of stylized and abstract shapes. The capacity of stylization to convert commonplace items into visually compelling masterpieces was particularly underlined. Comprehending these stylistic preferences may provide direction for both aspiring and veteran environmental artists in their creative pursuits, so fostering the development of the upcycled art domain.

The results of this study demonstrate the diverse range of artistic forms in upcycled art and their possible impacts on environmental art as a whole. By integrating many artistic techniques, artists may effectively captivate a wide variety of audiences, stimulate significant conversations, and inspire proactive measures in the field of sustainability. This variety of artistic styles is consistent with the wider discussion on environmental art, in which the selection of a particular style is acknowledged as a potent means of communicating messages about the environment and fostering awareness of ecological issues (Kaplan, 2021).

A one-way ANOVA was performed to compare the styles used among the four Artists on the artworks. The results are as follows.

Table 3: One-way ANOVA Results

s/n	Source	SS	df	MS	F-ratio	P-value	Sig.
1	Between Group	28.2857	3	9.4286	0.3067	0.8201	0.05
2	Within Group	737.4286	24	30.7262			
	Total	765.7143	27				

Source: Study Data 2022

The one-way ANOVA was used to assess the presence of statistically significant variations in artistic styles across the four artists. The F-ratio is a statistical measure used to compare the variability among different artists' styles with the variability within each artist's own body of work. A large F-ratio and a p-value below the significance level (alpha) would indicate significant stylistic differences among the artists.

The study results indicate that the F-ratio is 0.3067, indicating a relatively small value. The p-value of 0.8201 exceeds the predetermined significance level of 0.05. The study does not provide sufficient evidence to reject the null hypothesis due to the p-value (0.8201) being greater than the significance level (0.05). The null hypothesis posits that there are no statistically significant variations in artistic styles among the four artists.

The one-way ANOVA results in Table 3 therefore suggest that there is no statistically significant variation in artistic styles among the four artists. The study reveals that an F-ratio value of 0.3067 indicates a relatively small effect size. In the context of ANOVA, a higher F-ratio indicates more substantial evidence of group differences, whereas a lower F-ratio indicates weaker evidence. The significance level, often

set at 0.05, is a predetermined threshold used to determine statistical significance. A p-value less than alpha suggests the statistical significance of the observed differences. The p-value of the analysis is 0.8201, which exceeds the significance level of 0.05. A high p-value indicates insufficient evidence to reject the null hypothesis.

Based on the aforementioned observations and statistical principles, the study affirmed since the p-value (0.8201) exceeds the significance level (0.05), there is failure to reject the null hypothesis. Failing to reject the null hypothesis indicates that the study lacks statistical evidence to support the claim of significant differences in artistic styles among the four artists. The observed variations in the data can be attributed to random fluctuations rather than significant differences in artistic styles. This finding supports the hypothesis that the artist's style has minimal influence on the artwork's style (Ichikawa, Jonathan and Matthias, 2018).

It is important to acknowledge that the ANOVA test has specific assumptions that must be satisfied, including normality and homogeneity of variance (Deeks et al., 2019). Hence, it was imperative to verify these assumptions subsequent to interpreting the ANOVA outcomes. If the assumptions are not satisfied, it may be necessary to use alternative tests or transform the data in order to obtain valid results (Ngulube, 2013). The study therefore performed the Tukey's Honestly Significant Difference (HSD) test for multiple comparisons after obtaining a significant result from the one-way ANOVA. This test was used to identify significant differences in artistic styles among specific pairs of groups (artists). The result is presented as follows:

Table 4: Pairwise Multiple Comparisons

<i>Pairwise Multiple Comparisons</i>		$Q_{.05} = 3.9013$ $Q_{.01} = 4.9068$	
		HSD _{.05} = 8.1736	
		HSD _{.01} = 10.2803	
T ₁ :T ₂	M ₁ = 4.29	1.86	Q = 0.89 ($p = .92244$)
	M ₂ = 2.43		
T ₁ :T ₃	M ₁ = 4.29	2.14	Q = 1.02 ($p = .88686$)
	M ₃ = 2.14		
T ₁ :T ₄	M ₁ = 4.29	0.00	Q = 0.00 ($p = .00000$)
	M ₄ = 4.29		
T ₂ :T ₃	M ₂ = 2.43	0.29	Q = 0.14 ($p = .99967$)
	M ₃ = 2.14		
T ₂ :T ₄	M ₂ = 2.43	1.86	Q = 0.89 ($p = .92244$)
	M ₄ = 4.29		
T ₃ :T ₄	M ₃ = 2.14	2.14	Q = 1.02 ($p = .88686$)
	M ₄ = 4.29		

Source: Study Data 2022

Key: T1 Balogun T2 Popoola T3 Adenle T4 Tejuoso.

The multiple comparisons results in Table 4 indicate a mean difference of 2.43 between Balogun and Popoola. The q-value for this discrepancy is 0.89, however the p-value is 0.92244. Based on the fact that the p-value is greater than the specified significance threshold of 0.05, it may be inferred that there is no statistically significant difference between Balogun and Popoola. The difference between Balogun and Adenle is 2.14, as evidenced by the estimated q-value of 1.02 and a corresponding p-value of 0.88686. Furthermore, it can be demonstrated that the p-value surpasses the pre-established significance level, thus indicating the lack of a statistically significant difference between Balogun and Adenle.

The data demonstrates a substantial disparity of 4.29 between Balogun and Tejuoso. In addition, the q-value has been calculated to

be 0.00, which indicates a statistically significant outcome. This is further corroborated by a p-value of 0.00000. The calculated p-value is less than the preset significance level, indicating a statistically significant difference between the two artists. The analysis reveals a mean difference of 0.29 between Popoola and Adenle. In addition, the q-value is calculated to be 0.14, along with a p-value of 0.99967. The calculated p-value surpasses the preset significance level, indicating that there is no statistically significant difference between Popoola and Adenle.

Additionally, a statistically significant disparity was noted between Popoola and Tejuoso, with a magnitude of 1.86. The q-value for this discrepancy is 0.89, while the associated p-value is 0.92244. Furthermore, it is evident that the p-value exceeds the predefined significance level, indicating the lack of a statistically significant difference between Popoola and Tejuoso. In addition, the mean difference between Adenle and Tejuoso is 2.14 units, and the q-value is 1.02, along with a p-value of 0.88686. The calculated p-value is greater than the specified significance threshold, indicating that there is no statistically significant difference between Adenle and Tejuoso.

Arising from the results of the Tukey's HSD test, it was noted that the only significant difference exists between Balogun and Tejuoso. However, no substantial disparities were seen in the other pairwise comparisons. This finding reinforces the idea that there is no significant difference in the creative styles used by the four artists in their productions. The results indicate that the artistic style of the artist does not have a major impact on the style of the artwork, and there is no noticeable variation among the styles of the four artists. However, there was a noticeable difference between Balogun and

Tejuoso, which might be attributed to elements such as the topic, materials, or cultural influences.

Conclusion

In conclusion, the selected artists use a wide variety of techniques in their upcycled artworks, such as welding, casting, painting, melting, screwing, gumming, assembling, folding, tying, stapling, adhering, and spraying. These approaches let artists express themselves creatively by transforming everyday items into exceptional art pieces. The techniques represent artists' unique visions, themes, and intellectual frameworks. Using these approaches, the artists push limits and question traditions.

Adeola Balogun and Dotun Popoola's skills are essential to their creative processes and highlight the issues of sustainability and environmental consciousness in their work. They challenge spectators' notions of value and waste by repurposing discarded materials into art. Their use of welding, casting, and other techniques highlights how discarded items may be reused into beautiful and meaningful products, which aligns with more significant initiatives to encourage environmental conservation and resourcefulness.

The approaches used by John Adenle and Lanrewaju Tejuoso are crucial to their artistic practices, with each contributing distinctively to their research of upcycled artwork. These artists use melting, gumming, folding, and stapling techniques to turn discarded materials into meaningful artworks. Their tactics not only demonstrate their ingenuity, but they also serve as effective instruments for raising sustainability and environmental consciousness. Adenle & Tejuoso's work encourages viewers to evaluate the possibilities of discarded

materials and promotes a more sustainable approach to consumption and trash management.

The various styles used by Balogun, Popoola, Adenle, and Tejuoso in their recycled artworks represent their individual artistic views and contributions to the environmental art movement. Balogun's emphasis on realism and stylization, Popoola's blend of stylization, abstract, and assemblage, and Adenle and Tejuoso's balance of abstract and conceptual approaches all highlight the diverse character of upcycled art.

All the artists' works demonstrate the command that upcycled art has in raising awareness about environmental concerns and encourage sustainability. By converting abandoned waste materials into attractive artwork, they urge audiences to rethink the value of abandoned waste materials and the consequences of human consumption. The artists' innovative techniques not only enhance the art world but also add to the larger discourse about sustainability and environmental responsibility.

Further investigation and exploration of individual artists' recycled artworks might reveal more about their artistic journeys and the growth of their styles through time. Such research will therefore assist better understand and appreciate modern art and its vast variety of forms.

References

Barragão, V. (2022). *Transforming Trash into Beauty*. *Ecotone* 18(1), 49-56. <https://doi.org/10.1353/ect.2022.0008>.

Beehr, T., Kim, M., & W. Armstrong, I. (2024). *How much do survey response rates affect relationships among variables?*. *International Journal of Social Research Methodology*, 27(1), 63-86. doi: 10.1080/13645579.2022.2113663

Centaury, Harjani. (2020). *Upcycle: As A New Preference in the Art of Climate Change*. doi: 10.24821/IJCAS.V7I2.4651

Eric Elliott (2021). *2d design handbook* Colorado Mesa University. https://www.coloradomesa.edu/art/documents/student-resources/2d_design_handbook_v1.8small_fall-2021-accessibilityupdate-for-website.pdf

Ericsson, K. A. (2018). *An Introduction to the Second Edition of The Cambridge Handbook of Expertise and Expert Performance: Its Development, Organization, and Content*. *The Cambridge Handbook of Expertise and Expert Performance*, 1.

Glenn P., & Allen C. (2022). *Environmental Aesthetics*. *Philosophy*, doi: 10.1093/obo/9780195396577-0428

Halaçeli Metlioğlu, H., & Şanlı Sürmelioglu, L. (2023). *An Experimental Research On Upcycling Of Waste Plastic Bags In Weaving Design*. *Journal of Textiles & Engineers/Tekstil ve Mühendis*, 30(129).

Hanieh, Moshtaghian., Kim, Bolton., Kamran, Rousta. (2023). *Upcycled food choice motives and their association with hesitancy*

towards consumption of this type of food: a Swedish study. *British Food Journal*, doi: 10.1108/bfj-09-2022-0757

Hanna, Novik. (2022). *Upcycling using elements of scrap vehicles. Teorià i praktika dizajnu*, doi: 10.32782/2415-8151.2022.26.21

Hayley J. (2019). *Connecting Art and Science: An Artist's Perspective on Environmental Sustainability. Environmental Studies Electronic Thesis Collection. 54. University of Vermont. Retrieved from <https://scholarworks.uvm.edu/envstheses/54> 9/16/2023*

Johnson, S., Echeverria, D., Venditti, R., Jameel, H., & Yao, Y. (2020). *Supply chain of waste cotton recycling and reuse: A review. AATCC Journal of Research, 7(1_suppl), 19-31.*

Livinus, Kenechi, Ngwu., Chikelue, Chris, Akabuike. (2020). *Sabastine Ugwuoke's Socio-Political and Environmental Intervention through Artistic Utilization of Waste Materials in Creative Venture.*

Olga, Guselnikova., Oleg, Semyonov., E., E., Sviridova., R., O., Gulyaev., A., Gorbunova., Dmitry, Kogolev., Andrii, Trelin., Yusuke, Yamauchi., Rabah, Boukherroub., Pavel, S., Postnikov. (2023). *"Functional upcycling" of polymer waste towards the design of new materials.. Chemical Society Reviews*, doi: 10.1039/d2cs00689h

Oligbinde, S. R., Adesanya, C. O., & Oyeniyi E, O. (2022). *AESTHETIC value of re-use waste materials as a panacea for environmental protection (An Appraisal of Oligbinde's Creative Works). EPRA International Journal of Research and Development (IJRD), 7(8), 55-61. doi: 10.36713/epra10983*

Oloidi, O. (2011). *The Rejected Stone: Visual arts in an artistically uninformed Nigerian society*. UNN: University of Nigeria Senate Ceremonials Committee.

Ostertagova, E., Ostertag, O., & Kováč, J. (2014). *Methodology and application of the Kruskal-Wallis test*. *Applied mechanics and materials*, 611, 115-120.

Sculptors' Association of Nigeria (ScAN) (2021). *Maiden National Sculpture Exhibition "Elixir" Sculpture as Aesthetic Palliative to A Nation at Crossroads*. National Museum, Onikan, Lagos

Sung, K. (2017). *Sustainable production and consumption by upcycling* (Doctoral dissertation, Nottingham Trent University (United Kingdom)).

Sung, K. W., Cooper, T., & Kettley, S. (2015). *An exploratory study on the links between individual upcycling, product attachment and product longevity*. In *Proceedings of the Product Lifetimes and the Environment (PLATE) Conference* (pp. 349-356). Nottingham Trent University.

Werner, Scheltjens. (2023). *Upcycling historical data collections. A paradigm for digital history?*. *Journal of Documentation*, doi: 10.1108/jd-12-2022-0271

Mears, E. (2018). *Recycling as Creativity: An Environmental Approach to Twentieth-Century American Art*. *American studies journal*, 64(5), 64-05.

Xiaolei, Wang. (2022). (Invited) Recycling and Upcycling Electrode Materials from Spent Lithium-Ion and Alkaline Batteries. Meeting abstracts, doi: 10.1149/ma2022-015593mtgabs



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Millinery Art Skills Acquired and Used by Higher National Diploma (HND) Fashion Design Students during Industrial Internships

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Abstract

Millinery art skills acquisition has faced many challenges, even though it has a high potential to support students' performance in the fashion design industry. This study examined millinery skills acquired and practised during an internship by Higher National Diploma Fashion Design students in Technical Universities. It is part of a more extensive study on millinery skills acquisition and utilisation by Higher National Diplomat students in fashion. The study population

was 249 level 200 students and 28 industry supervisors. The study used multistage and stratified sampling techniques to collect student data, while industry supervisors were purposively selected. Data was collected using a semi-structured questionnaire and interview guide. The study data was analysed using frequency tables to determine millinery art skills acquired and used by the students during the internship. Findings indicated that the students lack skills in blocking, fabric manipulations and decorative techniques to embellish millinery products. The study also revealed that most fashion industries where the students went for the internship were not practising millinery skills. Also, those practising millinery art demanded payment before accepting the students on internship. Based on the findings, three virtual contents were developed on the skills gaps identified in the study. The virtual online content was communicated to the participant institutions in the study to help bridge the skill gap identified in the study. The study recommended purposeful industry linkage by the fashion departments with industry experts in millinery to support the training of fashion design students.

Key words: *Millinery skills acquisition and utilisation, Fashion*

Introduction

The culture of beauty is shaped by various factors such as tradition, environment, status, personal taste, and preference. Dressing accessories are as essential as clothing because they communicate an individual's values, beliefs, attitudes, and assumptions (De Carvalho, 2020). Accessories are an important part of creating a stylish look, and they can be divided into two categories: worn and carried. Worn accessories include earrings, gloves, hats, fascinators, hair bands,

and footwear. On the other hand, carried accessories include items like bags, clutches, fans, parasols, and others (Ribeiro et al., 2012).

Millinery is the art of designing and making hats and headdresses, which is as old as dressmaking. It is one of the creative aspects of fashion design education or training. Dressing the head has been a tradition throughout history, with different styles of headwear being used at specific times. This tradition dates back to 3000 B.C.E., as evidenced by artefacts in Egypt and North Africa (Tia, 2016). At that time, millinery products were mainly used as protective coverings for the head against harsh weather. The art of millinery was integrated into technical institutions and universities across Ghana in 1963, where it is studied in the fashion departments.

Fashion Design and Technology is a skill-oriented course of study in technical universities in Ghana that produces graduates who feed the fashion industry. However, the performance of industry graduates largely depends on the level and quality of skills they acquire during their training/education (Ayonmike, 2014). The acquisition of high-level skills cannot be achieved if the programme's facilitators are not proficient and the equipment is obsolete (Agordah et al., 2023). This situation makes it difficult for learners to follow well-defined instructions to acquire millinery art skills (Vishwaroop, 2022; Auta & Giwa, 2020).

Williams and Laing (2013) stated that limited research has been conducted on millinery art, although it is taught in the formal sector. Even though previous fashion researchers have overlooked millinery art, it strongly connects to the head, face, and clothing. Fashion experts predicted that accessories would be more critical since

consumers would be interested in quality clothes, not clothes with a short fashion life (Marjorie & Baker, 2013).

This implies that the consumer will prefer quality clothes in smaller quantities and instead have a range of accessories that could easily make basic clothes versatile. This calls for effective skill acquisition in millinery art to grant learners practical skill usage to enhance performance in the fashion industry. Therefore, this paper reports an investigation in the millinery art skills acquired and used by fashion design students during an industrial internship in Ghana's fashion industry.

Literature Review

Millinery Art Skills

Millinery products promote elegance in dressing, and they always define the wearer whenever they are used to accessorise garments. Variety in millinery art products is observed in different periods; these define the evolution of fashion in those periods. However, in Africa, as stated by Tia (2016), hat-making started in 3000 B.C.E. and was mainly used for protection from the harsh weather along with typical traditional headdresses.

Custom-made headdresses and clothes are classy, with unique features usually considered based on the wearer's status, figure type, type of material used, and quality (McQuerry, 2019). This makes millinery art a unique skill that needs to be acquired alongside garment design and construction. Accessorising one's clothing product shows the difference between a fashion designer and a garment producer.



Samples of custom-made hats and fascinators

Source: Agordah, 2022

Due to the uniqueness of millinery art headdresses, young designers in fashion institutions need to acquire millinery art skills and use them to accessorise their clothing designs to enhance their production and exhibit the difference between them and traditional dressmakers (Fowler, 2019). Millinery art skills in draping/moulding, fabric manipulation, embellishing/decoration and hand-stitching are essential (McQuerry, 2019). As Coleman (2021) stated, contemporary fashion has taken over the fashion industry in Africa, and special events are flooded with sophisticated female headdresses. Fashion education should prioritise teaching millinery art skills to technical university students to reduce the need for importing millinery products into our markets.

Based on Agordah and Isika's research in 2023, it was found that fashion design students who did not acquire skills in draping/blocking cannot construct millinery art products professionally. This implies that draping/blocking skills are essential in millinery art practice. Agordah et al. (2023) also stated that skills in hand-stitching are a prerequisite for acquiring millinery art because elegant millinery art

products are uniquely hand-stitched inconspicuously. This paper reports a study that investigated the millinery art skills HND fashion design students acquired in technical universities and used during an industrial internship in the fashion industry.

Utilisation of Millinery Skills in the Fashion Industry

Literature on fashion design states clearly that there is a difference between a fashion designer and a dressmaker. Fashion designers design and produce garments with possible accessories to enhance the total presentation of their designs.

However, dressmakers only produce garments without considering the total presentation of their work with accessories. Dressing is complete when a garment is accessorised because accessories complement or accentuate individual styles (Ericol Fashion, 2019; Rodriguez, 2020). Choosing and wearing the right dressing accessories can make or unmake one's dress. Hence, fashion design students need to acquire millinery art skills to accessorise their designs and achieve excellent presentations to the public.

The ability to design and produce hair brooches, fascinators and hats adds significantly to the style of simple wear, making it classy. This can be easily made with fabric pieces usually disposed of in the fashion industry; with fabric manipulation skills, most of the fashion industry waste can be taken care of creatively. This encourages sustainable fashion practices and reduces the quantity of fashion waste in the environment (Sai et al., 2022).

According to Niinimäki et al. (2020), the fashion industry is the second largest industrial polluter after aviation globally, accounting for up to 10% of emissions.

Furthermore, most fabrics/clothes produced by fast fashion are inorganic and synthetic. Although the production of these materials can have negative environmental impacts, such as the release of harmful chemicals and greenhouse gases (Kumar et al., 2020), they are suitable for manipulation by pleating and gathering to make headdresses that add value to the garment while helping reduce waste and increasing their fashion life. Fashion design students can enhance their garments by creating hair brooches and fascinators using fabric manipulation techniques. The student's ability to practise millinery art skills during industrial internships depends on the skills they have acquired in fashion design at technical universities.

As Fowler (2019) states, every fabric piece can be used to make headdresses. It all depends on the individual's skills. This is because the ability to use the needle and thread to present a design idea as a headdress is a skill. This implies that the ability of learners to exhibit this skill in the industry mainly depends on the skills acquired in millinery art at the technical universities. Blocking/draping skills are essential when using linen, ramie, felt, sinamay, cotton, and parasal textiles.

Studies by McDowell (1992) stated that millinery was practised since 1890 and alongside dressmaking. The training period, as stated by Mark (2011) at that time, was three to four years. Millinery art has evolved over the years just as dressmaking and different periods have observed several varieties alongside clothing styles. Currently, millinery art is being studied in vocational/technical institutions worldwide, including Technical Universities in Ghana.

A study by Ananga et al. (2016) focused on skills acquired by graduates of Technical Universities and highlighted deficiencies in their skills in meeting industrial needs. Allsop (2017) looked at the skill gap in fashion education and stated that fashion design graduates do not have enough skills to perform effectively in the fashion industry. Although these studies focused on the level of skills acquired by the graduates in the Technical Universities, they did not address the skill gap in millinery art as a unit course of study. In addition, using technological tools to enhance skills acquisition is an understudied area in most fashion-related education in Africa, thus a significant gap to address.

Chepchumba and Cheruiyot (2018) examined the challenges facing the fashion programme in Kenya. Isika et al. (2016) also studied the competencies of fashion design instructors in draping in Kenya, which gave excellent views on gaps in the fashion design programme. Obinim and Pongo (2018) and Foster and Ampong (2012) focused on competent pattern-making skills in Ghana. These scholars did not specifically address the skills gap in millinery art skills, which requires more interrogation.

Wovenu (2017) also looked at constraints hindering the employment of fashion design graduates in Ghana's fashion industry. He found, among others, that the skills acquired by graduates in millinery art are low and cannot help them operate in the fashion industry. This study, however, did not focus on internships and how the skills acquired in the institution are practised during this period. To fill this research gap, this study investigated how students use millinery art skills during their internship in the fashion industry.

Importance of Online Virtual Content in Effective Skills Development

Elhashash and Elhashash (2023) stated that virtual teaching content is integral to e-learning, enabling learners to easily access and practice independently. This tool is handy for skill development as it eliminates the constraints of time and place, unlike real practical labs. With virtual teaching content, learners can enjoy a more flexible schedule, reduce the cost of their degree and further their education alongside their career development (Onele, 2023; Haleem et al., 2022).

Research shows that online virtual content can help individuals acquire and develop skills. Eib (2022) suggests that digital content can help students make up for the learning loss they experience. As students are only in school for a limited period, reaching them becomes challenging after graduation. Therefore, it is vital to make study findings accessible online for current students and graduates to address this issue. Online virtual content is easily accessible and can help learners fill the gaps in their skill sets (Haleem et al., 2022). For example, fashion design graduates can easily enhance their skills in the fashion industry using online resources. As a result, this paper presents online virtual content developed to address the skills gaps identified in the study of millinery art skills deficiencies of fashion design students.

Training in millinery art skills is an important area lacking sufficient fashion research. To address this gap, online content is needed to support fashion design graduates and fill the identified gaps in the study. The study's results help bridge the millinery art skills training gap in fashion curriculum review. This support is also essential for

those interested in practising millinery art in the fashion industry but lacking the essential skills, as indicated (Wovenu, 2017).

It is also necessary to analyse how students apply millinery skills acquired during internships in the fashion industry. The findings on millinery skills acquired and used during the industrial internship are given maximum attention to support millinery art skills transfer challenges in fashion design at technical universities. The flexibility in the use of virtual content online grants the young graduate to update their skills deficiencies at their own convenient time (Marbun, 2023). This is because online content can be used anytime if the learner is interested (Camarinha-Matos et al., 2001).

Results

Millinery Skills Acquired by HND Fashion Design Students

The study aimed to investigate millinery art skills acquired by fashion students. Fashion students often envision their design ideas and bring them to life through design. This process helps them develop the necessary skills to turn their ideas into actual products. Table 4.3 summarises the students' millinery art skills in designing brooches, fascinators, and hats.

Table 1: Students' Rating of their Skills in Designing Millinery Products

Millinery Product	Responses (frequencies and percentages)		
	Good	Fairly Good	Poor
	f (%)	f (%)	f (%)
Hair brooches	79 (31.7)	45 (18.1)	125(51.2)
Fascinators	94 (37.7)	33 (13.2)	122 (48.9)
Hats	90 (36.1)	37 (14.9)	108 (43.3)

Source: Study Data 2021 N = 249

Table 1 shows how fashion design students rated their skills in designing millinery products: 31.7%, n = 79, rated their ability to design hair brooches as good. Regarding rating their ability to design fascinators, 37.7% n = 94. On rating students' ability to design hats, 31.7% n = 90 rated their ability as good. This means many fashion design students did not acquire enough millinery art skills to design garments with headdresses to enable them to make a complete fashion statement.

The above situation is challenging because if accessories are not selected professionally, it negatively affects the complete presentation of the design. The study further explored students' ability in four essential skills in millinery art. Table 4.4 measures millinery art skills acquired in constructing millinery products by the students in blocking/draping, fabric manipulation decoration, and hand stitching.

Table 2: Students Rating their Skills in Constructing Millinery Products

Variables	Responses (frequencies and percentages)			
	Good	Fairly Good	Poor	Total
Hair brooch	77 (30.9%)	47 (18.9%)	125 (50.2%)	249 (100%)
Fascinator	92 (36.9%)	31 (12.4%)	126 (50.6%)	249 (100%)
Hats	103 (41.3%)	37 (14.9%)	109 (43.7%)	249 (100%)

Source: Study Data 2021

Table 2 shows the results from the analyses of HND Fashion Design students' self-rating of their ability to construct millinery products. As the table indicates, 50.6% n = 126 have poor skills in constructing brooches, 50.2% n = 125 said their ability to construct fascinators

was poor, and 43.7% n = 109 stated their skill was poor in constructing hats.

Many fashion design students have not acquired the technical skills to construct headdresses (fascinators and brooches), but only 41.3% of students claimed they possessed the skills to construct hats. The research supports Agordah et al. (2023) finding that fashion design students lack essential skills in millinery art.

Table 3: Students' Rating of Training Received in Millinery Art as Fashion Design Students

Rating Scale	Responses (frequencies and percentages)
Very poor	41 (16.5%)
Poor	52 (20.9%)
Fairly Good	47 (18.9%)
Good	98 (39.4%)
Excellent	11 (4.4%)
Total	249 (100%)

Source: Study Data 2021

Table 3 shows HND Fashion Design students' self-rating of the training received in millinery art: Only 4.4%, n = 11, of the students stated their training was excellent. This finding is evident in the study of Agordah et al. (2023) on the unavailability of instructional resources for millinery art skills training of fashion design students at technical universities. This is a significant challenge that considerably impacts the employment of fashion industry graduates.

Industry Supervisors' Views on Millinery Art Skills Acquired by the Students

The fashion industry supervisors have proposed leading suggestions for fashion design departments in technical universities to help students acquire the necessary skills in millinery art. One main proposal the industry supervisors is collaboration with millinery art experts in the fashion industry to facilitate millinery art skills acquisition in fashion design. They also recommend that sufficient time for practical lessons within the Fashion Design curriculum is essential. Typical comments are as follows: -

The fashion departments need to collaborate with experts in millinery to support the departments in millinery skills acquisition (35%, 10)

The fashion design departments should allocate enough practical time for skills training in millinery art skills (46%).

Millinery skills students need to acquire include hand stitching neatly with little or no trace. This is important. I observed that many students are struggling with this. The training needs to be strengthened in this area (46%).

Views of industry supervisor on the level of millinery skills acquired by the student interns. Typical comments included the following: -

Their millinery skills are not the best, and the students need to be taught well; things are swift these days (35%, 10).

Lecturers should be encouraged to attend workshops organised by milliners in the fashion industry. Students should be taught

more practical lessons on how to use most of the fabrics in constructing structured headdresses (44%)

Support for millinery skills acquisition must be purposeful. I can be a resource person if your school is ready to pay for my skills (industry supervisor/contact 14%, 4)

It will be helpful for institutions to develop the capacity to support millinery skill acquisition specifically. They may need to recruit staff specifically for that purpose (industry supervisor 39%, 11)

The feedback offers valuable insights into assessing the millinery art skills acquired and used by the fashion design students at Technical University in Ghana. The comments suggest collaborating with fashion industry experts to implement the millinery art curriculum that is more relevant to the skills needed by the fashion industry.

The suggestion to increase contact hours for practicals to improve millinery arts skills development is laudable. Additionally, students need to acquire the skills of constructing millinery products using various fabrics to acquire more practical experience.

Table 4. Millinery Products Students Practise During Internship

Making of Millinery items	Always	Sometimes	Rarely	Never	Not Sure
	f (%)	f (%)	f (%)	f (%)	f (%)
Hat	0(0)	58(23.3)	40(16.0)	105(42.2)	46(18.5)
Fascinator	20(8.0)	52(21)	10(4.0)	112(45)	55(22.1)
Brooch	0(0)	15(6.1)	86(34.5)	106(42.6)	42(16.8)

Source: Study Data 2021 N = 249

The student's results on the usage of the millinery skills in the fashion industry during the internship indicated that none 0% of the students always used the millinery skills in making hats, 8% n = 20 in fascinator making, and 0% n =0 in making hair brooches. This confirmed the findings in Table 4.2 that most fashion industry students who had industrial internships do not accessorise their garments. This implies weak industrial support for the skills practised in millinery art in the fashion industry.

Table 5: Students Rate Millinery Skills Practise during Internship in the Fashion Industry

Description	Range	Responses (frequencies and percentages)
Very Poor	0-20	52 (20.9%)
Poor	21-40	90 (36.1%)
Average	41-60	83 (33.3%)
Very Good	61-80	22 (8.8%)
Excellent	81-100	2 (0.8%)
	Total	249 (100%)

Source: Study Data 2021 N = 249

The study found that the students' millinery skills practised in the fashion industry during the internship were low. Only 0.8% n 2 rated the practice of millinery as excellent, while 36.1% n = 90 and 20.9% n = 52 rated their use of acquired millinery skills as poor and very poor, respectively. This situation is concerning because the industrial internship is meant to expose students to industrial techniques and millinery art skills in the fashion industry.

Virtual Online Content on Millinery Skills Gaps

Table 3 clearly shows that more than half of students indicated not acquiring average skills in constructing hats, brooches, and fascinators. These unique headdresses allow fashion designers to make a complete statement by dressing the head to complement garments. Skills such as blocking/draping and fabric manipulation are essential in making millinery products (Fowler, 2019).

Stitching to assemble parts of headdresses facilitates creative assembling techniques in millinery art skills. The findings reported here bridges the skills gaps by developing virtual content on YouTube to support fashion design students on methods of blocking/draping. The link to the practical demonstration can be viewed on: <https://www.youtube.com/watch?v=t7v1jZyP-IQ&t=13s>

Millinery products that are structured and have smooth finishes are highly sought after by fashion icons who present themselves comprehensively to communicate their identity. Fabric manipulation is also an essential skill in creating her brooches. Students' indicating that they do not have these skills in making brooches imply a lack of skills in manipulating fabrics for headdresses. Hence, the results fill this skill gap using content on YouTube on fabric manipulation skills that can be viewed on <https://www.youtube.com/watch?v=ux60DZ-cdnc>.

Various stitches such as blanket, double, wire, and sab are used to firmly assemble the parts of the hat's brim and crown, while edges and embellishments are stitched. Students must possess the skill of stitching without leaving any noticeable marks after assembling headdresses. This skill is essential for them to be competitive in the

fashion industry. To bridge this gap, online virtual content seen on https://www.youtube.com/watch?v=a8_jOlyIfK0 can assist them.

Conclusion

This study explores the millinery art skills acquired and used by fashion design students during their internships in the fashion industry. The study revealed significant gaps in the students' acquired millinery art skills, with most students having below-average skills in constructing brooches and fascinators (as shown in Table 3). The students also indicated that their training in millinery art has not been very good (as shown in Table 4). Additionally, the study found that most student interns did not have the opportunity to utilise their millinery art skills during their industrial internships since some fashion industry members do accessorise their products.

This implies limited capacity for industrial internship support in the fashion industry in millinery art. As a result, students in internships have fewer opportunities to practice their millinery skills and cannot gain any experience applying these skills in the fashion industry. This is a niche area the fashion departments need to pay attention to for their graduate to perform better in the fashion industry. The virtual content practical production process will be a reference for students to help them develop their millinery art to bridge the skills gap.

References

Agordah, F. E., Jacqueline, K. & Kaindi, I. J. (2023). Prerequisites for Millinery Art Skills Acquisition by Higher National Diploma Fashion Design Students in Ghana. East African Journal of Arts and Social Sciences, 6(2), 101-113. <https://doi.org/10.37284/eajass.6.2.1411>

Agordah, F. E., Kaindi, I. J. & Jacqueline, K. (2023). Instructional Resources for Skill Acquisition in the Art of Millinery for Higher National Diploma: A Study of Fashion Design in Technical Universities in Ghana. East African Journal of Education Studies, 6(2), 467-481. <https://doi.org/10.37284/eajes.6.2.1405>

Allsop, D. (2017). Examining the skill gap in fashion education. Master's thesis submitted to the University of Huddersfield. <http://eprints.hud.ac.uk/id/eprint/32664/>

Ananga, D. E, Adzahlie-Mensah, V. & Tamanja, E. (2016). Higher education and employability in Ghana. In Universities, Employability and Inclusive Development: Repositioning Higher Education in Ghana, Kenya, Nigeria and South Africa. British Council pp. 77-90.

Auta, M., A. and Giwa, M. (2020). Effects of the Use of Documentary Videos in Teaching Setting-out in Nigerian Secondary Schools <https://www.researchgate.net/publication/346407805>

Ayonmike, C., S. (2014). Challenges in Implementing the TVET Curriculum in Technical Colleges in Southern Nigeria. Makerere Journal of Higher Education Vol. 6 (1) Pp 87 – 97 DOI: <http://dx.doi.org/10.4314/majohe.v6i1.5>

Burns, A., C. & Bush, R., F. (2010). Marketing research (6th Edition) Prentice Hall.

Camarinha-Matos, L. M., Afsarmanesh, H., & Osório, A. L. (2001). Flexibility and safety in a web-based infrastructure for virtual enterprises. *International Journal of Computer Integrated Manufacturing*, 14(1), 66–82. <https://doi.org/10.1080/09511920150214910>

Chepchumba, R. M. & Cheruiyot, M. (2018). Challenges facing Kenyan University Fashion and Apparel Design Programs. *Scholars Journal of Economics, Business and Management (SJEEM)* Vol. 5 (5). Pp. 344-353

Coleman, L. (2021). Ghana Hat Fair a lady's is only complete when it is well accessorized millinersnetworkghana

De Carvalho, I., R. (2020). Fashion accessories: the women's hat and history. <https://www.celebremagazine.world/style/womens-hat/> DOI:10.22610/jevr.v11i1(V).3090

Eib. (2022, July 8). Digital tools could bridge educational gaps created by COVID-19 pandemic. European Investment Bank. <https://www.eib.org/en/essays/covid-19-digital-education>

Elhashash, M., & Elhashash, M. (2023, June 18). The most important advantages and disadvantages of virtual laboratory. PraxiLabs. <https://praxilabs.com/en/blog/2018/03/01/important-advantages-impediments-use-virtual-lab/>

Ericol Fashion (2018). Why Fashion Accessories are Important? <https://ericolfashion.blogspot.com/>

Faustina Emefa Agordah. (2023, February 6). Methods of blocking/ draping sinamay for headdresses [Video]. YouTube. <https://www.youtube.com/watch?v=t7v1jZyP-IQ>

Faustina Emefa Agordah. (2023a, February 6). How to assemble headdresses [Video]. YouTube. https://www.youtube.com/watch?v=a8_jOlyIfK0

Faustina Emefa Agordah. (2023b, February 13). Manipulation of Crinoline to make Headdress [Video]. YouTube. <https://www.youtube.com/watch?v=ux60DZ-cdnc>

Forster, P. & Ampong, I. (2012). Pattern cutting skills in small-scale garment industry and teacher education universities in Ghana. *International Journal of Vocational Education*. Vol. 4 (2), pp. 14-24

Fowler, A. (2019). Hand Sewing Hats. <https://hataalk.com/hand-sewing-hats/>

Fox, N., Hunn, A., & Mathers, N. (2007). Sampling and sample size calculation. *The NHIR RDS for the East Midlands/Yorkshire & the Humber*.

Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275-285. <https://doi.org/10.1016/j.susoc.2022.05.004>

Isika, K, I. J., M., K., Nguku, E., & Obere, A. (2016). The Competencies of Fashion Design Teachers in Public Institutions of Higher Learning in Nairobi County, Kenya. *International Journal of Sciences: Basic and Applied Research (IJSBAR)* <http://gssrr.org/index.php?jpurnal=Journal>

Kumar, Jayant & Singha, Kunal & Pandit, Pintu & Maity, Subhankar & Ray, Amal. (2020). Challenges for Waste in Fashion and Textile Industry. 10.1002/9781119620532.ch2.

Mack, S. R. (2011). Gifts to be Cultivated: Training in Dressmaking and Millinery 1860-1920. (Doctoral Dissertations University St. Thomas, Minnesota UST). https://ir.stthomas.edu/caps_ed_lead_docdiss

Marbun, I. a. N. A. (2023). The Embracing workplace flexibility: will virtual meeting technology remain successful during post Covid-19 pandemic? Deleted Journal, 7(1), 249–268. <https://doi.org/10.25139/jsk.v7i1.5033>

Marjorie, M. & Baker, M., S. (2013). Accessories the finishing touch. University of Kentucky-College of Agriculture

McDowell, C. (1992). Hats, status, style and glamour. London: Thames and Huston

McQuerry, L. (2019). Difference Between a Fashion Designer and a Clothing Designer. <https://work.chron.com/difference-between-fashion-designer-clothing-designer-4556.html>

Niinimäki, K., Peters, G., Dahlbo, H., Perry, P., Rissanen, T., & Gwilt, A. (2020). The environmental price of fast fashion. Nature Reviews. Earth & Environment, 1(4), 189–200. <https://doi.org/10.1038/s43017-020-0039-9>

Obinim, E. & Pongo, N., A. (2018). Competency Training Models and Teaching of Apparel Patternmaking in Ghana. International Journal of Vocational Education and Training. Vol. 14 (2) pp. 48-57

Omair, A. (2016). *Selecting the appropriate study design for your research: Descriptive study designs. Journal of Health Specialties Vol. (3) 3. 153-156* <http://www.thejhs.org>

Onele, N. O. (2021). *Virtual Reality: a tool for improving the teaching and learning of technology education. In IntechOpen eBooks.* <https://doi.org/10.5772/intechopen.90809>

Ribeiro, L., Miguel, R., Pereira, M., Lucas, J. & Trindale, I. (2012). *Evolution of fashion accessories: bags design and the use of woven fabrics. Global International Fashion Conference.* http://gfc-conference.eu/files_download/GFC2012

Rodriguez, V. (2020). *How to dress classy – 7 style tips you need to know.* <https://stylishlyme.com/style-guides/how-to-dress-classy/>

Sai, A. O., Quansah, S. A., & Acquaye, R. (2022). *Recycling Fabric Waste into Functional Interior Decoration Pieces. Journal of Art and Design, 2(1), 15–32.* [https:// DOI: 10.31586/jad.2022.253 www.scipublications.com/journal/index.php/jad/article/view/253](https://www.scipublications.com/journal/index.php/jad/article/view/253)

Salkind, N. J. (2010). *Demographics. Encyclopaedia of Research Design. SAGE*

Tia, M. (2016). *How hats evolved in Africa.* onchek.com/theinsight/how-hatsevolved-in-africa/#

Vishwaroop A. (2022). *How Teachers Can Use Documentary Films to Teach Students.* <https://blog.teachmint.com/how-to-use-documentary-films-to-teach-students/>

Williams, K., M. & Laing, J. (2013). Fashion: The Synergy between Millinery and Horse Racing Events. Conference Paper. <https://www.researchgate.net/publication>

Wovenu, M. (2017). Some underlying reasons accounting for fashion graduates of the polytechnics not operating in the fashion industry. Arts and Design Studies Vol.53. pp. 28- 32 www.iiste.org



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A reflection of the aesthetic nature of the environment in selected picturesque landscape paintings of the Shooting Range Zone at Kenyatta University

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Abstract

Since the Renaissance period, picturesque landscape paintings have been used to demonstrate the aesthetic nature of the environment. The aesthetic qualities tend to, among other benefits, champion environmental challenges and create a religiously meditative atmosphere, The picturesque landscape paintings also encompass a wide range of artistic movements, styles, intentions, and mediums. Examples of picturesque landscape paintings include Thomas Cole's 1836 painting The Oxbow and Jasper Cropsey's 1865 painting The Valley of Wyoming. This paper seeks to demonstrate the aesthetic nature of the environment in picturesque landscape painting of the Shooting Range Zone at Kenyatta University, Nairobi, Kenya. The site is historical as it was a shooting range for the colonial British Army. The site has natural and beautiful environmental features such as valleys and paths, a forest of trees and fast-growing grasses. A select artist produced landscape paintings from the Shooting Range that

were the primary data of study. Formal analysis was used to descriptively analyze the landscape paintings. The paper presents the analyzed results of the aesthetic nature of the Shooting Range environment as depicted in the picturesque landscape paintings.

Key words: *Environment, Picturesque Landscape painting*

Introduction

Picturesque landscape paintings are inedible artworks that depict the aesthetic nature of the environment. This have been done since the Renaissance Period to today (Wango 2022). Paden (2015) states that picturesque landscape paintings were used to express the beauty of the environment. Adam (2010), Wango (2022), Paden (2015), Stokstan, and Cothren (2005) affirm and add that the then Renaissance landscape paintings captured the reflection beauty of the natural sunlight. Gersh-Nesic (2019), Faison (2015), and Blumberg (2020) observe that picturesque landscape paintings feature the nature of the environment that includes mountains, valleys, bodies of water, fields, forests, and coasts. Faison (2015) goes ahead to provide examples of picturesque landscape paintings such as Thomas Cole's 1836 The Oxbow and Jasper Cropsey's 1865 painting titled "The Valley of Wyoming" (below).



Source: Artvee, **Title :** Wyoming Valley
Artist: Jasper Francis 1865



Source: Metropolitan Museum of Art,
Title: Oxbow, **Artist:** Thomas Cole 1836

Scholars have stated that picturesque landscape paintings have the effect of evoking psychological effects and serene calmness to the viewer. They also point out the importance of picturesque landscape paintings in championing environmental challenges, and creating a stimulating atmosphere (Wango, 2022. Richman-Abdou 2017, Carlson 2009, Paden 2015, and Faison 2015). This suggests that picturesque landscaping paintings are good examples of artistic genre of painting that demonstrate the appreciation of the aesthetic nature of the environment. Some scholars like Carlson (2009) and Herzog (2016) however argue against this view. Carlson (2009) for example explains that picturesque landscape paintings are abstract depictions of the aesthetic nature of the environment that actually would prevent appreciation of the nature of the environment.

It is from this standpoints that this paper seeks to verify the indicated standpoints by demonstrating the aesthetic nature of the environment in picturesque landscape paintings. The paper descriptively analyzes picturesque landscape paintings of a select environment, the Shooting Range Zone at Kenyatta University, Nairobi. The Shooting Range Zone is a historical location at Kenyatta University where the colonial British Army used to store their firearms in the Armory and practice their shooting skills. Today, the Zone houses painting studios for students and lecture rooms for literature, theater, and film studies.

A select artist produced landscape paintings from the Shooting Range that were the primary data of study. Formal analysis was used to descriptively analyze the landscape paintings. The paper presents the analyzed results of the aesthetic nature of the Shooting Range environment as depicted in the picturesque landscape paintings. In so doing, the paper answers Muthama (2009) concerns that there was

need for artists to document their landscapes through drawing and painting.

Literature Review

Picturesque landscape painting

Paden (2015) explained the term “picturesque” to mean “picture-like.” The term was used in the eighteenth century to describe landscape painting depicting the nature of the environment as it is. Examples of early picturesque landscape painters include Claude Lorrain (1600–1682), and Gaspard Dughet (1615–1675).



Source: [Metropolitan Museum of Art](#),
Title: The countryside, **Artist:** Claude Lorrain. 1615-1675



Source: [Metropolitan Museum of Art](#), **Title:** Sunset , **Artist:** Claude Lorrain (1600-1682)

Richman-Abdou (2017), Paden (2015) and Faison (2015) note that landscape paintings are an artistic genre that focuses on natural scenery. Wango (2022) and Paden (2015) agree and highlight the observational skills of the scenery, the selection of the preferred medium, and the application of techniques as the critical elements of display in picturesque landscape paintings. They point out that

realism, impressionism, and hyperrealism are bases of stylistic influence of picturesque landscape paintings.

The aesthetic nature of the environment

Picturesque landscape painting not only depicts the aesthetic nature of the environment but also enhances the beautification of the landscape garden (Carlson (2009); Sehgal (2017); and Faison (2015). Mitchell (2014) further highlighted the appreciation of the aesthetic nature of the environment through picturesque landscape painting that features valleys and mountain ranges, prairies and forests, lakes and swamps, seas, and oceans.

Wango (2022) similarly pointed out that the aesthetic nature of the environment is the resource of reference for picturesque landscape painting. He also alluded to the fact that landscape painting invokes awe, curiosity, visual dialogue, and visual interest. Adam (2010), Wango (2022), Stokstan, and Cothren (2005) further acknowledge that picturesque landscape paintings carry a serene composition that convey a mood and feeling used to reflect the history of the scenery.

The Shooting Range Zone at Kenyatta University

Kenyatta University in Kenya has various outstanding scenes, iconic buildings, thick forests, tarmac and dusty roads, and beautiful gardens (Kelvin, 2023). Shooting Range Zone, located in the Department of Fine Art and Design has among other scenes, monumental walls, a life-size sculptural piece, archaic buildings, beautiful gardens, and a forest of trees. Kelvin notes that the shooting range zone was the location of British military barracks in Kahawa garrison, Nairobi, and the archaic buildings were military training areas for the colonial military officers.

Today, the buildings are painting studios for students and lecture rooms for other courses such as literature, theater, and films. The serene nature of the shooting range zone is also a public recreation area used for religious mediation and relaxation by the Kenyatta University community. The area is made up of beautiful natural features of valleys and paths, prairies and forests, old buildings and walls, trees that fade off the flowers, and fast-growing grass.

Methodology

A select artist produced landscape paintings from the Shooting Range that were the primary data of study. Formal analysis was used to descriptively analyze the landscape paintings (Barrett 1994). Wango (2022) and Carlson (2009) confirm that the appreciation of the aesthetic nature of the environment is analyzed in the application of textures, lines, colors, and resultant shapes, patterns, and designs. The paper presents the analyzed results of the aesthetic nature of the Shooting Range environment as depicted in the picturesque landscape paintings.

Results

The section first presents the aesthetic nature of sections of the environment in the Shooting Range Zone at Kenyatta University, Nairobi, Kenya. It then presents results of the formal analysis of the depiction of the selected sites in picturesque landscape paintings by a select artist.

A Contour hill in the Shooting Range

This was the first site in the Shooting Zone selected for study. It includes a contour hill, a forest of trees, and short bushy grasses. At a glance, army armory houses that were used to store firearms can be spotted. Currently, the houses have been turned into art studios and an Administration Block for the Department of Fine Art and Design. There is a short path through this section that gives access to the students Residential Hostels in Nyayo Block. Along the path, exists a life-size full cement sculpture of a cultured man with a hat and holding a book.

***Artwork 1a* is a scribble with a bold pen on the nature of the environment on a hill in the shooting range.**



Artwork 1a Title: Path to the shooting range, Media: Ball point on cartridge paper. Technique: Scribbling technique Size: A3

Artist: Wanyax Arts (Wanyama Ogutu)

***In Artwork 1a*, scribbling technique has been used to express the forest of trees in the distance together with a scattering of bushy grasses. The Department of Fine Art and Design, at the distance, is**

depicted using hatching and cross-hatching techniques. Lines has also been utilized to scribble the cement sculpture showing a man reading. Around the sculpture, there can be seen a bushy path that leads to the administration block of the Department of Fine Art and Design. The scribble of the path is wider in the foreground and narrower as you move toward the administration block.



Artwork 1b: Title: Shooting Range Hill, Media: Biro Red faint pen and tea washes cartilage paper

Technique: Scribbling technique, Size: A3

Artist:

Wanyax Arts (Wanyama Ogutu)

Artwork 1b is another picturesque landscape painting of the contour hill in the Shooting Range done by the same artist in brown ocher on the Manila paper. Brown ocher is used to depict the environment. Brown ocher has also been used to depict the tone variation of the dark brown and light parts of the select site. The choice of media has

enabled the capture of the depth and intensity of a forest of trees and bushy grasses in the Zone.

The below *Artwork 1c* done of the same select site by the same artist, uses a combination of tea, coffee, and charcoal as the painting medium.



Artwork 1c: Title: Shooting Range Hill, Media: coffee, tea washes, and charcoal, Size: A3

Artist: WanyaX Arts (Wanyama Ogutu)

The picturesque landscape painting above utilizes media that has been used to create depth and perspective of the forest of trees and bushy grasses in the Zone. The contours and scribbles of the hill of the shooting range are well achieved when the media is combined with washes of tea. Comparison of the achievement of depth and perspective of the forest of trees and bushy grasses using different medium is presented in *Artwork 1d* below:



Artwork 1d: Title: Shoot range hill, Media: Acrylic on canvas, Size: 80cm by 60cm

Artist: Wanyax

Arts (Wanyama Ogutu)

Artwork 1d is a picturesque landscape painting of the same zone made using acrylic on canvas. It is a color harmony depiction of the nature of the environment. It captures the naturalist color harmonies of the hill of the shooting range during the day. This is represented by the blue sky, green forest of trees, and bushy grasses. The color harmonies display the distance and perspective of the landscape. The color harmonies clearly display the perspective and contour shape of the hill in the shooting range.

A tarmac path to the shooting range

This was the second site in the Shooting Zone selected for study. It is a tarmac road leading to lecture rooms and studios at the shooting range. The long side of the route has an arrangement of a linear pattern of trees, shrubs, and flowers. The route also leads to the infamous informal settlement area known as 'KM'. The surrounding area is encompassed by a linear and atmospheric perspective of trees and bushes of grass and hostels. In the distance is an atmospheric perspective of the university games and sports grounds. At some point, moving vehicles can be spotted in a distance.



**Artwork 2a Title: Path to the Shooting Range, Media: Ball point on cartridge paper, Technique: Scribbling technique Size: A3
Artist: Wanyax arts (Wanyama Ogutu)**

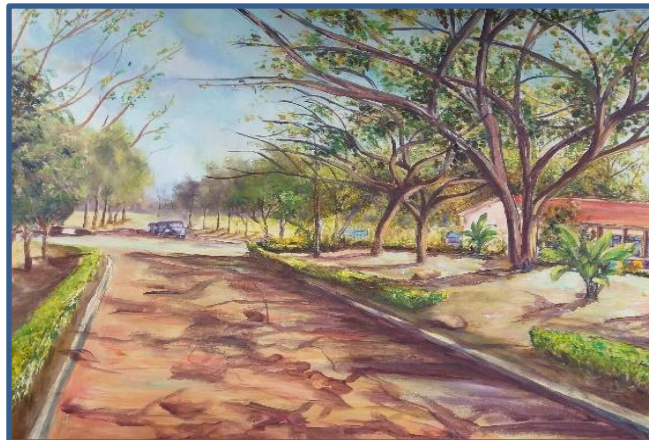
Artwork 2a is a scribble using a bold pen of the study area done on cartridge paper. The scribbles are expressed along the path, along trees, shrubs, flowers, and the Department of Fine Art and Design. The picturesque landscape painting also shows the Administration Block building, a forest of trees, and a scattering of bushy grasses.

The right-side building is depicted by the hatch and cross-hatching technique of drawing. The scribbles of the bold pen had achieved the tarmac foreground and narrowed in the distance as it varnished on university game and sports grounds. The bold pen scribbling emphasize the beauty of the linearity of the tree and shrubs and flowers along the path.



Artwork 2b Title: Path to the Shooting Range, Media: Watercolor washes on ivory paper Technique: Scribbling technique Size: A3 Artist: Wanyax Arts (Wanyama Ogutu)

Artwork 2b is a toned shade of Artwork 2a made using tea, coffee washes, and scribbles. The select media has created a tonal variation of light, shade, and shadow. It has also helped to create tonal variation and a linear and atmospheric perspective of the nature of the environment in the artwork.



Artwork 2c Title: Path to the Shooting Range, Media: acrylic on canvas, Size: 80cm by 60cm ,

Artist: Wanyax arts (Wanyama Ogutu)

Artwork 2c is a colored painting displaying the realistic nature of the environment. The naturalist nature of the environment is displayed in depth, linear, and atmospheric perspective, like a blue sky, a green forest of trees, and bushy grasses. The color has captured the sunset and is reflecting on the foreground and distant landscape.

Shooting Range Studios

This final site selected for study in the Shooting Range Zone were the Shooting Range studios. Currently, the shooting range studios are used as lecture halls and studios for painting classes. The Shooting range studios are next to a wall fence that forms the boundary of the University.

The select study site is densely covered by a forest of trees, shrubs, and a garden of flowers. The surrounding area is covered by a forest of trees in linear and atmospheric perspective. In the distance is an Armory that was used by the colonial army to store their armaments after a shooting practice. Today, the space around the armory offers a parking lot for vehicles and a recreation center for members of the university community.



Artwork 3a: Title: Shoot range painting studio, Media: Ball point on cartridge paper, Technique: Scribbling technique Size: A3 Artist: Wanyax Arts (Wanyama Ogutu)

Artwork 3a (above) is a scribble of the select site using a bold pen on cartridge paper, which has been captured from an atmospheric perspective. The scribbles capture the building and its environment, which includes a forest of trees, shrubs, and a garden of flowers. Hatching and cross-hatching techniques have been used to emphasize the forest of trees in a distance together with the scattering of bushy grasses.

Artwork 3b (below) is a rendition of the select site made using a bold red pen. It was created using rhythmic patterns made over toned shades of tea, coffee, and washes. The hatching and cross-hatching techniques have been used to emphasize the subject matter. The media has also created the tonal variation of light, shade, and shadow of the environment. It has also helped to create a deep atmospheric perspective on the nature of the environment.



Artwork 3b Title: Shooting Range painting studio, Media: Ball point, Red bold pen and tea washes cartilage paper, Technique: Scribbling technique, Size: A3

Artist: Wanyax arts (Wanyama Ogutu)

Artwork 3c displays a subjective impressionist version of the nature of the environment. The artist chose his palette to emphasize the beauty of the trees, shrubs, and flowers. The subject of the color palette has been reflected on the long path of the painting studio and lecturing room. The impressionist nature of the environment has been depicted in depth, linearity, and atmosphere. The color harmonies have captured the subjective reflection of the nature of the environment.



Artwork 3c: Title: Shoot range painting studio, Media: Acrylic on canvas, Size: 80cm by 60cm

Artist: Wanyax Arts (Wanyama Ogutu)

Conclusion

The paper draws inspiration from picturesque landscape paintings of the Renaissance period. Those paintings invoked psychological effects, championed environmental challenges, and created a religiously meditative atmosphere. The Renaissance period landscape

paintings featured the aesthetic nature of the environment, such as mountains, valleys, bodies of water, fields, forests, and coasts. Viewers of the artworks, at the time, appreciated the aesthetic nature of the environment as presented in the picturesque landscape paintings.

This paper has demonstrated a similar appreciation of the aesthetic nature of the environment using formal analysis instruments on a select selection of picturesque landscape paintings from the Shooting Range Zone at Kenyatta University. The selected artworks have depicted the aesthetic nature of the environment through the manipulation of elements of design textures, lines, colors, and resultant shapes, patterns, and designs. The paper ascertained that the aesthetic nature of any environment can be appreciated through picturesque landscape painting.

References

Adam, L. S. (2010). *A History of Western Art.*(5th ed).New York, MH: McGraw: ISBN-13: 978-0-205-74422-0

Barrett, T. (1994). *Criticizing art: understanding the contemporary.* Mountain View. California: Mayfield Publishing Company.http://www1.udel.edu/art/rmarquez/416/barrett_criticizing_art.pdf

Blumberg, N. (2020, April 3). *Landscape painting.* Encyclopedia Britannica. <https://www.britannica.com/art/landscape-painting>

Gersh-Nesic, B. (2019). *Introduction of Landscape painting.* Thoughtco.com. Retrieved on July 12, 2021 from <https://www.thoughtco.com/art-history-definition-landscape-painting-183217>

Herzog, N. (2016). *Glorious Landscape Paintings in Contemporary Art.* Widewalls.ch. Retrieved on July 13, 2021 from <https://www.widewalls.ch/magazine/landscape-paintings-contemporary-art>

Kelvin. R, (2021) *Shooting Range! Reasons Behind This Anonymous Military Amature At Ku Main Campus.* <https://www.kucomradesforum.Com/Shooting-Range-Reasons-Behind-This-Anonymous-Military-Amature-At-Ku/>

Mittler, G. A. (2006). *Art In Focus.* New York: McGraw-Hill: ISBN 0-07-868545-1

Mitchell, M. (2014). *Why do we love the landscape?* Markmitchellpaintings.com. Retrieved on 2 July, 2021 from <https://www.markmitchellpaintings.com/blog/why-do-we-love-the-landscape/>

Richman-Abdou, K. (2017). *Art history: The Evolution of Landscape painting and How Contemporary Artists Keep It Alive*. Mymodernmet.com. Retrieved on July 12, 2021 from <https://mymodernmet.com/contemporary-landscape-painting/>

Stokstan, M., & Cothren, M. W. (2005). *History of Art. (4th Ed)*. London: New Jersey. Hill ISBN 0-07-231717-5

Sehgal, N. (2017). *Why we love landscape paintings*. Mojarto.com. Retrieved on July 12, 2021 from <https://www.mojarto.com/blogs/why-we-love-landscape-paintings>

Wango, K. (2022). 'Foundations of Landscape Painting' – Colour Application, Textural Effects and Development of Holistic Composition. Analysis of Selected Landscape Paintings by Second Year Students at Kenyatta University, Nairobi, Kenya. *East African Journal of Arts and Social Sciences*, 5(1), 284-317. <https://doi.org/10.37284/eajass.5.1.744>

Wen, X., & White, P. (2020). *The role of landscape art in cultural and national identity: Chinese and European comparisons*. *Sustainability*, 12(13), 5472.



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The Componential Theory of Creativity as a Guide to Creativity for Kenyan Textile Micro and Small Enterprises

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Abstract

Due to their tendency to imitate each other's products, Kenyan textile micro and small enterprises (MSEs) face performance challenges, particularly in terms of low product differentiation. The importation of new and cheap used textile products further exacerbates the local competition. MSEs assist countries in achieving the United Nations Sustainable Development Goals (SDGs) by promoting decent jobs, economic growth, industrialization, and innovation. The purpose of this article is to elucidate how textile MSEs can utilise the Componential Theory of Creativity (CToC) to foster creativity and develop competitive innovations. Creativity enables artists and designers to explore uncharted areas revealing new concepts. The CToC shows that both intrinsic and extrinsic factors must be examined in order to enhance enterprise creativity. Sustainable product design and development requires effective product design strategies. Strategies are used in conjunction with other strategies rather than in isolation. Government support is critical for MSEs to create and

sustain new products, markets, and jobs, allowing them to meet economic changes.

Keywords: *Creativity, Product design, Textile*

Introduction

The micro and small enterprises (MSEs), manufacture goods for both domestic and international markets. These enterprises have a significant economic impact on job creation and income generation (Oigo, 2012). AFDB (2024) highlights that Micro, Small and Medium-sized Enterprises (MSMEs) are the core of Africa's economies, accounting for 95% of firms and generating over 80% of new jobs annually, with a projected 1 billion labor force growth between 2016 and 2063. According to the Kenya State Department for Micro, Small, and Medium Enterprises (MSMEs) Development (2024), the MSME economy contributes 85% of non-farm jobs, accounting for 15 million out of the 18 million workforce in the country and currently absorbing nine out of 10 young workers. However, MSEs face challenges including design constraints, production constraints, and market constraints. One of the design constraints Kenyan informal sector enterprises, including textile MSEs is that they invest little in innovation and instead imitate each other's products (Daniels, 2010).

According to World Bank (2020), a Kenya enterprise survey of 2018 revealed that the most commonly mentioned challenge of enterprises (23% of firms) was the practices of competitors in the informal sector. This number was almost identical to that of 2013 (24%). Textile MSEs in Kenya have been reported to experience product design challenges, key of these being low product differentiation and few innovations (diversifications).

MSEs play a crucial role in countries achieving the SDGs, particularly in decent work and economic growth (goal 8), as well as encouraging industrialization and innovation (goal 9). The SDG targets for goals 8 and 9 adopted in this study are as follows:

- ***Target 8.2. Increase economic productivity through diversification, technological advancement, and innovation. (IISD, 2019a).***
- ***Target 8.3. Encourage the formalisation and growth of micro, small, and medium-sized enterprises through access to financial services and develop policies that encourage job creation, entrepreneurship, creativity, and innovation. (IISD, 2019a).***
- ***Target 9.b. Support the development of domestic technology, research, and innovation in developing countries. Ensure the creation of a favourable environment for industrial diversification and product value addition. (IISD, 2019b).***

Pierre and Fernandez (2018) argue that there is insufficient evidence regarding how micro and small firms engage in innovative activities. Therefore, further research is needed to examine the innovation strategies and capabilities of small enterprises.

Darvishmotevali (2019) posits that individuals experience enhanced creativity when they possess increased autonomy in decision-making and are willing to undertake risks. This is optimal in a work environment that focuses on fostering innovation and gives sufficient resources and time for creative endeavours. Moreover, it is essential to establish a professional setting that highly esteems innovation and encourages deliberate ventures in the process of product design and development.

An enterprise can utilise many theories and product design strategies to foster creativity and maintain competitiveness. The objective of this article was to elucidate how Textile MSEs can employ the Componential Theory of Creativity (CToC) to implement a creative and resilient product design process, thereby reducing the product design challenges.

Creativity

Creativity is a cognitive process that entails the identification of original and innovative ideas or unconventional connections between pre-existing ideas, with the aim of addressing a particular situation. To achieve effective creative expression, one must possess a thorough understanding of production procedures and skills.

The creative process involves identifying the project's aim and objective, understanding the circumstances and facts, brainstorming viable solutions, and ultimately adopting and presenting a novel product concept. Creativity enables artists and designers to transcend reality and venture into uncharted territories, thereby revealing unique new concepts. By engaging in experimentation and learning from their mistakes, they are able to uncover novel perspectives, thought processes, and methods of creation.

Product design strategies and guides are essential instruments that micro and small enterprises use to create competitive product innovations. This paper highlights one of the guides for creativity and innovation, the Componential Theory of Creativity (CToC). The theory can guide an individual or enterprise through their product design process.

The Componential Theory of Creativity (CToC)

The Componential Theory of Creativity (CToC) helps designers understand the creative process and its constituent elements. Designers can create unique products by utilising domain-specific skills, innovative methods, intrinsic motivation, and commitment to tasks. Teresa Amabile formulated the Componential Theory of Creativity (CToC) in 1983. Amabile (2012) argues that it accurately portrays the mental aspects necessary for generating innovative output. According to the CToC, creativity is most likely to be at its peak when a person who is motivated from within, has extensive knowledge in a specific field, and possesses advanced creative thinking skills, works in an environment that provides ample support for creativity (Amabile 2012).

The CToC outlines four essential factors that need to be taken into account: three related to the individual/Creative team, including relevant creative thinking abilities, suitable expertise and process knowledge, and task motivation, and one factor external to the individual, which is the social environment in which the individual operates. The components shown in figure 1 are (1) Expertise. Refers to a skill where knowledge, technological, procedural, and intellectual ability are applied. (2) Creative thinking. Refers to using the mind in a flexible and imaginative way to solve a challenge. (3) Motivation. Refers to an inner passion to solve the problem at hand. (i.e. Intrinsic Motivation). (4) Social Environment. Refers to the work environment intervening factors in the creative process (Extrinsic motivators).

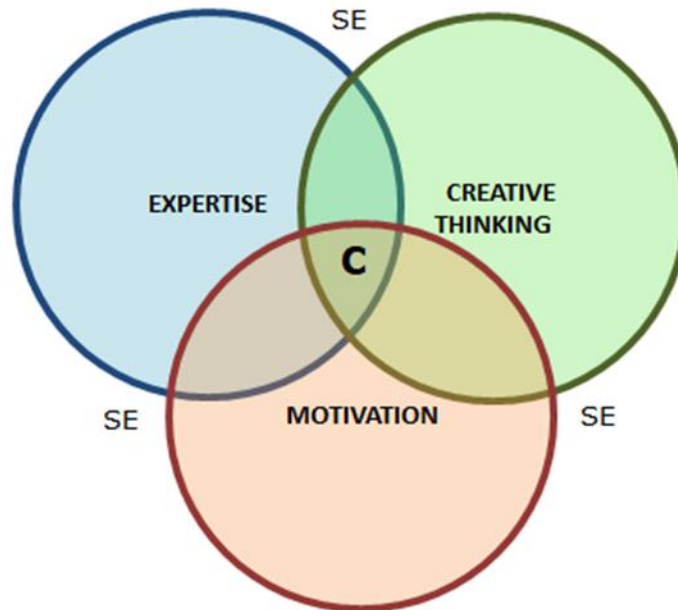


Figure 1: Component Model of Creativity
Source: Author. Adapted from Amabile (1998)

The componential model is the oldest theory on creativity and innovation in organizations, providing a comprehensive description of individual and organizational creativity processes and their mutual influence (Amabile & Pratt, 2016). The Amabile's component model was enhanced to clarify the mutually beneficial connection between the individual/team creative aspect and the enterprise's innovation aspect of product design (Creativity and Innovation) as illustrated in Figure 2.

Figure 2 illustrates the components influencing innovation and creativity. It shows that the symbiotic relationship as illustrated is that individual/group/team creativity feeds organizational / enterprise innovation; organizational work environment also impacts individual/group/team creativity.

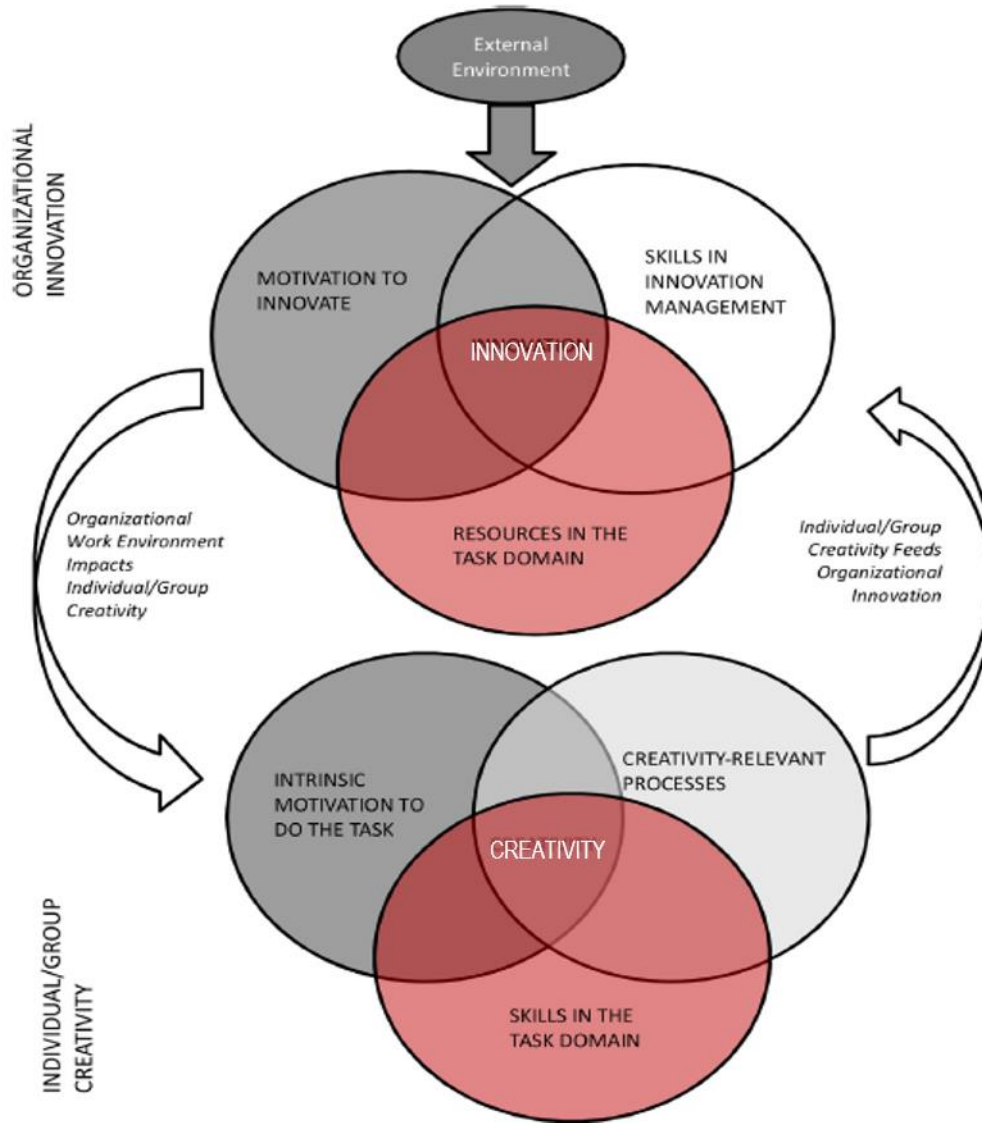


Figure 2: Interaction between Creativity and Innovation
Source: Amabile & Pratt (2016)

Product Design Strategies Relation to the Componential Theory of Creativity

The study employed benchmarking, association, collaboration, original, and research product design strategies to examine how they relate to the CTOC. These strategies were chosen based on their

empirical validation in previous enterprise studies (Dionco-Adetayo & Adetayo, 2004; Mahemba & De Bruijin, 2003; Ulrich & Eppinger, 2008). The strategies are widely used to enhance business growth and performance and are in line with the principles of creativity and innovation in product design and development. Figure 3 illustrates how selected product design strategies fit into the CToC.

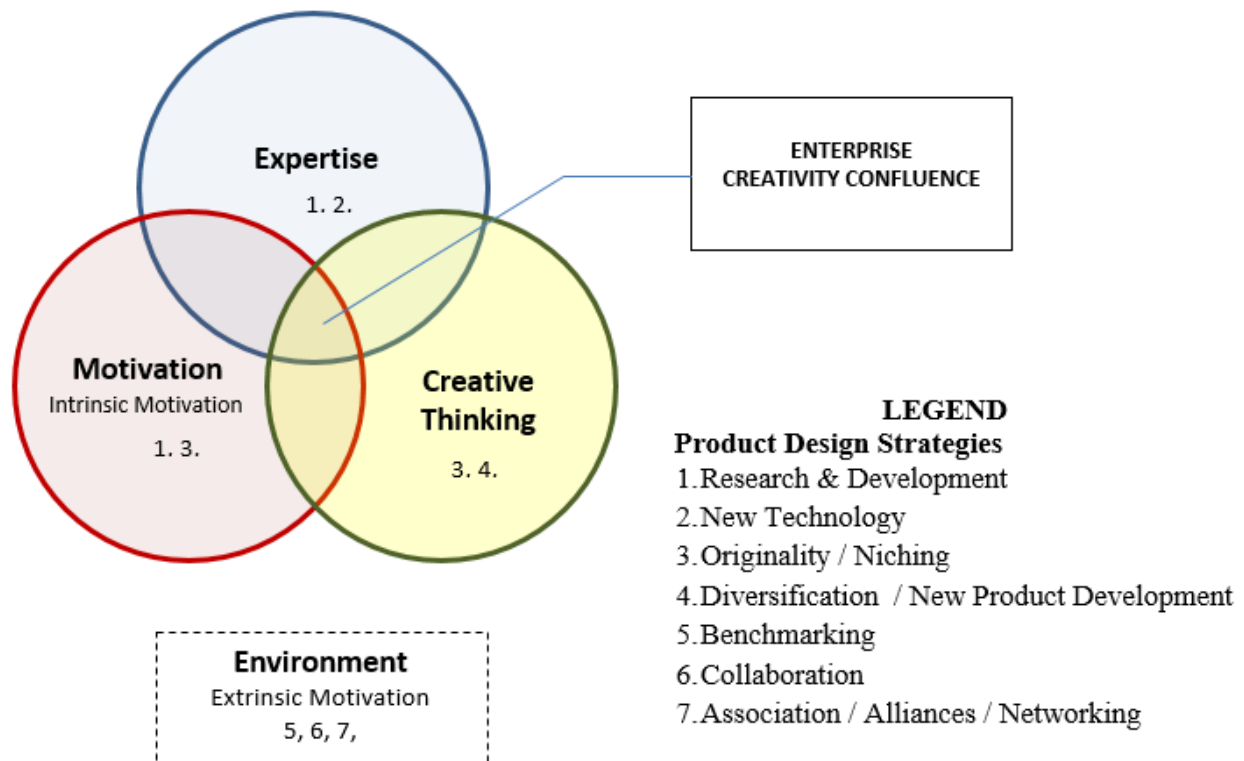


Figure 3: PD Strategy Relation to the CToC
Source: Author. 2020

In order for the creative process to be successful, it is imperative to consider all of these components. An individual or enterprise can be referred to as having a 'Creative Orientation' when they employ a product design approach that is cognizant of and backed by strategies for initiating new unique concepts/products. The explanation of the relationship between product design strategies and the Componential Theory of Creativity is summarized in Table 1 (next page).

Table 1: PD Strategies Relation to the CToC

The Relationship between PD Strategies and the Componential Theory of Creativity			
Strategy	CToC Components	Orientation	Explanation
1. Research & Development,	Expertise	Knowledge Orientation	Product innovation (performance) relies on R&D to promote expertise, a component of creativity. The expertise component can only be nurtured by an enterprise that is Knowledge oriented, where Knowledge acquisition and Sharing is encouraged.
	Motivation (Intrinsic Motivation)	Conducive work Environment	Successful R&D can only happen when the Employee/Designer/Intrapreneur is motivated. Requires a Design Management Style that creates a conducive work Environment
2. New Technology,	Expertise	Knowledge Orientation	Embracing new technology strategies usually gives an enterprise a competitive advantage. An enterprise that is Knowledge oriented will enable the upgrade of Skills therefore indicating their sensitivity to the Expertise component. Singla et al. (2018) advocate that Technology push (TP) and demand pull (DP) practices need to be prioritized to meet the challenges of competent markets worldwide.
3. Originality / Niching,	Creative Thinking	Intrapreneural Orientation	A competitive market place characterized by copying and imitation requires a strategy like Niching (Originality) to ensure less or no competition on similar products and/or same clients. Embracing intrapreneural orientation will

			allow for creative thinking where employees are allowed to design and innovate.
		Motivation (Intrinsic Motivation)	Conducive work Environment
			A successful Originality / Niching strategy can only happen when the Employee/Designer/Intrapreneur is motivated. Requires a Design Management Style that creates a conducive work Environment
4. Diversification / New Product Development (NPD)	Motivation (Intrinsic Motivation)	Conducive work Environment	Creation of new and differentiated products (Diversification) is achieved successfully when the Employee/Designer/Intrapreneur is motivated. Requires a Design Management Style that creates a conducive work Environment
	Creative Thinking	Intrapreneural Orientation	Embracing intrapreneural orientation will allow for creative thinking where employees are allowed to design and innovate.
5. Benchmarking,	External Environment (Extrinsic Motivation)	Market Orientation	Product design and innovation process begins with a situation/Market analysis in order to provide a fitting product for the client/market. Benchmarking can be said to be a comparison with high performers in the same trade for self-evaluation. A Market orientation stipulates sensitivity to Competitor and Customer dynamics. The extrinsic motivation will drive the enterprises innovation agenda. Popular quotes relating to the Benchmarking strategy includes: - "Do not reinvent the wheel"

				<ul style="list-style-type: none"> - “Learn not only from your mistakes but also from the mistake of others” - “Stand on the shoulder of giants”.
6.	Association /Alliances / Networking	External Environment (Extrinsic Motivation)	Market Orientation	Association / Networking relates to linking and getting support from not only design and development but also support for secondary areas such as Marketing, Finance and Legal issues.
7.	Collaboration	External Environment (Extrinsic Motivation)	Market Orientation	<i>Most innovation activities involve multiple actors, from situation analysis, planning/design and development. Findik and Beyhan (2015) note that enterprises that engage in external collaboration for innovation are better placed to improve their products. When collaboration is carried out internally it is usually referred to as Teamwork.</i>

Source: Ombura, 2023

Conclusion

The development of successful product innovations takes the route of identifying a design concept, analysing its utility and aesthetic value, and determining a suitable approach to creating the product. To remain competitive, enterprises may need to prioritize and apply successful product design strategies. Firms that focus on creativity

and innovation are more able to sense and respond to market trends in a dynamic and diversified market, and hence continue in business. The CToC shows that both intrinsic and extrinsic factors must be examined in order to enhance enterprise creativity. Product design is a key component of an enterprise's performance, because it pertains to creativity and product innovation. Textile MSEs should strive for a robust design process that will ensure the creation of viable and quality products for the market. The various product design strategies feasible for an enterprise need to be optimised and used in combination with other strategies for enhanced performance (innovation).

References

African Development Bank. AFDB (2024) Gazelles among the elephants and lions - MSMEs carve out space to grow. African Development Bank Group. Available at: <https://www.afdb.org/fr/news-and-events/gazelles-among-elephants-and-lions-msmes-carve-out-space-grow-32770> (Accessed: 2 June 2024).

Amabile, T. (1998). How to Kill Creativity. Harvard Business Review. September-October. (pp. 77-87).

Amabile, T. M. (2012). Componential theory of creativity [Harvard Business School Working Paper No. 12-096]. Encyclopedia of management theory. Cambridge, MA: Sage. doi, 10(9781452276090), n42.

Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. Research in Organizational Behavior, 36, 157-183.

Daniels, S. (2010) Making Do: Innovation in Kenya's Informal Economy. Analogue Digital. ISBN 9780578068169

Darvishmotevali, M. (2019). Decentralization and Innovative Behavior: The Moderating Role of Supervisor Support. International Journal of Organizational Leadership, 8, 31-45

Dionco-Adetayo, E. & Adetayo, J. (2004). Intrapreneuring Strategy for Small Firms Survival in a Globalized Economy. Product Innovation in MSMEs. Blackwell Publishing Ltd, Volume 12, Number 2,

Findik, D., & Beyhan, B. (2015). The impact of external collaborations on firm innovation performance: Evidence from Turkey. Procedia-Social and Behavioral Sciences, 195, 1425-1434.

IISD (2019a). Goal 8 - Decent Work & Economic Growth. <https://sdg.iisd.org/sdgs/goal-8-decent-work-economic-growth/>

IISD (2019b). Goal 9 - Industry, Innovation & Infrastructure. <https://sdg.iisd.org/sdgs/goal-9-industry-innovation-infrastructure/>

Mahemba, C. & De Bruijin, E. (2003). *Innovation Activities by Small and Medium-sized Manufacturing Enterprises in Tanzania. Innovation by Manufacturing MSMEs in Tanzania. Creativity and Innovation Management. Blackwell Publishing Ltd, USA. Volume 12 Number 3 September 2003.*

Oigo, B. (2012) *Role of Product Range, Network Associations and Marketing Strategies in Business Performance of Textile Handicraft Traders in Nairobi, Kenya, Unpublished Thesis. Kenyatta University.*

Pierre, A., & Fernandez, A. S. (2018). *Going deeper into SMEs' innovation capacity: An empirical exploration of innovation capacity factors. Journal of Innovation Economics Management, (1), 139-181.*

Singla, A., Ahuja, I. & Sethi, A. (2018), "Technology push and demand pull practices for achieving sustainable development in manufacturing industries", *Journal of Manufacturing Technology Management, 29(2), 240-272. <https://doi.org/10.1108/JMTM-07-2017-0138>*

State Department for Micro, Small and Medium Enterprises (MSMEs) Development (2024). *Formation of MSMEs, State Department for Micro, Small and Medium Enterprises (MSMEs) Development. Available at: <https://www.msme.go.ke/> (Accessed: 2 June 2024).*

Ulrich, K. & Eppinger, S. (2008). *Product Design and Development (5th ed.)*. McGraw-Hill.

World Bank (2020) *Kenya 2018 - Enterprise Surveys, www.enterprisesurveys.org. Available at: <https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/country-highlights/Kenya-2018.pdf> (Accessed: 14 May 2024).*



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ANIMAL AS METAPHOR IN MURAINA AKEEM'S WELDED METAL SCULPTURES

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Abstract

The use of animal as metaphor is synonymous with African art and believe system that has continued to exist despite the effect of Western contact. Animal motifs feature in the artistic traditions of the Ashanti, Bamileke, Benin, Nok, and Yoruba people among others. The use of animal in art is link with mystical power associated with each of the animal used. Foreign contacts with the African artists have

really influenced their artistic creativity, which has reflected in the form, materials, theme and techniques. In Nigeria, despite cross Atlantic influence, contemporary artist still reflects their cultural background in their works. Muraina Akeem, a contemporary welded metal sculptors in Nigeria explores animal as his subject matter and yet there is a dearth of information about him and his creative art in scholarly works. This paper therefore discusses his medium, techniques and content with a view to documenting his efforts and contributions to the development of contemporary welded metal art practice in Nigeria. A few of his works are purposively selected as they relate to the context of the study. To achieve this, both primary and secondary methods of data collection were employed.

Key Words: *Animal, Motif, Metaphor, Welded Metal, Sculpture.*

Introduction

Contemporary art in Nigeria is characterized by dynamics of change and continuity and the shift in traditional styles became inevitable due to the flux of foreign ideas, which ultimately influenced all aspect of the people's life. According to Filani (2005) contemporary Nigerian art can be said to have been mainly defined by the formal school system which came in as a result of the spread of western education. The exposure to western education by many Nigerian art students gave them the access to academic training that broadened their knowledge and scope in the theory and practice of art. The exposure to western education also gave them access and knowledge in the use and experimentation of foreign materials cum techniques to achieve personal expressions in their artistic works.

From the ancient time, traditional African artists used animal motif as metaphor and other devices of representation as vehicles of expression, by using animal characters to define human values and encourage thinking about human social disharmonies. As such, the animals most often found in African art are those that are most familiar or those through which irony and paradox are most tangible. Moreover, given animals suggests different things to different groups of people in Africa. Animals in African Art therefore, celebrates African cultural diversity as well as the brilliance with which ideas are given form through plastic art with emphasis on metal.

In modern time, forms, meaning, and essence in their sculpture (with emphasis on welded metal art) varied from the focus in the works of traditional artists, which is linked with spiritual and mystical interpretations. Presently, the works are used as a metaphor to communicate and reflect contemporary issues in the society as against the meaning and purpose of using the motif in the traditional time.

The artist's medium of expression (welded metal sculpture) came into limelight through a Spanish artist called Julio Gonzalez who used the skill in the artistic possibilities of new materials and a new method borrowed from industrial technology, to construct welded iron sculpture in 1927, Osborne (1970), Gardner (1976) and, Andrews (1983). In 1930, Gonzalez new art caught the interest of his contemporary period, Picasso then asked him for technical assistance, and the two of them created welded iron structures that resembled Gonzalez's work. Consequently, from this time, this new found technique (of welded metal) marked the emergence of a major modern medium in sculpture and was thereafter preferred to the old

ways of making sculpture out of metal and the influence began to spread from Europe to America and latter to other parts of the world.

In Nigeria, modern welded sculpture came into limelight in 1963 through a second year National Diploma (ND) student of Yaba College of Technology, in Lagos by name; Victor Uwaifo. Uwaifo, ventures into using metal junk (from auto mobile) in execution of his (ND) project titled "Saxophonist" in plate 1 (below), at Yaba College of Technology, in Lagos. The trend has continued to flourish, resulting into various forms, themes, styles and approaches. Uwaifo's saxophonist is currently housed at the School of Art, Design and Printing, Yaba College of Technology Museum. Prior to Uwaifo's saxophonist, metal is known to be part of physical accompaniment in house project featuring in particular as buglers and rails on building through the Afro-Brazilians (Sobowale 2023).



Plate1: Saxophonist

Source: Muraina Akeem

The use of welding in making metal sculpture continued to give the sculptors more discoveries in their experiments and from it, the artists were beginning to create assemblages. Assemblages are works, which were composed by joining separate objects and

materials, in direct opposition to academic idea that a sculpture must be a homogeneous object of stone, bronze, or wood. Gilbert (1942) in his own opinion defined assemblage as a technique of piecing individual segments or objects together to realize sculpture. Assemblage often came as a result of being able to convert or recycling discarded metals most especially from machines and auto parts and giving it a new life by assembling them together to form a sculptural piece.

Adeleye (2019) study documented Akeem Muraina's metal-morphosis, which involves experimenting with discarded and used metals to manage waste and become self-sufficient. The study also showcased the style, technique, and innovations used in the actualization of some sculptures produced, along with a brief analysis.

While Oligbinde, Orelaja, Solomon, Onigbara and Odunlami (2023) study focused on the manner in which wastes have brought attention to the necessity to properly care for the immediate environment. Engineers, environmentalists, campaigners, visual artist and even world leaders have always been deeply interested in the issues of waste contamination. The study aims to investigate the ways in which various Nigerian artists and engineers are utilizing their abilities and assets to protect and maintain the quality of life for local residents in the continuous fight against climate change.

Kayode (2006) study looked into how artists and other professionals developed interest with their ingenuity creative knowledge in giving new life to old discarded objects that constitute nuisance to the environment. Through the artist efforts, the society is saved from being vulnerable to environmental hazard. According to Mbonu-Amadi (2024) Muraina Akeen in his exhibition which marked his three

decades career as a studio artist delves deeply into the text, using the vividness of art to convey a spiritual understanding of Nigeria's faltering economy.

Recycling or conversion according to Filani (1999) is a creative improvisation, renovation and utilization of abandoned material which are recreated as new raw materials to satisfy artistic ends. He also mentioned the possible areas where materials could be converted for use with an example of the use of junk metals to recreate artistic forms. Filani (1984) notes that, the scenario, unknowingly results in challenges and therefore gives the artists the opportunity to be more creative and more inventive.

Corroborating the above, Ademuleya (1999) observes that the numerous inventions and discoveries made so far have not only made it possible for today's artists to be rich in variety of materials, using various possible media in producing his creative art, but it also served as a challenge to him as he began to see himself as part of the inventive process. The artist, according to him, experiment into such materials or other related materials creatively harnessed to be able to meet today's ever growing and changing needs. This statement is obvious in Muraina Akeem's work as it takes someone with a critical creative mind and, an inner eye (*ojú inú*) to be able to recreate these discarded but found objects into what could be seen and appreciated as a work of art.

Andrew (1983) notes that after World War II, arc welding became extremely popular among young artist. Perhaps this had something to do with the usefulness of welding in salvaging the broken debris of an industrial society and forming it into shape (welded sculpture) with new meanings. Thus, through assemblage, the artists were able to

resurrect and bring to life what seems to be a lively work of art from things regarded as useless and abandoned. This is highly reflected in the contemporary creative welded metal sculptures of Muraina Akeem in which he was able to combine and convert some automobile parts considered as useless into tangible art piece.

The nature of modern metal sculpture cannot be complete without adequately looking at the revolutionary and significant role played by the use of metal in the twentieth century art arena from Europe and America down to the other part of the world. Balogun, (2008) observed that the field of sculpture, due to the industrial revolution in Europe and America has been invaded by numerous media of expressing aesthetic form, and that metal, is a material explored for diverse creative essence to satisfied aesthetics demand especially through various processes of welding. He notes the wind of industrial revolution which blew across the western world in the eighteen centuries as having greatly revolutionized functionality of iron in different techniques and form for figurative purposes.

Muraina Akeem, a short biography

He was born in April 1966 and hails from Ibadan, Oyo State in Nigeria. He holds a Higher National Diploma in Sculpture from Yaba College of Technology in Lagos and a postgraduate degree in Technical Teacher Education from the Federal College of Education Technical, Akoka, Lagos. He is married and blessed with children. His interest in metal sculpting started in 1990 in his student days at the Yaba College of Technology where he had diligently understudied his lecturer Olu Amoda in metal sculpture.

After his study, he took up an appointment as a studio manager in the latter's Riverside Studio on Majoro Street, Onike Iwaya, Lagos. He taught Fine Arts briefly at St. Peter's Grammar School, Oyan in Òsun State during his National Youth Service Corp in 1994 and 1995. He was the general secretary of the society of Nigerian artist Lagos branch between 2003 and 2009. An active member of the Art Zero group, and a member of the Nigerian Conservation Foundation. He was a founding member of Sculptor Association of Nigeria (SCAN)

On returning to studio after his one-year teaching service in 1995, he went back to metal sculpting with the use of zoomorphic representation for his artistic theme to express and communicate his mind to the world about happenings in his environment. Muraina Akeem's adage, "Pay attention to what is lesser than you so that greater things in life can pay attention to you," captures the essence of his philosophy. This he has achieved in the use of what people regards as lesser things (junk, scraps and waste metal) of which after patience (*ifarabale*) and careful thinking (*aroinle*) couple with his inner eyes (*oju inu*) he was able to put life in them through his artistic skill (Lawal, 1974).

According to Uwaezuoke (2001), a glance at his work will surely evoke a cue to explain the thoughts behind each of the scrap images, and that his works is a call to the obtuse mind of the material-driven modern man. He prides himself on his giant strides in technology but seems strangely oblivious of the fact that he has upset the natural balance that not only maintains his environment but also guarantees his very existence.

For the realization of infrastructural development, trees have to be cut down and thereby deprived the environment its source of oxygen.

Edu S.H., the Chairman, Nigerian Conservation Foundation commented on Muraina's images that "the crux of the matter in his work is stemming man's stupid and wanton devastation of his environment in the name of conquering nature" (2001).

Production Techniques

The production techniques involved in the making of the welded metal works of Akeem is direct arc welding. This is a process of joining two or more materials, usually metals, permanently to form a homogenous item. Arc welding is a type of **welding that uses a **welding power supply** to create an **electric arc** between an electrode and the base material to melt the metals at the welding point (Sobowale, 2015). The ends of the two metals that are to be united are subjected to heat, pressure or a combination of both and are brought to molten state. A filler (an electrode being a material used to produce a weld) is placed between the two molten metal parts to form a molten pool or weld puddle. On cooling, a strong permanent bond is formed between the two metals, thereby forming a joint.**

The emergence of arc welding into the execution of figurative welded metal art work as mentioned above has since added to the way and manner metal art works is been done. This new method is considered faster and less expensive compeered with forge and cast metal works, thus, this make many modern artists who are interested in the technique to adopt it for the production of their welded metal works this day.

Welded metal works as it is today require the use of various modern equipment's and tools. These, the artists are using for the execution of their creative welded metal works. The variant mechanical tools

require skill for it to function to the taste of the artist, therefore, the skill of an individual artist and interest on the materials and tools to be use will determine the outward appearance of his product.

In the cause of this study, a visit to Akeem's studio was made in order to have a first-hand knowledge on the process of his creative welded metal works, it was observe he relied in the use of arc welding machine as a major equipment in the execution of his works along with some tools such as hand grinder, wire brush, arc saw, hammer of various sizes, pliers, vise, plate cutter and other consumable materials such as metal sheet, rod of difference sizes was also noticed along with various found objects

Thematic Analysis of Muraina Akeem's selected works

In *Pains of the Loved One (horse portrait)* (Plate 2, next page), the love men generally bestowed on the horse is not a true love. Men uses horse only for their selfish end. They forcefully move the animal by pulling the belt and chains put on its mouth and neck through which it will be dragged to where it is not even convenient for the animal. Thus, such an act gives some pains and injury to the animal particularly when it is being led to war.



Plate 2: Pains of the Loved One (horse portrait)

Source: Muraina Akeem

The idea of the love showed to the horse could be likened to a Yoruba adage which says, *ife a fe adie ko de nu*. Man love for chicken is not a sincere one. Man's care and love to this animal at the end of the day is for him to see that the animal has good health and strength to achieve his self-centered desires. This type of love could also be likened to the manner people in corridor of power are relating with those working under them such as the civil servants among others.



Plate 3: A line for the Loved One

Source: Muraina Akeem

In "A Line for The Loved One" (Plate 3, above), the artist analyzes human emotions as they relate to their opposite sex by using a frog in this piece. Generally, in the night, female frogs comes out from their hiding to attract and chase the love of their opposite sex through the sound they make. It is how sweet and attractive the sound is to the opposite sex, waiting among the male frogs that will attract its feelings and quickly search for the one giving such a loved sound amidst several females beckoning for emotional recognitions. Once an approach is being made, the female frog will quickly back the male and left the scene before the male gets distracted. This again propelled the Yoruba saying "*oko won lode l'opolo fi gbe ti e pon*".

Likening the frog attitude with man, man also had a way they secure and protect the feelings for their loved one through marriage that will afford them to cohabit, and putting rings in the hand of their partner and prevent others from chasing their spouse. The frog attitude of making a choice amidst the jazz like sound from several others could also be compared to man's nature of getting attracted to a particular type of song as there are many musicians trying to get their music to people and every one of them as numerous as they are, have their own fans.



Plate 4: Orphans (hawk chicks)

Source: Muraina Akeem

In "Orphans" (hawk chicks) (Plate 4), the artist uses the piece of work to campaign against war. War leads to killing of several innocent souls that knew nothing about its cause. The occurrence of war have left many children to be orphans in our society particularly in the Northeast and some Southern part of Nigeria where bandit and terrorist and government forces clashed and killed themselves leaving some children to no parents to care for their needs, which will eventually dash their hope and bright aspiration in life.

Looking at the little hawks, one can see in them the feelings of neglects as they stand alone missing their mother. Their look probably suggest that their mother who supposed to understand their feelings and needs might have being fired by the hunter or might have being caught in the midst of tick fire during the cruel act of constant bush burning caused by human actions to the animals in their natural domains. Consequently, the artist is using this work in collaboration with the government campaign against the act of incessant bush burning in order to preserve the environment and its habitats.



Plate 5: For how long

Source: Muraina Akeem

In "For How Long", (Plate 5), a cow was depicted at rest supposedly seriously meditating on the cruel act of human to their life. Cow is among the animals that is being used by the people to cultivate the ground during planting season, the same animal will still be used to convey their load and harvested crop back home during harvesting. Despite the usefulness of the animal to man, they are still very unfortunate because when man is in need of meat, the animal (cow) comes first to their mind to slaughter in other for man to satisfy their wants. In this piece of artwork, the artist used it in comparison with what the retiree's experience during their active period. The retirees

in our society were used by their employers to accomplish goals during their active time in their separate places of employment, but as soon as they departed the service, they were swiftly forgotten and discarded when it came to anything positive. Many retirees have met an early death as a result of their employer's callous actions after they had reached the pinnacle of their abilities.



Plate 6: Too Close for Comfort

Source: Muraina Akeem

While in "Too Close for Comfort" (Plate 6), the artist carefully make use of discarded automobile and machine parts to form a seated cheetah, a fiery carnivorous animal. The animal was depicted seated and yet looking very fearful as no weaker animals should dear move closer than necessary to intrude in its life or looking down on the likely possibility of getting attack by the quietly posed fiery animal.

The artist is probably using the piece in Plate 6 to pass a message to the viewers that they should be mindful of their steps when getting unnecessary close to people or places that are being protected by law. Around us in our environment, laws were being made either by government or by individual to guide and protect their interest. When such law is being violated, the consequence is not always palatable as

it could lead such person to an unexpected situation, serious injury or loss of life. It could also lead to criminal penalties as fine, probation, community service and civil penalties such as damages, injunctions and, restitutions. There could also be administrative penalties, reputational damages and, employment consequences, loss of rights and privileges and financial implications.



Plate 6: Too Close for Comfort

Source: Muraina Akeem

“Vigilante”, (Plate 7, above) is another piece in which the artist expressed his passion in the use of what is believed to be a waste from automobile and industrial machine. The artist used his artistic creativity to make another savanna animal the Giraffe. This animal is naturally very tall and endowed with a very long neck that affords it the opportunity of gazing through a long range thereby giving it the chance of seeing the possibility of enemy from afar. The work is done to draw man attention to the importance of being conscious of man need in protecting and securing himself from foes. The work is made to alert people to how crucial it is for them to understand how to secure and protect themselves from threats. If man can be conscious of the coming danger, he will be able to prevent it and take all

necessary measures in making sure his protection of life and property is secured.

Basing on the foregoing, one will agree with Signature Beyong (2024) that Muraina Akeem's works intersect art and storytelling with a unique glimpse, where metal transcend its physical form to become a medium for the expressions of profound narratives and timeless truths.

Conclusion

Looking at the artist work, it is affirmed that these scrappy metal devices have a life of their own or even a kind of soul. A look at the creative welded metal art works from Akeem provokes a cue to explaining the underlying thoughts behind each of the scrap figures. The elements from which the sculptures were made from as said earlier has being discarded and considered useless with no life in them before they met another creator who through his creative skill has bestow on them a long everlasting life. In addition, the artist places more value on them by using them (the discarded found object) as a creative art piece.

Muraina's idea of using objects already rejected could be liken to the biblical saying of Jesus that "the stone rejected by the builder has becomes the head of the cornerstone" Matt. 21:24. This is true of the materials used by Muraina in the creations of his animal motifs, these items has already been thrown away as people believed that they were no more useful but only for them to come later and accept them with more interest in their present state as they were being seen as an expensive art works. Uwaezuoke (2001) asserts that his creative

idea has also helped the society to relieve the environment of so much scrappy untidiness through the artist means of recycling.

The contribution of Muraina Akeem to the development of welded metal sculpture in the modern art scene in Nigeria is therefore tremendous. His creativity in converting discarded auto parts to make welded sculptural pieces which are today in collections of people both home and abroad cannot be over looked, hence, his contribution to creative knowledge is worth mentioning and documented for future purposes.

The findings reported in this paper on the life and works of the artist have contributed to solving the problem of poor documentation in contemporary Nigerian art. Ikpakronyi (2007:1-2) has observes that the attitude of the Nigerian art historian in documenting the life and works of our outstanding professionals in art during their life time is poor. This has often forced them to rely on second hand information that may not be sufficient to discuss the artist and his works from friends and colleagues, newspapers, magazines, exhibition brochures and catalogues. These second hand information avenues can never give detailed information like the artist background, his works, techniques and style as well as concepts and theme of his works. This paper, however, was able to give adequate attention to such details.

References

Adeleye, A. J. (2019). *Waste as Experimental Material in Sculpture: Metal-Morphosis of Akeem. Muraina's Metal Art. Ilaro Journal of Environmental Research and Development. Vol.3 (1) 135 – 145*

Ademuleya. B. A., (1999). "The Use of Petropolystyrene as a Casting Medium in Sculpture". *Journal of Industrial Design and Technology, Federal University of Technology Akure Vol. 1 no.1, 28-34.*

Andrews. O. (1983). *Living Materials: A Sculptors Handbook, California: University of Californian Press.*

Babatunde, L. (1974). *SOME ASPECTS OF YORUBA AESTHETICS1. The British Journal of Aesthetics, 14(3), 239-249.*

Balogun Adeola (2008) *The Significance of Metal (Iron) As A Modern Sculpture Medium. Visual Vanguard, A Journal of Contemporary Art, Design and Architecture. Sept., 2008, Vol: 1 (2). Lagos.*

Gardner, (1980:842), *Art through the Ages. Harcourt Brace Javanovich, Publishers. San Diego, New York.*

Filani. E.O., (1984): *Petropolystyrene in Printmaking. An MFA Thesis, Department of Applied Arts Faculty of Creative Arts University of Benin. Edo State*

Filani. E.O., (1999). "Trend and Experiments on Improvisation of Art Materials in Nigeria: Recycling from waste to wealth" *Journal of Industrial Design and Technology, Federal University of Technology Akure Vol. 1. pp. 24-27*

Fílàní O. (2005; 31). *Patterns of Culture in Contemporary Yoruba Art. Symphony Books, Nigeria*

Ikpakronyi Simeon (2007). Gani Odutokun and The Problem of Documentation in Modern Nigerian Art. in Gani Odutokun; A Legend of Nigerian Art. National Gallery of Art, Nigeria. 1-2

Kayode F. (2006) From "Waste to Want": Regenerating Art from Discarded Objects. Journal of the Environment, School of Environmental Sciences, Federal University of Technology, Yola – Nigeria Vol. 1 (1). Pp 68-85

Lawal B. (1974). (1974). Some Aspects of Yoruba Aesthetic. British Journal of Aesthetics. 3 (15). Pp239+249

Mbonu-Amadi O. (2024). Akeem's Metalphysics Alliance captures scriptural analogy. <https://www.vanguardngr.com/2024/04/akeems-metalphysics-alliance-captures-scriptural-analogy/>.

Accessed on Friday June 2024

Oligbinde S. R., Orelaja, O.A., Solomon O. I., Onigbara V.B. and Odunlami S.A. (2023). Recycling Wastes: Anew Language among Professional Artists and Engineers in Nigeria. A paper presented at the 3rd annual national conference, Moshood Abiola Polytechnic, School of Science and Technolog, Nigeria.

Osborne H., (1970) The Oxford Companion to Art, Oxford University Press, U.K.

Sobowale, T. (2015). Stylistic Analysis of Adeola Balogun and Fifelix Odogwu's Welded Metal Sculpture. (Unpublished M.Phil Thesis), Obafemi Awolowo University, Ile-Ife, Nigeria. 1-117

Sobowale, T. (2023). Metal Sculpture of the Auchi Art School (1981 – 2021). (Unpublished PhD Thesis), Obafemi Awolowo University, Ile-Ife, Nigeria. 1-222

Signature Beyond (2024). Introduction: Metalphysics Alliance, The Cows, the Pastures and the Tenants. In Contemporary African Art Exhibition by Muraina Akeem, held at Signature Beyond Art Gellery, Ikoyi, Lagos, Nigeria

Uwaezuoke O. (2001). Art blends with the soul of nature, The Comet Newspaper, Zuly 200. Lagos.

Uwaezuoke O. (2001). The musings of the junk impressario, The Comet Newspaper, May 1, 2001.



Letter from the Chairman's Desk

By Sunil Bhatia PhD

A friend of my age was talking to me while standing in the market and suddenly he experienced his body turning imbalanced and about to fall. He informed me that I was feeling dizzy and could fall at any moment. I tried to hold him but his condition was worsening. I advised him to sit on the ground " Do not resist what your body is demanding otherwise your imbalanced body will experience uncontrollable force that will prove your fall inevitable." He was a little reluctant but I insisted and he sat. After a few moments, he was found under control and stood. I escorted him to his house and informed his family members about his health. They rushed to the hospital for his treatment.

While coming from his house I realized I was living alone and something had gone wrong with my body who would look after me? I realized what I believe has no role in our lives for maintaining active healthy and normal humans. The role of balance is supported in every step of life and we learn from our parents when they hold us and allow us to take steps for learning walking. Even they bought a walker toy that supports walking by learning balance.

I thought about the balance that is a driver in product guide the users and the first one that struck in mind was the weighing machine where stages of the bar guide the measuring weight. How come the idea of balance was struck to them by such a minimalist and simple design of

scale? It is needed for designing of weighing scale, two pans hanging with a rope tied with a wooden bar. When potters made clay pots they found making a round shape possible on a rotating potter's wheel. They designed pitchers but filled water to generate imbalance. To control the imbalance of pitchers due to the motion of filled water forced them to design for stability by creating balance. They placed a pitcher on a round shape at the bottom. So initially thought of giving external support by keeping certain objects around that heavy imbalance force should not displaced and remain in the balance stage. Later they placed a rounded base pitcher filled with water on a square wooden shape fixed with nails. It was the perfect idea of achieving balance by applying external design objects. The potters use small threads for separating the casted pot in such a way that it leaves a flat base for balance.

It is the art of learning balance that revolutionized humans from walking from four legs to two legs and we call it human evolution. I have noticed in some houses where they domesticated monkeys and trained to as their child walk comfortably on two legs compared to monkeys living in a forest where they walk on four legs. It is the training of the master that trained to balance while walking on two feet.

Gymnasts are trained not to lose balance and perform their skills to get perfect marks. It is the balance that is a prime factor for achieving perfect marks. I found a game of dice that was a perfectly balanced cube that had each side a number of a different number of dot marks that directed the user to move that step after throwing the dice indicated on the upper side of the dots. I thought if it is unbiased

that will change the nature of the game and an equal level of ground will be missing and it will be kind of cheating.

I was a member of the technical committee for purchasing chairs that should have wheels at the base. Sometimes an employee needs help from sitting beside the employee and being pushed by his legs while sitting on a chair. I thought about a perfect balance chair because it is human nature to stretch his body as he experiences tiredness. That behavior forced me to buy those chairs that have the best balance mechanism in odd situations and the user should not fall because of its defective design. I recommended five arms at the base for a stable design with the wheel attached for wishful small movement. The design of the chair is improved because of instability that was because of the imbalance of character in it. Designers attempted to design a stable product in all possible odd situations by eliminating imbalance. They might have thought of one leg to two legs to three legs but ultimately settled on four legs. The user's activity of relaxing their body by stretching made them design a leg base for proper balance. Earlier back of the chair was fixed vertically but later made slightly slanted to accommodate the shape of a human back while resting. This design of the chair was designed for sitting for a short time. A new breed of workers emerged not traditional workers functioning with physical strength and needing long hours of sitting on table chairs. A new situation demands long hours of sitting of users resting and pushing hard for proper stretching of their body for relaxation. They designed the base of the chair with five legs fixed with a wheel for little movement for reaching out to by college for some little help in working time.

A normal chair without a wheel at the base has a perfect design with four legs for balance and stability. Balance has different

characters when it is static or in dynamic situations. Most difficult when it is flying. It was the crucial problem of the Wright brothers to design an airplane that should have balanced but had a mechanism to move forward in the air. Lifting objects for flying in the air in a balanced state needs different forces and once it is in the air for flying in a balanced state needs a different state.

Achieving balance in a robust state is known as stability.

In a financial statement, the balance in revenue and expenditure is guides for the break-even point and imbalance guides the user with profits and losses for taking measuring corrective steps.

It is an ancient game for entertainment by walking by balancing on a tightrope. Sometimes performer holds a long stick that helps in balancing while performing various acts. It is the balance that guides the performer to act accordingly to be in that state and to fall in imbalance.

A street sweeper was brooming and I noticed his broom that was attached to a long stick had one side that was touching the ground and had the shape of a slanted cone-like base. I thought it was due to use in one direction to achieve its large surface area in one stroke of the broom. I just questioned him 'Why do you keep sweeping from one side? . If you keep rotating after a few strikes the broom sticks will not exhaust from one side.' He said we deliberately fix the various broomsticks of different sizes where the long one at the upper side and the short one at the lower side. First, it helps in using short ones and does not go to waste, and most importantly it keeps balancing in this shape that needs low physical power every time we broom on the road. It is the imbalance in the broom that balances it. The users do

not exert extra force to control the rotation of the broom stick while cleaning. With low effort, we sweep the large area.

A fetching of water from a distance from a well or river or pond the rural woman keeps the water-filled pitch on their head. They ensure it is stable by placing over clothes shaped round kept over the head for maintaining balance while walking. Those women are not perfect in this art of walking by carrying water-filled pitchers on their heads that resting on the side of the waist and holding their mouth by their hands around it.

Children's toys are designed to maintain the figure's center of mass by placing some heavy objects in a hidden place and as the child hits it falls but the next moment bounces back to the same position. The child keeps hitting and every time experiences in balanced state. The street human living sculpture without showing any sign of movement uses tricks for balancing in sitting in the air for long hours. Visitors do charity for his livelihood by seeing his art of sitting as a static sculpture. People are surprised sitting in the air without any support and that entertains them.

Ancient people carry large heavy prey by tying on a wooden bar to hold on their shoulders. It is the balance that distributes the weight of animals among people holding from front and rear. If an imbalance in holding then people are carrying experience faster tiredness from one side people compared to people from the other. It is an imbalance that keeps guiding for adjusting the distance of holding the bar till everyone is satisfied.

An old man was trying to lift a heavy item that was beyond his physical strength. He asked me to help in carrying the load over his head. I supported him in keeping over his head and he walked away. I

realized it was his balance that was guiding him not to lift otherwise you would lose balance and the consequences would be harsh.

Before the design and application of electronic parts people were relying on mechanical design and for switching from one stage after the confirmation of this they used balance concepts. In the mechanical vending machine, they used extensively the concept of balance or imbalance for designing the desired control path for achieving the desired objective. The drivers were natural energy for shifting from one stage to another for achieving desired objectives. In modern times role of natural energy as a driver for shifting from one stage to another is done by electrical energy as a driving force.

The reason for motion in magnet is possible by creating flux by rotating. That external force disturbed the position of the magnet and its natural character tried to regain the lost position and that imbalance created frequency.

It is great honor that Prof Dr. George Vikiru *is a Lecturer in the Department of Fine Art and Design, School of Law, Arts and Social sciences, Kenyatta University, Nairobi, Kenya* has accepted the invitation and invited articles from contributors.

Lambert Academic publication for celebration of the 150th special issue by publishing a book by compiling editorials "Design For All, Drivers of Design" in two sets Drivers of Design Drivers of Design Volume-II was translated into eight different languages from ENGLISH to French, German, Italian, Russian, Dutch, and Portuguese. Kindly click the following link for the book. "Morebooks", one of the largest online bookstores. Here's the link to it:

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Enjoy reading, be happy, and work for the betterment of society.

With Regards

Dr. Sunil Bhatia

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Forthcoming Issues

August 2024 Vol-19 No-8



Dr. Bijaya K. Shrestha *received Doctoral in Urban Engineering from the University of Tokyo, Japan (1995-'98), Master in Urban Design from the University of Hong Kong, Hong Kong (1993-'95) and Bachelor in Architecture from the University of Roorkee (now Indian Institute of Technology), India (1983-'88). Dr. Shrestha has got working experiences of more than two decades. He had already served to the Department of Housing and Urban Development, Ministry of Housing and Physical Planning, Government of Nepal, United Nations Centre for Regional Development (UNCRD), Japan and various architectural schools in Nepal before taking the present job at*

Town Development Fund (TDF). He has initiated a new master program in Urban Design and Conservation at Khwopa Engineering College, Purbanchal University, where he served two years as Head of Post-graduate Department of Urban Design and Conservation.

Dr. Shrestha is the recipient of numerous gold medals for his excellent academic performance and decorated by 'Calcutta Convention National Award 2006' by Indian Society for Technical Education for his best paper at the 35th ISTE Annual convention and National Seminar on Disaster – Prediction, Prevention and Management. He is also member of numerous professional bodies and life member of various alumni associations. He has already contributed more than five dozen of papers, published in various forms: book chapter, international journals, conference proceedings, local magazines and journals including in local newspapers. Moreover, he has been invited in numerous international conferences for presentation of his research findings. Finally, his field of expertise includes sustainable urban development, disaster management, housing, local government capacity building and development control. He will focus on universal design concept on Nepal

September 2024 Vol-19 No-9



Steinar Valade-Amland.

He is market economist, and after more than 30 years of professional practice, I have accumulated extensive and valuable experience from a wide range of industries and managerial roles within marketing and sales, communication, PR and advocacy - leading to the design industry as an account director and later CEO of one of Denmark's leading brand design agencies, culminating in the role of spokesperson for the Danish design community, heading Danish Designers - parallel with holding numerous honorary positions.

My primary role today is helping organisations and management teams to establish the best possible baseline for business development and change processes - through stakeholder engagement and moderated processes, through organisational learning and co-creation. I'm rather agnostic when it comes to models and methods, but design thinking and processes inspired by design methodologies are part of my DNA after 30 years in and closely connected to the industry.

He authored numerous articles and book contributions, amongst others with 15 articles to the Bloomsbury Encyclopaedia of Design, out in 2015.

His latest book, DESIGN: A BUSINESS CASE - Thinking, Leading, and Managing by Design written together with Brigitte Borja de Mozota, is now out in English, Hindi and Korean.

October 2024 Vol-19 No-10



Sharmistha Banerjee, PhD Assistant Professor, Department of Design & Associated Professor, Centre for Disaster Management and Research, Indian Institute of Technology Guwahati

She is an Industrial Designer with extensive experience in collaborative innovation and sustainable product design. Presently, I hold the position of Assistant Professor in the Department of Design at the Indian Institute of Technology Guwahati. My doctoral research explored Design for Sustainability, specifically focusing on the development of scale-appropriate agricultural equipment. My academic journey began with a Bachelor's degree in Industrial Design from IIT Guwahati, followed by a Master's degree in Integrated Product Design from the Technical University of Delft, Netherlands, culminating in a PhD from IIT Guwahati.

I co-founded the Sustainability and Social Innovation Lab at the Department of Design, IIT Guwahati, which aims to redefine systems for sustainable human consumption and production. Our design interventions strive for a profound transformation of the consumption structure. The lab is an active participant in the Learning and Education Network in Sustainability (LeNS), a global consortium of over 150 universities dedicated to sustainability. A significant portion of our work focuses on sustainable product-service development projects within the agricultural sector.

December 2024 Vol-19 No-12



Yuka Takahashi

Designer, specialized in industrial design and applied art

New Books



Sunil Bhatia

Design for All. Volume-II

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Sunil Bhatia

Design for All

Drivers of Design

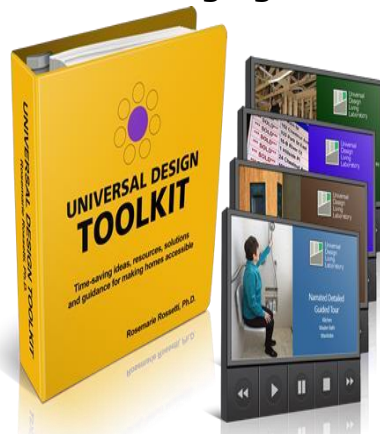
Expression of gratitude to unknown, unsung, unacknowledged, unnamed and selfless millions of heroes who have contributed immensely in making our society worth living, their design of comb, kite, fireworks, glass, mirror even thread concept have revolutionized the thought process of human minds and prepared blueprint of future. Modern people may take for granted but its beyond imagination the hardships and how these innovative ideas could strike their minds. Discovery of fire was possible because of its presence in nature but management of fire through man made designs was a significant attempt of thinking beyond survival and no

doubt this contributed in establishing our supremacy over other living beings. Somewhere in journey of progress we lost the legacy of ancestors in shaping minds of future generations and completely ignored their philosophy and established a society that was beyond their imagination. I gilded up such drivers that have contributed in our progress and continue guiding but we failed to recognize its role and functions. Even tears, confusion in designing products was marvelous attempt and design of ladder and many more helped in sustainable, inclusive growth.

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it is available on www.morebooks.de one of the largest online bookstores. Here's the link to it:
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Rosemarie Rossetti, Ph.D., teamed with her husband Mark Leder in creating this unique Toolkit. They bring ten years of research, design and building expertise by serving as the general contractors for their home, the Universal Design Living Laboratory– which is the highest rated universal design home in North America.

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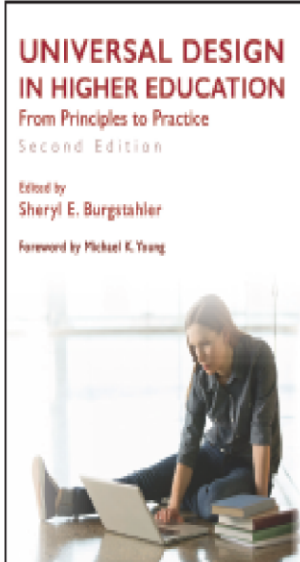
And so much more!

If you want useful, dependable advice and easy to implement ideas from respected experts who know the ropes, you'll love Rossetti and Leder's perspective. As a speaker, author and consultant who uses a wheelchair, Rossetti has helped hundreds of people design their ideal homes. Now her comprehensive Toolkit is available to help and support you! Get the Universal Design Toolkit now to start your project!

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—STEPHAN J. SMITH, EXECUTIVE DIRECTOR, ASSOCIATION ON HIGHER EDUCATION AND DISABILITY

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From Principles to Practice, Second Edition

EDITED BY SHERYL E. BURGSTAHLER • FOREWORD BY MICHAEL K. YOUNG

This second edition of the classic *Universal Design in Higher Education* is a comprehensive, up-to-the-minute guide for creating fully accessible college and university programs. The second edition has been thoroughly revised and expanded, and it addresses major recent changes in universities and colleges, the law, and technology.

As larger numbers of people with disabilities attend postsecondary educational institutions, there have been increased efforts to make the full array of classes, services, and programs accessible to all students. This revised edition provides both a full survey of those measures and practical guidance for schools as they work to turn the goal of universal accessibility into a reality. As such, it makes an indispensable contribution to the growing body of literature on special education and universal design. This book will be of particular value to university and college administrators, and to special education researchers, teachers, and activists.

SHERYL E. BURGSTAHLER is an affiliate professor in the College of Education at the University of Washington in Seattle, and founder and director of the university's Disabilities, Opportunities, Internetworking, and Technology (DO-IT) and Access Technology Centers.

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“Sheryl Burgstahler has assembled a great set of chapters and authors on universal design in higher education. It’s a must-have book for all universities, as it covers universal design of instruction, physical spaces, student services, technology, and provides examples of best practices.”

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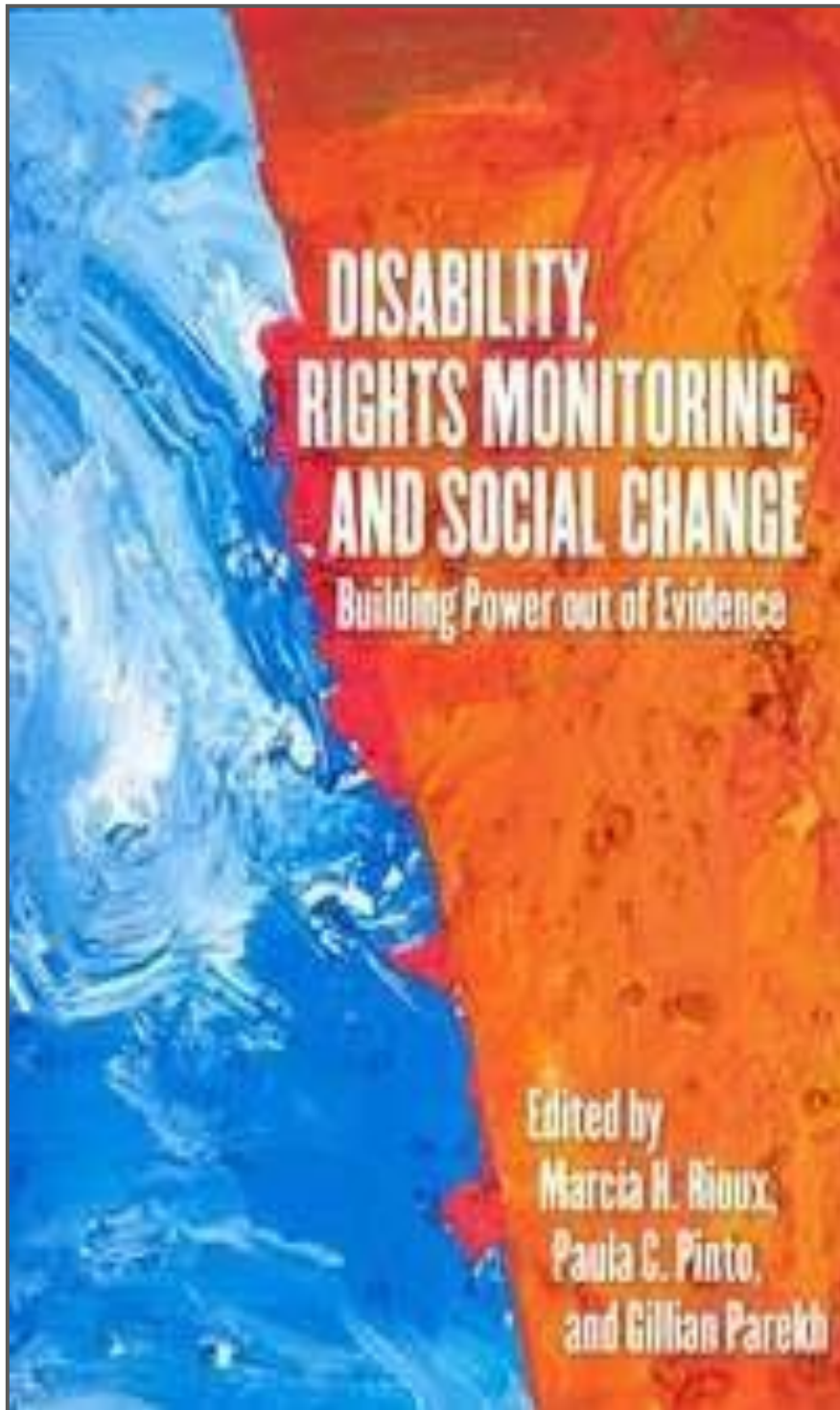
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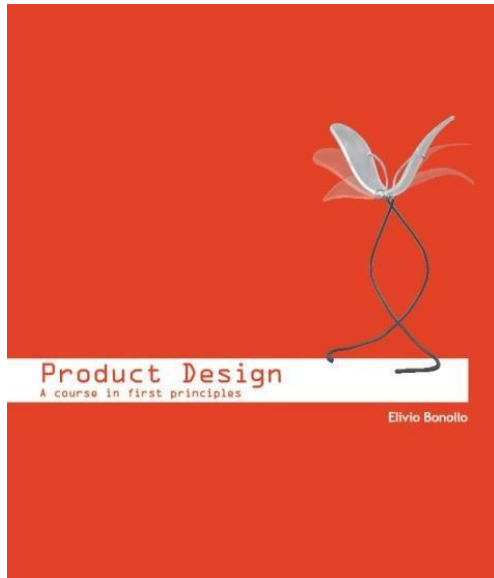
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Disability, Rights Monitoring and Social Change:



New Update: ELIVIO BONOLLO (2015/16) PRODUCT DESIGN: A COURSE IN
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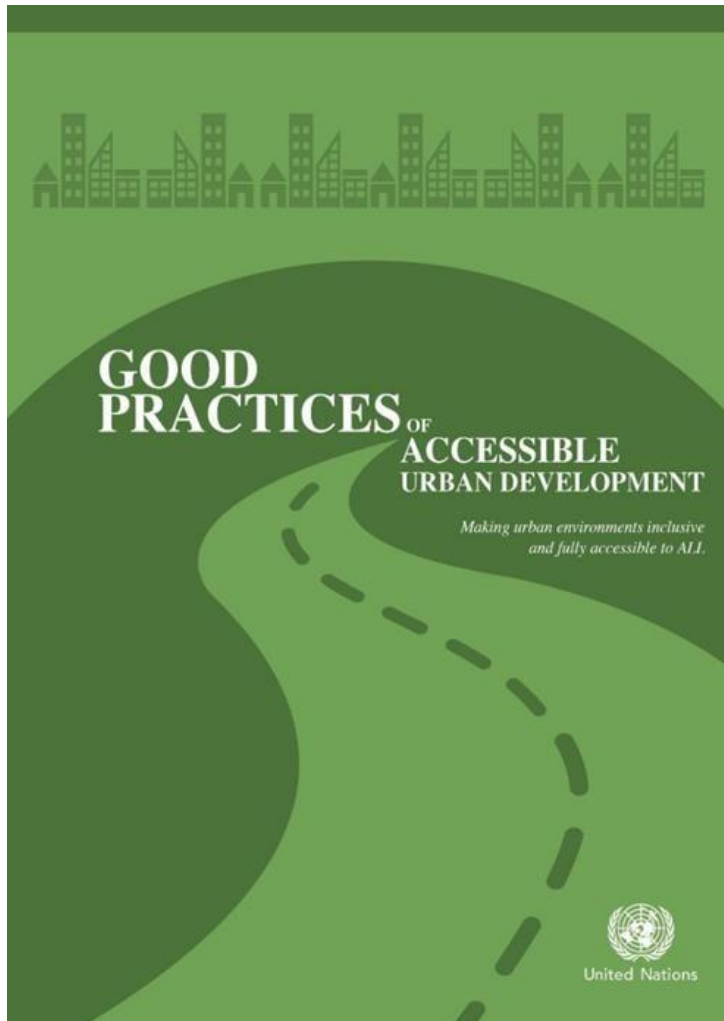
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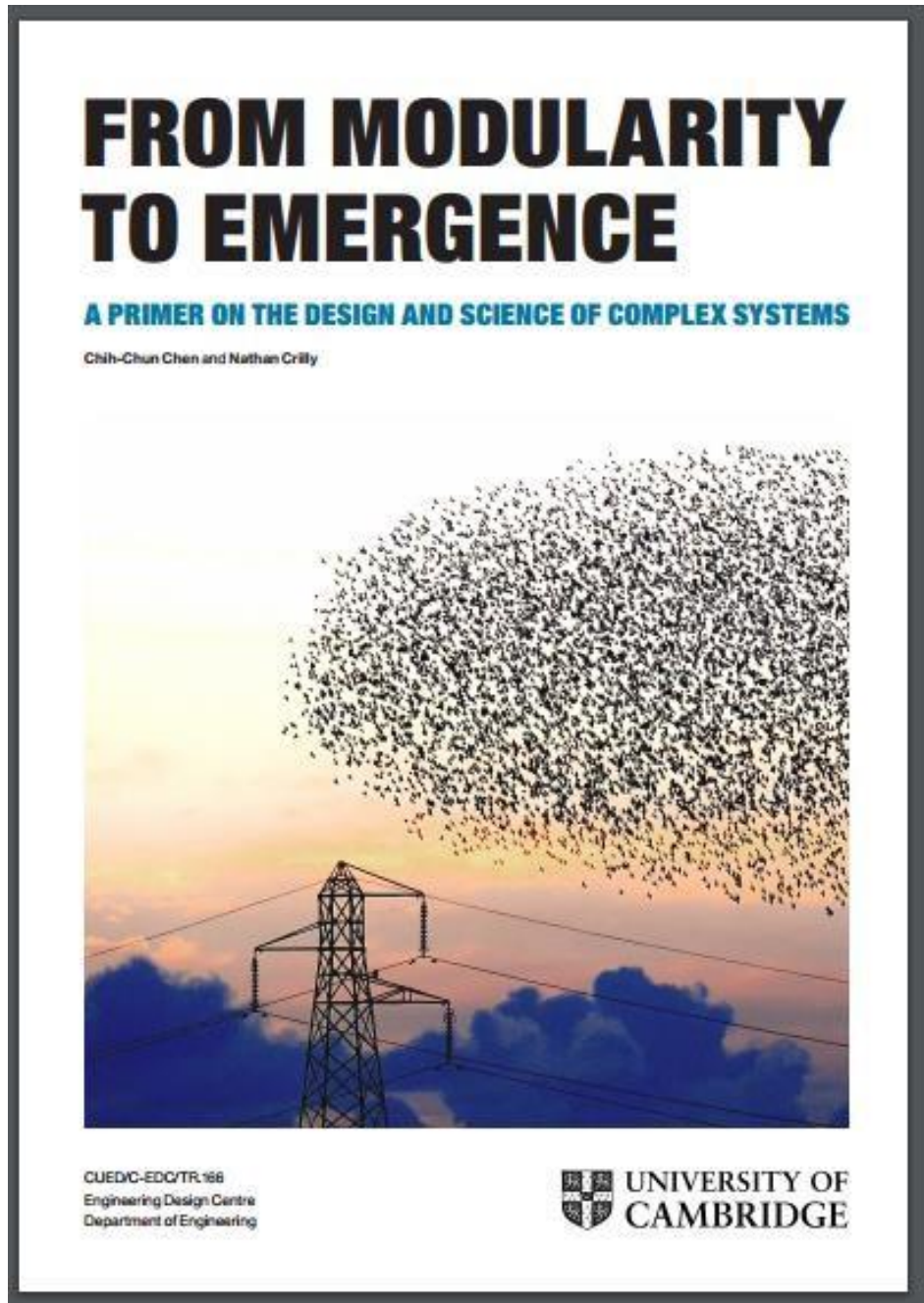


In light of the forthcoming United Nations Conference on Housing and Sustainable Urban Development (HABITAT III) and the imminent launch of the New Urban Agenda, DESA in collaboration with the Essl Foundation (Zero Project) and others have prepared a new publication entitled: “Good practices of accessible urban development”.

The publication provides case studies of innovative practices and policies in housing and built environments, as well as transportation, public spaces and public services, including information and communication technology (ICT) based services.

The publication concludes with strategies and innovations for promoting accessible urban development. The advance unedited text is available

at: http://www.un.org/disabilities/documents/desa/good_practices_urban_dev.pdf



Dr Chih-Chun Chen and Dr Nathan Crilly of the Cambridge University Engineering Design Centre Design Practice Group have released a free, downloadable book, A Primer on the Design and Science of Complex Systems.

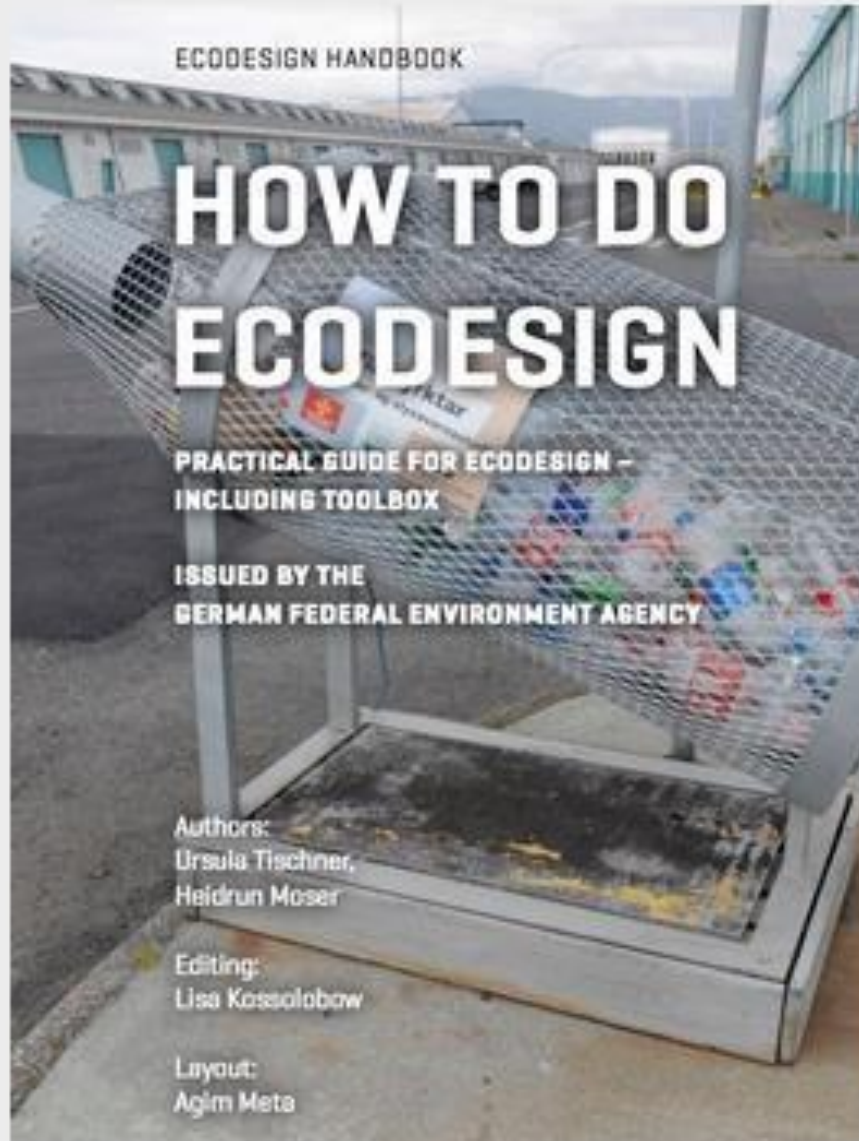
This project is funded by the UK Engineering and Physical Sciences Research Council (EP/K008196/1).

The book is available at URL: <http://complexityprimer.eng.cam.ac.uk>

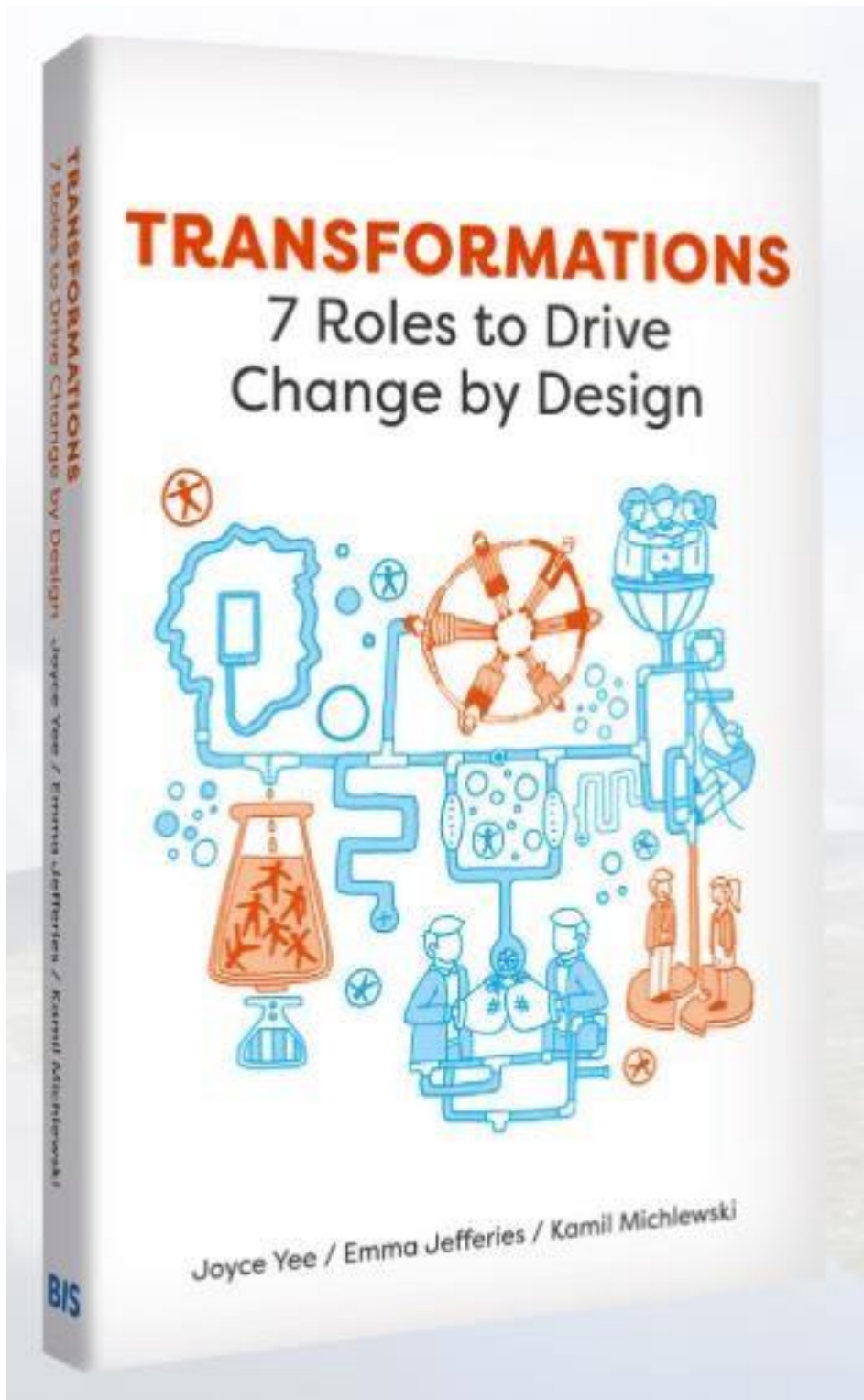
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New iBook / ebook: HOW TO DO ECODESIGN



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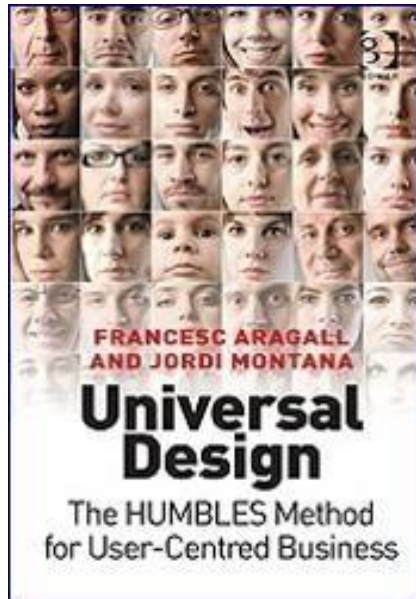
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Universal Design: The HUMBLES Method for User-Centred Business



“Universal Design: The HUMBLES Method for User-Centred Business”, written by Francesc Aragall and Jordi Montaña and published by Gower, provides an innovative method to support businesses wishing to increase the number of satisfied users and clients and enhance their reputation by adapting their products and services to the diversity of their actual and potential customers, taking into account their needs, wishes and expectations.

The HUMBLES method (© Aragall) consists of a progressive, seven-phase approach for implementing Design for All within a business. By incorporating the user’s point of view, it enables companies to evaluate their business strategies in order to improve provide an improved, more customer-oriented experience, and there by gain a competitive advantage in the marketplace. As well as a comprehensive guide to the method, the book provides case studies of multinational business which have successfully incorporated Design for All into their working practices.

According to Sandro Rossell, President of FC Barcelona, who in company with other leading business professionals endorsed the publication, it is “required reading for those who wish to understand how universal design is the only way to connect a brand to the widest possible public, increasing client loyalty and enhancing company prestige”. To purchase the book, visit either the [Design for All Foundation website](#)

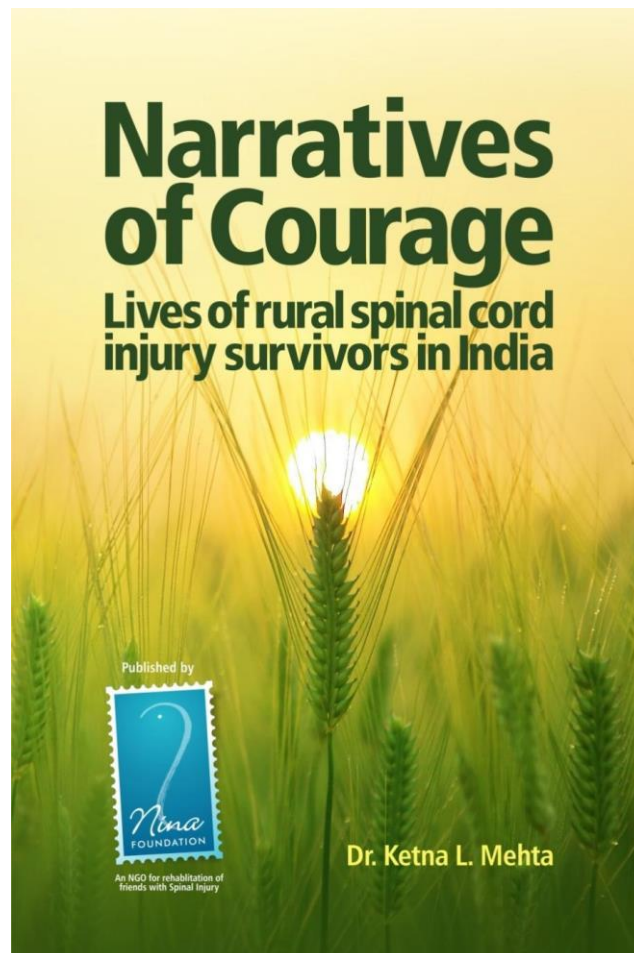
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Case Studies in Applied Behavior Analysis for Individuals with Disabilities *(Second Edition)*

Keith Storey, Ph.D., BCBA-D
Linda Haymes, Ph.D., BCBA-D

This book responds to a critical need for highly qualified personnel who will become exemplary professionals because of their advanced knowledge, skills, and experiences in working with students and adults that have varying disabilities, including Autism Spectrum Disorders (ASD). Since Board Certification for behavior analysts was introduced, there has been an expansion of training programs in Applied Behavior Analysis to meet the demands from school districts, health insurers, and families. In spite of these developments, a case studies book has not been available that uses the Behavior Analyst Certification Board Task List, Fifth Edition (BACB) guidelines for educating individuals receiving their BCBA, or for those in the field such as teachers, and service providers. The goal of this book is to fill that need. In this newly revised second edition, eighteen case studies are provided—case studies with complete analysis, case studies with partial analysis, and case studies without analysis. The format, readability, and detailed description of instructional methodology makes this text a valued resource for instructors and behavior analysts responsible for improving the skills of people with disabilities.

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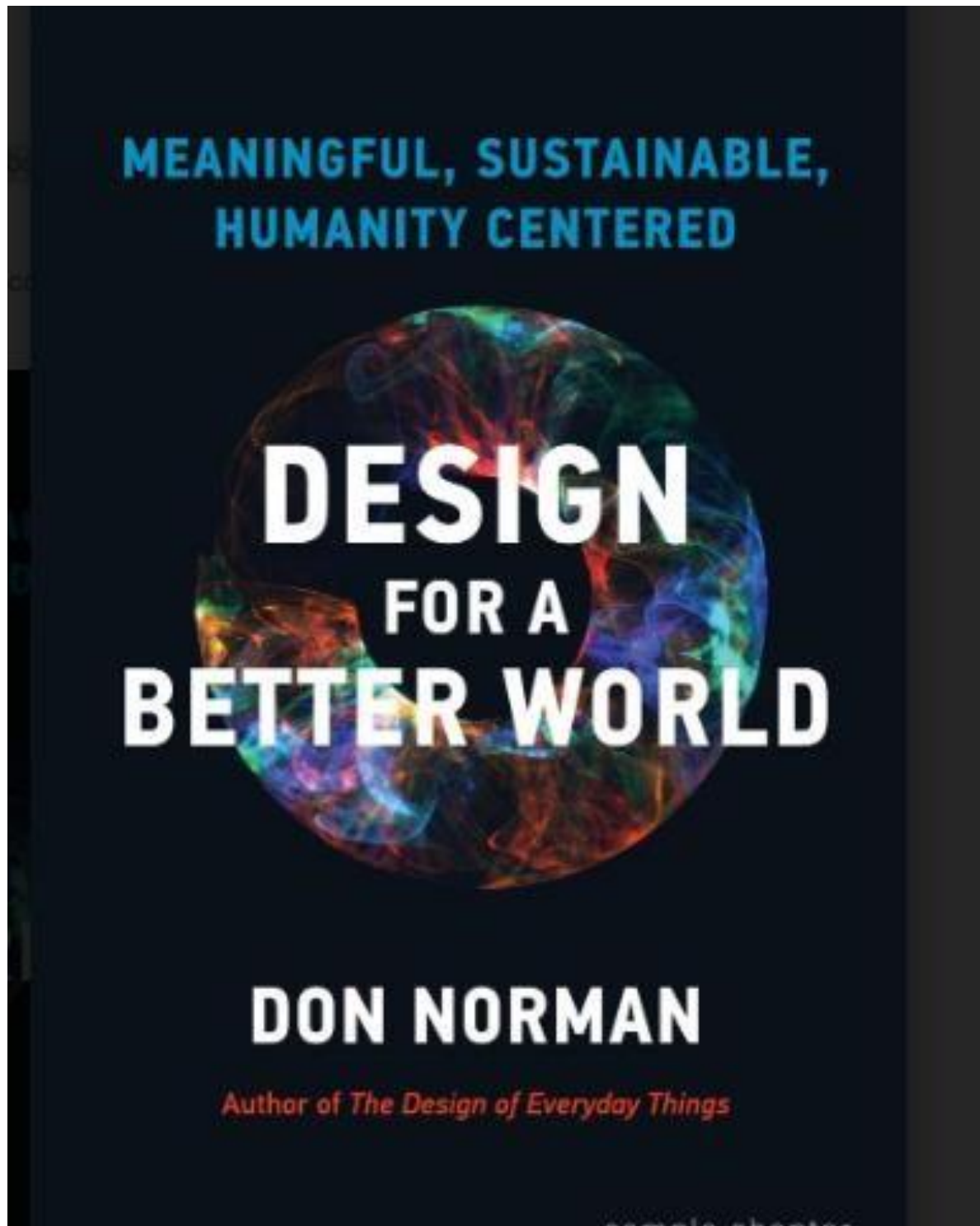


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News

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The Intersection of AI and Accessibility: How AODA Is Shaping Inclusive AI Development?



As you navigate the fascinating world of AI, consider the influence of the Accessibility for Ontarians with Disabilities Act (AODA) on AI development. The AODA's stringent standards are pushing tech companies to design AI systems that are inclusive and accessible to all, including those with disabilities.

The act is setting a new global standard, demonstrating how AI can be harnessed to promote inclusivity and accessibility. But what does this mean for the future of AI? And how are developers responding to these new challenges and opportunities? Let's explore.

Key Takeaways

- **AODA, since 2005, mandates the creation of accessible AI by setting stringent standards and promoting inclusivity in development.**

- **AI technologies such as voice assistants and educational platforms are being designed for usability by individuals with disabilities.**
- **AODA's focus on universal design principles encourages the development of AI interfaces suitable for diverse users.**
- **The AODA standards present both challenges for smaller firms due to resource allocation and opportunities for innovation in accessible AI.**
- **AODA's leadership in inclusive technology development is ensuring that future AI advancements benefit everyone, fostering a more inclusive society.**



Source: elements.envato.com

Understanding AODA and Its Importance

To understand the importance of [AODA compliance](#), let's take a look at its inception in 2005 and its goal to make Ontario fully accessible for people with disabilities by 2025 through five key accessibility standards.

As the first law of its kind worldwide, the AODA significance lies in its proactive approach to accessibility barriers. Rather than reacting to individual concerns, it mandates organizations to identify, remove, and prevent these barriers, creating a more inclusive environment.

Impact of AODA on AI Development

When it comes to AI development, AODA plays a transformative role by setting stringent accessibility standards and promoting inclusivity. It mandates AI developers to adhere to these standards, ensuring technologies are usable by individuals with various disabilities.

This inclusive innovation focuses on designing user interfaces that are navigable with screen readers, providing alternative text for images, and ensuring voice-activated systems understand diverse speech patterns. By promoting the principles of universal design, AODA encourages AI developers to create products accessible to the widest range of users.

These accessibility guidelines not only benefit people with disabilities but also enhance the usability of AI technologies for all. Moreover, AODA's emphasis on accessibility drives innovation, leading to advancements in areas like natural language processing, machine learning algorithms, and adaptive technologies.

Case Studies: Inclusive AI in Action

Let's dive into real-life examples of AI applications that have successfully implemented AODA standards, showcasing how these technologies can be made more inclusive.

AI-powered voice assistants like Siri and Alexa are success stories, supporting voice commands for people with mobility impairments and offering spoken responses for visually impaired users. This practical application enhances user experiences by removing communication barriers.

Another real-world example is automated customer service systems. By integrating text-to-speech and speech-to-text functionalities, they ensure individuals with hearing or speech disabilities can interact without obstacles.

Lastly, AI-driven educational platforms use AODA guidelines to adapt content delivery for students with disabilities, providing equal learning opportunities. These case studies demonstrate the transformative power of inclusive AI.

Challenges and Opportunities

While you've seen how AI can be made more inclusive with AODA standards, it's worth noting that the journey towards total accessibility isn't without its hurdles. The challenges are significant, especially for smaller firms with limited resources, and keeping pace with ever-evolving AI technologies is no small feat.

But, let's turn the lens towards the opportunities:

- **Collaborative Solutions:** By forming partnerships between AI developers, accessibility experts, and individuals with disabilities, innovative solutions can emerge.
- **Resource Allocation:** Governments and larger organizations can provide vital resources for smaller entities, aiding their compliance efforts.
- **Innovation:** Challenges often fuel creativity, sparking new ideas for accessible AI.
- **Broadened Reach:** Ensuring accessibility can open up new markets, extending your reach to a wider audience.

The challenges are real, but so are the opportunities.

The Future of Accessible AI

Looking ahead, you'll see that as AI evolves, so too must our commitment to accessibility, with AODA leading the way in the development of inclusive technologies. Future innovations in AI will be underpinned by the AODA's standards, ensuring they're accessible to all.

Technological advancements will continue to transform our lives, but without inclusive design, many could be left behind. That's where AODA steps in. By requiring that new technologies are built with accessibility in mind from the onset, it ensures that everyone benefits from these advancements, regardless of their abilities.

If you are a business or organization owner needing to enhance your website's accessibility for users with disabilities, try QualiBooth's innovative software. It provides continuous

monitoring, detailed error reports, and easy-to-understand data. With quick setup and real-time tracking, QualiBooth helps ensure your site is user-friendly for all visitors.

In this digital age, adherence to AODA's principles is more than just compliance, it's a commitment to creating a more inclusive society.

Conclusion

As you navigate the evolving landscape of AI, remember that AODA is revolutionizing accessibility in this field. It's not just about compliance, it's about harnessing the power of AI to create a more inclusive world.

Yes, there are hurdles, but the opportunities far outweigh them. So, keep pushing the boundaries and let's shape a future where AI isn't just smart, it's accessible to everyone.

After all, isn't that the ultimate goal of technology – to empower us all?

(Courtesy: Analytical Insight)



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