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Art and Design usage in present-day Africa

Guest Editor: Dr. George Vikiru
Department of Fine Art and Design, Kenyatta University, Kenya

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Guest Editorial

Dr. George Vikiru

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vikiru.george@ku.ac.ke

The Art and Design practice on the African continent has, since time immemorial, been extremely varied with the differences in form and content reflecting the myriad cultures found on the continent. The usage of the artifacts has also been as diverse, since the time of the traditional arts when the arts were used either for function or as arts for their own sake, to today, when the usage is still as broad.

This special publication issue highlights the extensive use of Art and Design that is produced by artists on the continent today. Zephania and Dr. Kamau's paper highlights the concept of '*recycle and reuse*' in art and design. They describe how waste printing inks can be recycled and reused to make good and affordable art while the environment is kept clean. Zheng and Dr. Vikiru on their part discuss the adaption and use of new and emerging technologies in the production of art and design on the continent: they demonstrate

***polymorphism*, a new technique that is being applied to visual teaching aids for effective classroom instruction.**

Zipporah and Jane in their paper, '*Fabric pattern development as inspired by traditional hairstyles from the Samburu and Maasai Communities in Kenya,'* demonstrate the artistic process followed in documenting lost African heritage for use by posterity. Oluwaseun and Kehinde on their part compare the art of two communities on opposite ends of the continent when producing a similar art form that has varied use. Finally, Ruth, Dr. Munene and Dr. Maina's paper presents another new and emerging concept in the practice of art and design: *Design Thinking.* They argue for the use of Human-centred design (HCD) as a pathway of thinking and which places the audience at the centre of the design, innovation and implementation process.

Enjoy the read.

Zephaniah Lukamba is currently pursuing a Masters in Fine Art and Design, specializing in Painting, at Kenyatta University, Kenya. He is also a practicing artist who has ventured into using different tools during his painting processes, in an attempt to induce emotions in a viewer using tactile texture. His paintings take a critical view of nature and social issues. In the last five years, Lukamba has been privileged to exhibit at the National Museum of Kenya since 2016, Kenya art Fair (2017), McKinsey Mtaani exhibition (2017 & 2018), Manjano exhibition (2020), Sztuki Schowek gallery in Poland (2021), One-Off Gallery (2020-2022) among others.

Dr Kamau Wango has taught Fine Art for many years at Kenyatta University and holds an M.A and Ph.D. degrees in Fine Art from Kenyatta University. His areas of interest are drawing, painting and sculpture as well as history of Art. He is very passionate about the ability of students to develop an intellectual capacity and be able to study and understand society as a basis for the comprehension of issues that affect the society for which they endeavour to become

creative opinion leaders and also forms the basis for both 'expression' and 'self-expression'. He believes that students must be critical thinkers in the quest to be creative pace setters. He is also a firm believer in the need for new research and innovation. He is a former Chairman of the Department of Fine art and Design and is currently the Chairman of the Postgraduate Committee of the Department. He has published papers on various pertinent issues in Fine Art, particularly on student creativity and thought.

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EXPERIMENTATION WITH WASTE INK AS A PAINTING MEDIUM

Zephaniah Lukamba, ***Kenyatta University, zephbenja@gmail.com***

and

Dr. Kamau Wango, ***Kenyatta University, wango.kamau@ku.ac.ke.***

Abstract

The print, media and publishing industries produce, on an everyday basis, abundant waste ink that is mostly directly cast-off into the environment. This waste causes ecological degradation that ultimately leads to climate change. To reduce on the risk, researchers have found out that waste ink can be upcycled into a useful artistic medium that artists can use to create their works of art. There, however, is minimal research that has documented the experiments that have been undertaken with the waste inks by, for example, describing the colours that would be produced when the waste inks are applied to different surfaces using different tools and techniques and also what best preservation method there is for the medium. In light of this gap, this paper reports a study that sought to document the results of experiments done with upcycled waste ink in a bid to produce an effective painting medium. This study applied an exploratory research design study in examining the suitability of waste ink based on variables such as effect on conventional and non-conventional surfaces, reaction to colour inks, painting and drawing techniques and modes of preservation. The

results of the study were documented and used to inform the efficacy of upcycled waste ink in the painting genre.

Keywords: ***Upcycle, Painting medium, waste ink,***

Introduction

Throughout the history of art, artists have used a variety of painting media to express themselves. Kusmara (2013) affirms that the artists are generally not linear in the use of a specific material but they tend to be more "open" to the prospect of using a number of media. The sensuous features and expressive potential of a media, such as tempera, fresco, oil, acrylic, watercolour or other water-based paints, gouache, or ink, influence the decision of what material the artist should employ (Owen, 2021).

Davids (2010) argues that Ink is one of the media largely used in the delineation of objects by artists. There are many types and kinds of Ink. Jose-Yacaman *et al.,* (2006) writes about the three main variations of Black ink, that is: gallotannate ink (also known as iron-gall), Chinese ink, and printers' ink. Printers' ink is said to be equivalent to ballpoint pen ink and contains a variety of colours as well as desiccants (calcium and iron compounds), waxes, fats, rubber, and varnish. Chea (2009) writes about printing inks by stating that there has been an increase in printing technologies that employ printing inks and in so doing immensely increased the quantity of printing inks required in the printing industry. Ahmed (2007) confirms this view by stating that over 90 per cent of inks used in the printing industry are printing inks. As a result, a large amount of byproduct of printing inks, known as waste ink, is being produced by printing industries.

Appiah (2002) describes waste as matter that is lying unproductive, uninhabited, or abandoned and that most waste appears in three forms: solid waste, air emission, and wastewater (liquid waste). Waste ink produced from a printing press commonly falls under two classes: uncontaminated and contaminated. The ink that has not been used in a press fountain is referred to as uncontaminated ink, while contaminated ink is that that has been exposed to solvents, paper fibres, and other ink colours while being utilized in a press fountain (Ink Waste: It's Not Black and White, 2014).

Despite there being numerous recycling centres, landfills and incineration centres for waste ink, studies have shown that due to the rapid development of printing industries more and more off-load of waste ink has been made into the environment adversely polluting it and leading to Climate Change. There is therefore need for alternative uses of the waste ink. One alternative is for waste ink to be upcycled into useful artistic medium that can be used by artists to create works of art. Many artists have in the meantime exhibited artwork that utilizes waste ink. Lowe (2018) for example has published the artwork in Figure 1 by Amanda Russell that is referred to as *Ink waste art* and which captures brilliant colours of waste ink drawn from offset presses cascading in a silky stream into the barrel.

Figure 1. Ink waste art by Amanda Russell
Source: firespring.com

Another example of artwork from upcycled waste ink is shown in Figure 2. This artwork by two Australian is made using run-off ink of recycled inkjet cartridges. The artwork began the world's first 100% recycled artist ink in 2017 known as *Lousy Ink* ("Hear Me Out Exhibition and Lousy Ink", 2018).

Figure 2. Artwork made from Lousy Ink.
Source: zartart.com

Sara Abbott is another United States of America based artist who uses waste tank ink from printers and expired ink cartridges to create vibrant abstract compositions that interpret the virtue of

recycling and promoting a green environment. Her diverse art pieces are created using acrylics, oils, pastels, and ink on canvas (Figure 3).

Figure 3. Artwork made by Sara Abbott
Source: singulart.com

Despite the evidence of waste ink being utilized as an artistic medium in different parts of the world, there, however, is minimal research that has documented the experiments that have been undertaken with the waste inks by, for example, describing the colours that would be produced when the waste inks are applied to different surfaces using different tools and techniques and also what best preservation method there is for the medium. This paper reports a study that sought to fill this gap by documenting results of experiments with waste ink obtained from printing industries in Nairobi County, on effects on conventional and non-conventional surfaces, reaction to colour inks, painting and drawing techniques and modes of preservation. This was done to attest the waste ink's effectiveness as a painting medium.

Methodology

The reported study applied an exploratory research design because there was little or no information on the research problem due to the lack of preceding research studies (Mugenda & Mugenda, 2003). That study was studio-based and was carried out in an art studio. In the process of exploration, proper handling procedures were taken into consideration as waste ink is a pollutant.

Data Collection

The researcher applied an experimental data collection method. The tests in Figure 4 were carried out.

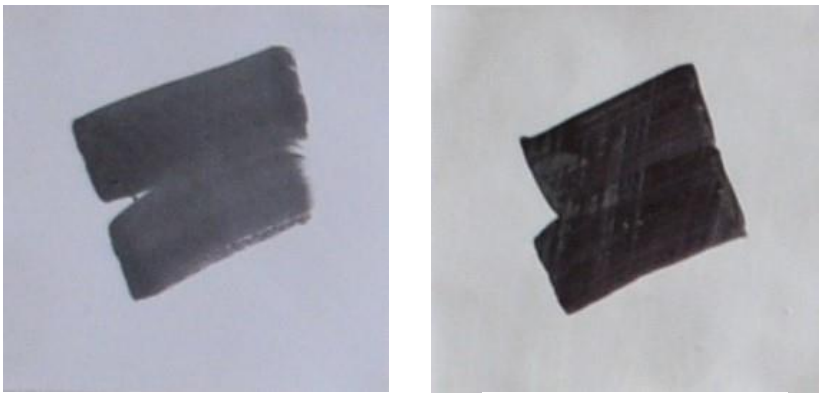
TESTS NO.	Independent variable	Intervening Variables
TEST 1	Waste ink	*-Conventional surfaces* Paper, canvas, plywood *-Non-conventional surfaces:* Aluminium foil, PVC banner, leather
TEST 2	Waste ink	*Selected Tools:* Brush, Palette knife, Sponge, Rag, Marker pen
TEST 3	Waste ink	*Painting and Drawing Techniques:* Dry brush, Wash, Layering, Splattering, Etching, Masking, Stippling, Hatching, Cross hatching, Scribbling
TEST 4	Waste ink	*Reaction to Colour Inks*- Cyan, magenta, yellow.
TEST 5	Waste ink	*Preservation methods:* Lacquer, Gloss varnish, Matt varnish, Fixative

Figure 4. Tests carried out on waste ink as a medium for painting

Data Analysis

a) Surfaces

On analysis, paper was found to holds waste ink more efficiently and provides well-defined brush stroke edges both when primed and unprimed. However, the primed paper provides a strong contrast with waste ink as compared to unprimed paper. The unprimed paper takes 5 to 20 seconds to dry which is relatively fast than primed paper which takes 55 to 60 seconds to dry. Figure 5 shows the appearance of waste ink on paper.

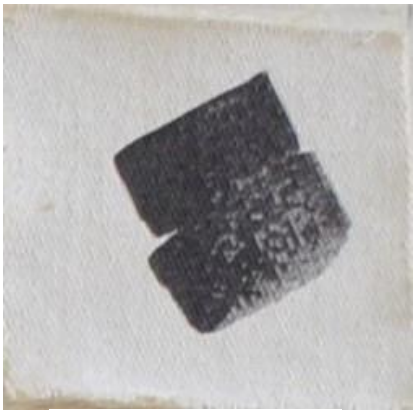


Unprimed paper **Primed Paper**

Figure 5. The appearance of waste ink on paper

Canvas also holds waste ink efficiently. Primed canvas has well-defined brush stroke edges although unprimed canvas smudges. Unprimed canvas takes 10 to 20 seconds to dry while primed canvas 40 to 55 seconds to dry. The images in Figure 6 show the appearance of waste ink on canvas.

Unprimed canvas



Primed canvas

Figure 6. The appearance of waste ink on canvas

Solid conventional surfaces such as plywood absorb waste ink efficiently. Nonetheless, unprimed plywood slightly smudges when waste ink is applied to it but when primed has well-defined edges. Unprimed plywood takes 10 to 20 seconds to dry while primed takes 50 to 55 seconds to dry. The below images in Figure 7 show the appearance of waste ink on plywood.

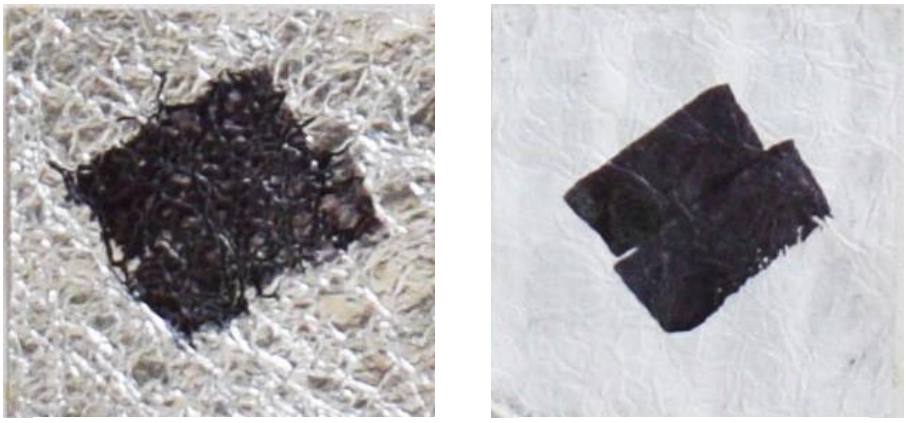
Unprimed plywood

Primed plywood

Figure 7. The appearance of waste ink on plywood

It was observed that aluminium foil smudged waste ink and took 4 hours to dry. However, when primed, the surfaces had well-defined

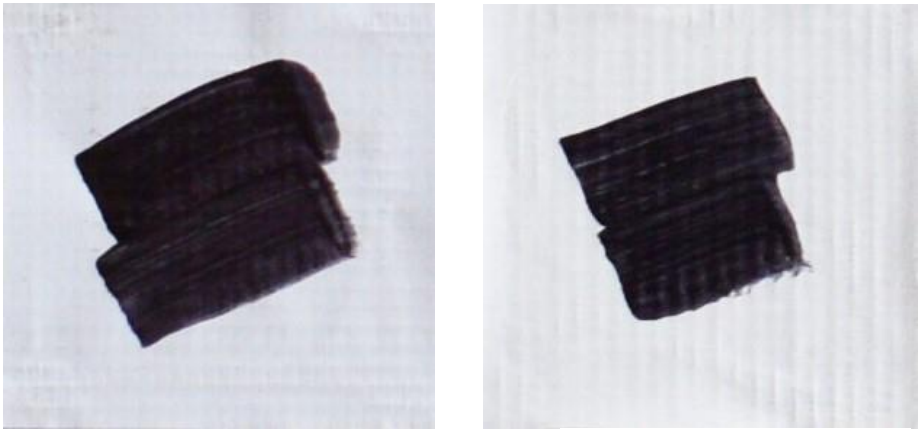
edges and took 1 to 3 minutes to dry. The images in Figure 8 show the appearance of waste ink on aluminium foil.



Unprimed aluminium **Primed aluminium**

Figure 8. The appearance of waste ink on aluminium foil

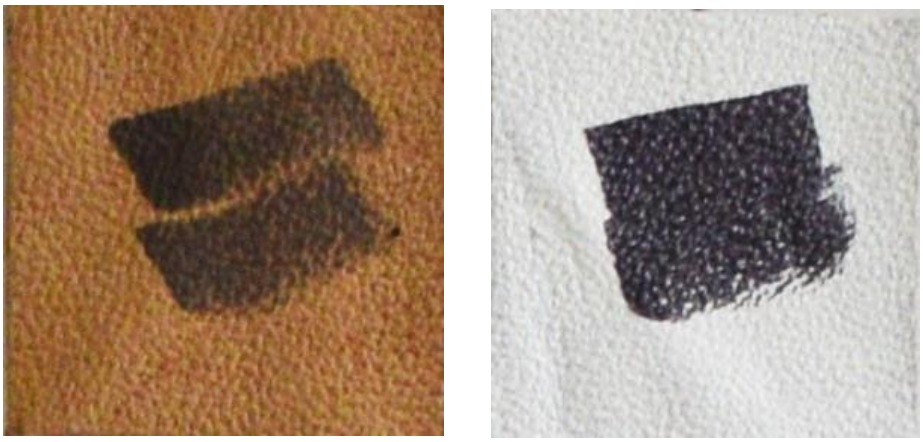
PCV banner that is used as a printing surface produced well-defined brush stroke edges both when primed and unprimed. The primed surface took more time to dry than the unprimed surface. The images in Figure 9 show the appearance of waste ink on the PVC banner.



Unprimed PVC banner **Primed PVC**

Figure 9. The appearance of waste ink on PVC banner

Leather also had well-defined brush stroke edges both taking less than 60 seconds to dry when primed and unprimed. The images in Figure 10 below show the appearance of waste ink on Leather.



Unprimed Leather **Primed Leather**

Figure 10. The appearance of waste ink on Leather

b) Tools

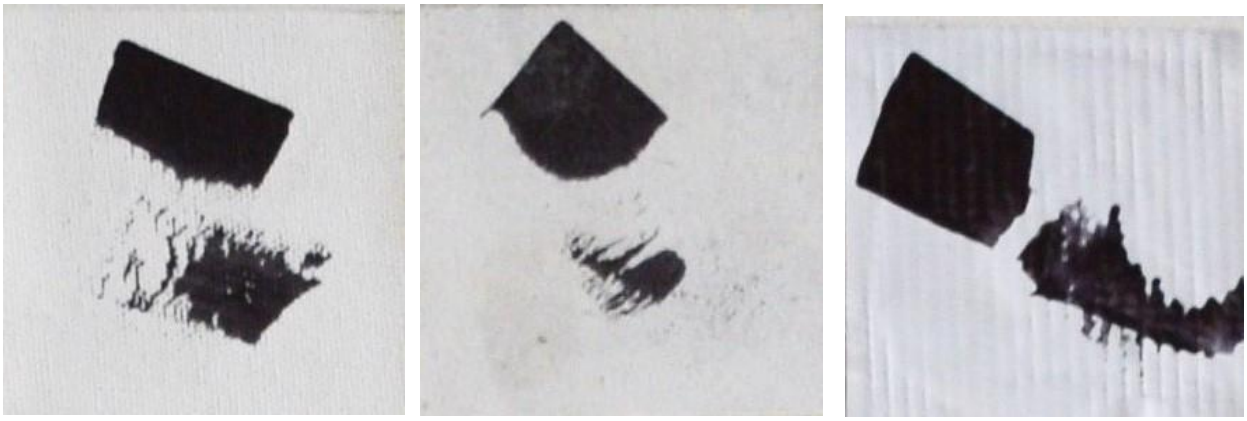
The researcher experimented with a variety of tools on three selected surfaces namely primed canvas, hardboard and PVC banner. The tools that were used were brushes, palette knives, sponge, marker pens and rags.

Both the brush tool and palette knife worked well with waste ink producing marks that can easily be manipulated in the creation of paintings. It was also observed that the edge of the palette knife had sharper outlines as compared to using the back part of the tool as shown in Figure 11.

Brush

Canvas **Hardboard** **PVC Banner**

Palette knife

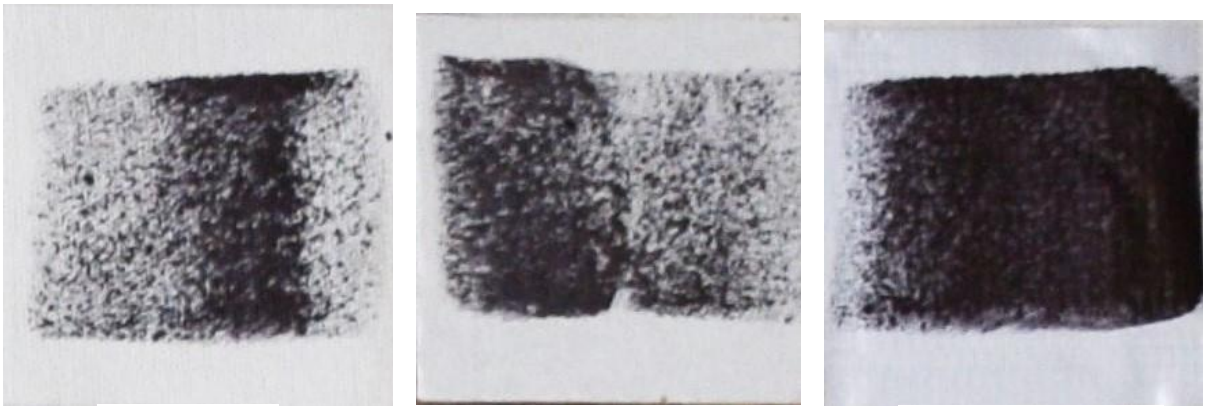


Canvas **Hardboard** **PVC Banner**

Figure 11. Waste ink appearance using brush and a palette knife as tools

Both the sponge and rag as painting tools absorbed waste ink efficiently and were able to create marks on the surfaces that could be used in a painting composition. The sponge had clear visible marks when used on canvas and hardboard, however, it smudged on the PVC banner because of the banners smooth surface as shown in Figure 12.

Sponge



Canvas **Hardboard** **PVC Banner**

Rag

Canvas **Hardboard** **PVC Banner**

Figure 12.The appearance of waste ink using sponge and rag as tools

The researcher then filled an empty marker pen with waste ink to observe if it could hold the medium and be used as a writing material. It was observed that the marker pen perfectly held waste ink and could be used as a writing medium providing great quality strokes and writings as shown in Figure 13.

Marker Pen

Canvas **Hardboard** **PVC Banner**

Figure 13. The appearance of waste ink using a marker pen

c) Painting and Drawing Techniques

The researcher then experimented using a variety of painting and drawing. The experiments were done on three different selected surfaces. The painting experiments were done using dry brush, wash, layering, splattering, etching and masking while the drawing techniques included stippling, hatching, cross-hatching and scribbling.

It was observed that most techniques were successful on the three selected surfaces and that only a few did not attain the result expected by the researcher. Dry brush, wash, layering, splattering, etching and masking painting techniques were applied on the three selected surfaces (canvas, hardboard and PVC banner). All the techniques appeared well defined and satisfactory to the researcher except the etching technique on the PVC banner. Here, the marks were hardly visible as compared to canvas and hardboard due to its smooth surface.

Experimenting on the possibility of achieving a wash effect, the researcher thinned waste ink using a standard thinner which easily

Dry brush **th the medium. Figure 14 shows the results of painting techniques on the selected surfaces.**

Canvas

Hardboard

PVC Banner

Wash

Canvas

Hardboard

PVC Banner

Layering

Canvas

Hardboard

PVC Banner

Splattering

Canvas **Hardboard** **PVC Banner**

Etching

Canvas **Hardboard** **PVC Banner**

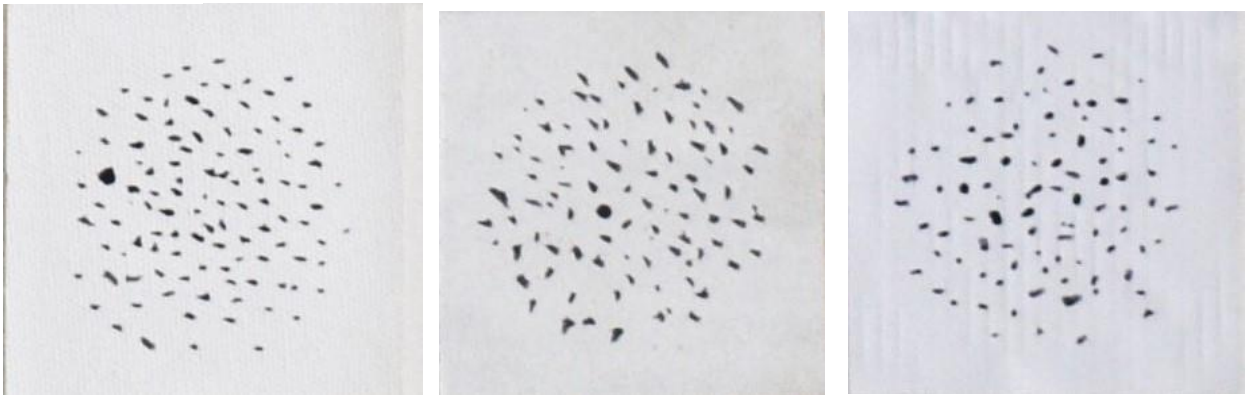
Masking

Canvas **Hardboard** **PVC Banner**

Figure 14. The appearance of waste ink using painting techniques

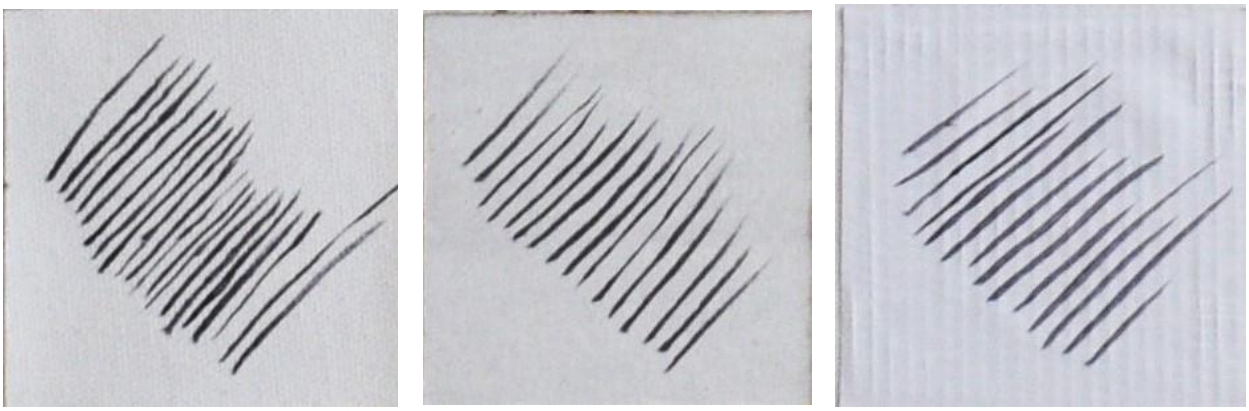
The researcher used a brush to experiment with stippling, hatching, cross-hatching and scribbling for the drawing techniques. The results all appeared well defined and easily noticeable. Figure 15 shows the results of drawing technique experiments on the three selected surfaces.

Stippling



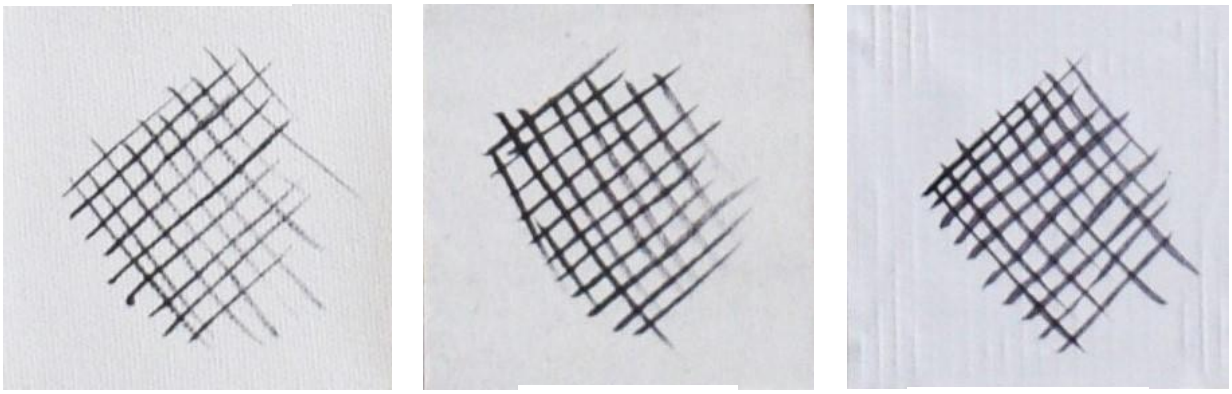
Canvas **Hardboard** **PVC Banner**

Hatching



Canvas **Hardboard** **PVC Banner**

Cross-hatching



Canvas **Hardboard** **PVC Banner**

Scribbling

Canvas **Hardboard** **PVC Banner**

Figure 15. The appearance of waste ink using drawing techniques

d) Coloured inks

The reaction of waste inks from printer cartridges on coloured inks was then documented. The surface that was used in this category was canvas primed with silk vinyl. It was observed that waste ink easily darkened the primary, secondary and tertiary colours. It was therefore used sparingly. Figure 16 shows the colour results of waste ink acquired from disposed of printing cartridge inks when mixed with primary, secondary and tertiary colours.

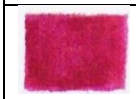
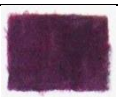
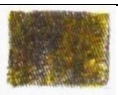
Waste Ink	Colour to be mixed with	Result
	 Blue	
	 Red	
	 Yellow	
	 Green	
	 Purple	
	 Orange	
	 Blue Green	
	 Blue Purple	
	 Red Orange	
	 Red Purple	
	Yellow Orange	
	 Yellow Green	

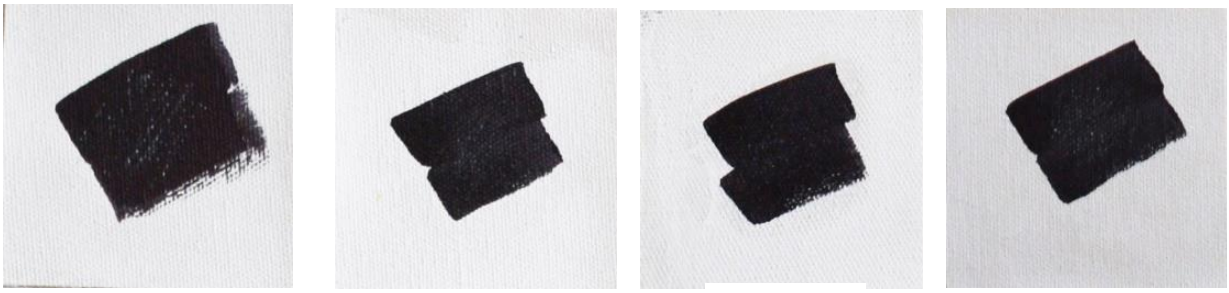
Figure 16. Waste ink mixed with primary, secondary and tertiary colours

e) Preservation method

Preservation of waste ink was not a challenge given that one of the components of waste ink is varnish which coats the medium when dry. The researcher then experimented with the use of an owl to govern the best preservative method when exposed to external scratches on the three selected surfaces (canvas, hardboard and PVC banner). The preservation methods used were fixative, matt varnish and lacquer.

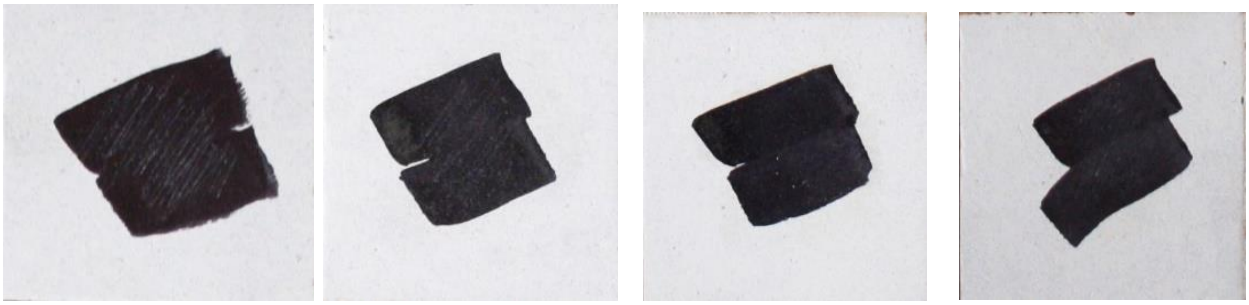
It was observed that all the preservative methods did not alter the colour of waste ink, however, some were more effective than others. The images in Figure 17 show the effectiveness of each preservation method.

Canvas



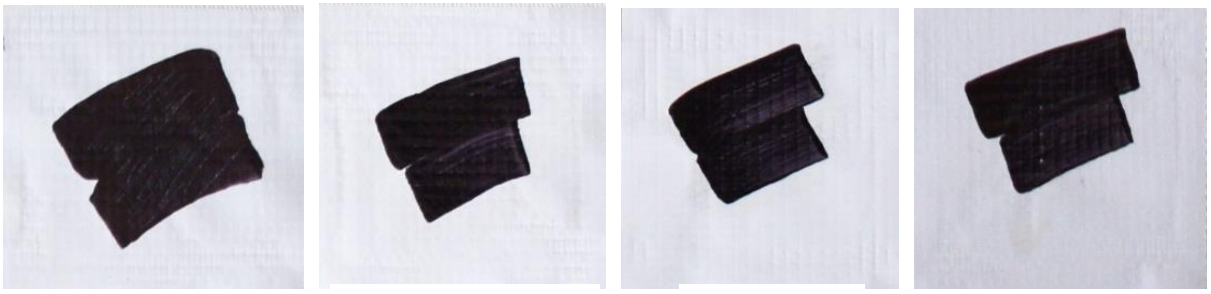
Unprotected **Matt Varnish** **Lacquer** **Fixative**

Hardboard



Unprotected **Matt Varnish** **Lacquer** **Fixative**

PVC Banner



Unprotected **Matt Varnish** **Lacquer** **Fixative**

Figure 17. The appearance of waste ink using drawing techniques

From the results shown in Figure 17, lacquer was observed to be the most effective preservative method when scratches were applied, followed by fixative and finally matt varnish.

Conclusion

In conclusion, waste ink is an effective painting medium based on how it reacted to the intervening variables. In relation to surfaces, waste ink easily absorbs into the surfaces and dries relatively quickly on primed surfaces making it efficient as a painting medium. The practical application of waste ink on surfaces using different tools and techniques was interesting as the medium is easily manipulated providing well-defined marks with great contrast to light surfaces. Waste ink also effortlessly mixes with colour inks making it efficient for artistic compositions that comprise colour matter. The medium can also be preserved easily when exposed to external factors such as scratches and water with different vanishes safeguarding the artwork created. Waste ink is without a doubt is an effective painting medium.

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Zheng Shanpeng is a Chinese Lecturer at the Confucius Institute, Kenyatta University. He holds an undergraduate degree in Art and Design from Shandong University of Technology (SDUT), China. He is a practicing graphic designer in Shandong Province, China with specific expertise in photography, graphic design, branding and activity planning. He also has over 10 years of experience as an academician in China, excelling in the teaching of the Chinese language and visual design-related courses. He has, in the recent past, won prizes in both teaching and art design. He is keen on turning his design works into valuable contribution to the visual design industry.

***Dr. George Vikiru** is a Lecturer in the Department of Fine Art and Design, School of Creative and Performing Arts, Kenyatta University, Nairobi, Kenya. His area of specialization is Graphic Design with emphasis on the utilization of the New Media Arts for Effective Communication and Social Transformation. His other areas of interest are in gender, technology and media studies. Dr. Vikiru has had over twenty years teaching experience at University where he has carried out research, published widely and undertaken University administrative duty.*

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GRAPHIC DESIGN AND CLASSROOM INSTRUCTION: APPLICATION OF POLYMORPHIC FUSION IN THE REPRODUCTION OF VISUAL TEACHING AIDS FOR THE CONFUCIUS INSTITUTES

Zheng Shanpeng, ***Kenyatta University, jasperzsp@gmail.com***

and

Dr. George Vikiru, ***Kenyatta University, vikiru.george@ku.ac.ke***

Abstract

Globalization has led to the necessity of teaching and learning of foreign languages in institutions as world economies have become increasingly interdependent. Learning of foreign languages, as that done in the Confucius Institutes, is therefore paramount. Scholars have argued that for Effective Foreign Language Learning (FLL)to take place, a concept known as 'nativization' can be applied to the teaching aids to enable learners be instructed in and comprehend the language being learnt better. One type of nativization is called 'cultural nativization.' This takes place when elements from the culture of the language being learnt are fused with those from the learners' culture in the teaching aids being used in classroom instruction. Further, other studies have identified 'polymorphism' as a technique of fusion that can be used in cultural nativization. This paper reports a study that demonstrated the application of

polymorphic fusion of different cultural artefacts from two communities in redesigning and reproducing teaching aids used in Confucius Institutes in Kenya. The study derived features of elements selected Chinese Han and Kenyan Maasai cultural artefacts and then applied six different methods of polymorphic fusion when reproducing the teaching aids. The study hypothesized that polymorphic designs using fused elements from Chinese Han and Kenyan Maasai cultural artefacts when applied on teaching aids used in the Confucius Institutes can ensure effective learning of Chinese language. This paper presents the visual design process that was applied. The paper also presents the subsequent redesigned and reproduced teaching aids. It is expected that the use of the reproduced aids would lead to enhanced learning of the Chinese language learning at the Confucius Institutes.

Key words: ***cultural nativization, polymorphism, fusion, visual design process***

Introduction

Globalization is requisite in the world today as communities have become interdependent. Globalization is affected by social cultural factors, one of which is the transnational circulation of ideas and languages. The impact of globalization on language can also be easily perceived in the language learning process. Irina (2011:81) argues that "without languages, there would be no globalization and vice versa, without globalization, there would be no world languages." Languages help people communicate across cultures, pushing them to think globally over new horizons as the world today

is multicultural and the language landscapes are multilingual. As is stated in an article written by Oana-Roxana Ivan (2012), there is a great demand for foreign languages in globalization. Foreign languages are a tool needed for effective interaction between people and help to better understand one's own language and culture (Aleidine & Theresa, 2015). Foreign language learning and teaching are progressively connected to diaspora relations, cross-cultural identities and global cosmopolitanism. (Christina & Bal, 2017).

According to Ivan (2012), culture is a crucial determinant in foreign language acquisition. This is due to the fact that improving cross-cultural awareness and enabling learners to deal with stereotypes are important goals of language courses. Ismail Cakir (2006) claims that although pure information is helpful, it does not necessarily guide learners' perceptions; while cultural awareness can make people think more critically. The close contact between the foreign language learner and the culture of the language being learnt leads to more effective language learning. Thomas &Chiharu (2014) on their part, state that in Foreign Language Learning (FLL), socio-culturally adapted learners tend to be much more connected, more open-minded, gaining a deeper understanding of their place in the world and the significance of knowing both their own and other people's cultures. The existence of local culture serves as the reference point for the effective utilization of foreign culture in language classes. Schulz (2007) proposes that a good way of doing this is to use culture-learning materials or portfolios.

It is paramount therefore that the target language and the learners' own language are in cooperated in the teaching aids during

classroom instruction of new languages. An experimental study carried out by Seyedeh & Mustafa (2014) had one group of learners provided with materials of the target language only while the other homogeneous group was given materials containing both native and target languages. After a period of use of the materials, it was evident that the use of culturally adaptive materials by the latter group had significantly boosted the acquisition of language.

Scholars have argued that for Effective Foreign Language Learning (FLL) to take place, a concept known as 'nativization' can be applied to the teaching aids to enable learners be instructed in and comprehend the language being learnt better. As a kind of readjustment that a language undergoes at lexical, phonological or syntactic levels, nativization is caused by the impact from native language or other cultural or social factors. In the nativization process, the information and knowledge of target language are transformed to learners' native language equivalents so as to evoke the learners' thinking. There are many types of nativization with one type being referred to as 'cultural nativization.' Cultural nativization would help the learners to comprehend the target culture easily and therefore ensure effective learning of the foreign language. Cakir (2006) states that cultural nativization is very crucial in the acquisition of foreign language learning (FLL)as it helps learners to comprehend the language and behaviour patterns of both foreign and local cultures at a more conscious level.

The medium of applying the cultural nativization is in the teaching aids being used for classroom instruction. Masoumeh (2012) emphasizes that fine art is a valuable instrument for all language

instructors to improve their teaching as it is significant in the preparation of the teaching aids that help develop intellectual skills and boost language learning through providing non-verbal inputs to the learners to enhance their understanding. These aids include the visual graphic materials that helps foreign language learners create mental images. Graphic design, as a technique of fine art, is used to effectively convey information to the target groups. Johanna D. (1999:42) relates graphic design to "ideological values and cultural attitudes". Culture is therefore perceived as a key element in graphic design. Newark (2002) affirms that, 'in graphic design, no matter what information is conveyed, it is supposed to culturally reflect its obligation to the society.

Many studies have demonstrated the link between graphic design and culture. Brenda & Reed (2016) point out that in design, the ideas of artists are often limited by their native culture, nationality and ethnicity. However, the world today is a mingling of both new and old ideas as well as a fusion of multiple cultures. Mar & Ire (2015) argue that it is the diversity of cultures, as well as the contrast and the union of them that make fusion art unique as different cultures can be interpreted in the fused artwork. In design, designers endeavour to determine the potential that exists in bringing together two or more cultures in a creative form while still keeping their individual identities (Gerrit, 2011). Nowadays the certainty of conventional monoculture has already been substituted by the uncertainty of the designed fusion culture (David, 2011).

Fused art tends to have more attention and be more recognizable in today's globalized world. 'Polymorphism' is the latest trend in graphic design that is used for fusion. It is noteworthy to note the

emergence and use of polymorphic logos or posters in the recent past. It can be argued that this new direction in design not only breaks the original limitations, but also moves towards a better direction (Minhua, 2019). Polymorphic technique therefore allow designers to implement a function in different ways. The technique is both object-oriented design as well as functional design and is applied to combine cultural elements in various contexts. This can be done in six different methods: (1) elements standing side by side, (2) elements fused, (3) background side by side, (4) background fused, (5) both elements and background side by side, and (6) both elements and background fused.

This paper reports a study that demonstrated the application of polymorphic fusion of different cultural artefacts from two communities in redesigning and reproducing teaching aids used in Confucius Institutes in Kenya. The study derived features of elements selected Chinese Han and Kenyan Maasai cultural artefacts and then applied six different methods of polymorphic fusion when reproducing the teaching aids. The study hypothesized that polymorphic designs using fused elements from Chinese Han and Kenyan Maasai cultural artefacts when applied on teaching aids used in the Confucius Institutes can ensure effective learning of Chinese language. This paper presents the visual design process that was applied. The paper also presents the subsequent redesigned and reproduced teaching aids. It is expected that the use of the reproduced aids would lead to enhanced learning of the Chinese language learning at the Confucius Institutes.

Methodology

This study applied the exploratory research design. This research design "tends to tackle new problems on which little or no previous research has been done." Brown R.B. (2006:43). The research design assisted better understanding the existing problem of acquisition of new languages that had been minimally investigated and acquire new insights. Exploratory research was also relevant during the fusing into polymorphic forms of the identified elements from Chinese Han and Kenyan Maasai cultural artefacts and the application of the fused forms in redesigning and reproducing the existing visual teaching aids at the Confucius Institutes in Kenya.

Out of the existent Chinese and Kenyan cultural artefacts, the study sampled only Chinese Han and Kenyan Maasai cultural elements were selected. This is because Han culture is overwhelming, numerical and has cultural dominance in China.On the other hand, "the Maasai have been viewed by many as the iconic, traditional representation of Africa"(Allison, 2013) and "their identity has stood timelessly through maintenance of their rich culture reflected through traditional dress and other customary practices" (Elizabeth,2018).The study also only involved Confucius Institute at Kenyatta University and Confucius Institute at University of Nairobi as they are the two largest and oldest Chinese Institutes in Kenya and would have challenges reminiscent to any other Chinese Institutes in the region.

The target population was the Directors and administrators of the two Chinese Institutes. They guided on the visual materials used at the Institutes for the teaching of Chinese Language. Purposive

sampling was used to select the 32 visual teaching aids which were further that included: posters, logos and fliers were categorized into five: brand publicity, enrolment brochures and fliers, teaching environment and decoration, cultural activities publicity, teaching materials and office stationery. Cluster sampling was then applied to achieve the study sample calculated using a 5% margin of error and 95% degree of confidence.

Developing compositions derived from cultural elements from Chinese Han and Kenyan Maasai Artefacts

The study first sought to identify and select typical Han and Maasai Cultural Elements to be used. Identified Han cultural elements and Maasai cultural elements were classified and coded according to their sources. They were classified based on the following 6 culture types: architecture, paintings, ornamentation, nature, clothing and jewellery and accessories.

Fusing experimentation was then done on the identified Chinese Han and Kenyan Maasai cultural elements using the six types of polymorphic fusing methods as follows: (1) elements standing side by side, (2) elements fused, (3) background side by side, (4) background fused, (5) both elements and background side by side, and (6) both elements and background fused.
The resultant compositions were then used to redesign the existing visual teaching aids used at the Confucius Institutes in Kenya.

The following section of the paper explains the visual design process that was applied to each of the six polymorphic fusing techniques.

The paper also presents an example of the subsequent redesigned and reproduced teaching aids.

(1) 'Elements presented side by side' polymorphic technique

The designer sought to use the natural elements from the two cultures that had their own distinct characteristics. The designer illustrates the use of leaves of *ginkgo* trees (found in Han region, China) and leaves of Acacia thorn trees (found in Maasai land, Kenya). Figure 1 indicates the designs extracted from the unique outline of leaves of the two trees respectively.

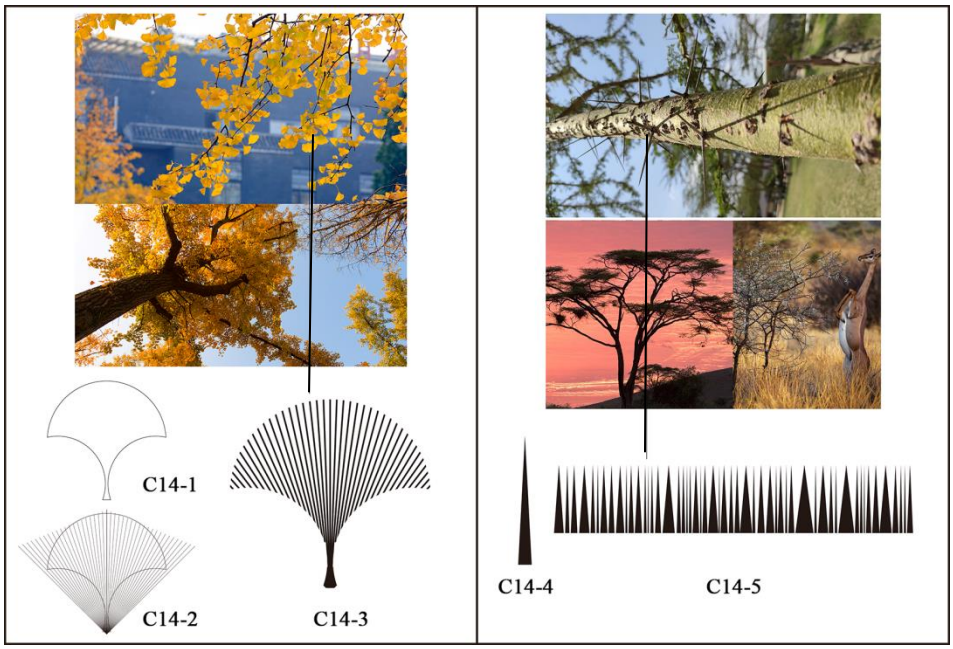

Figure 1 Sample elements from cultural artefacts of nature sampled from China (l) and Kenya(r)
Source: The researcher's own design

The researcher then used *Illustrator and Photoshop Software* on the sketch of leaves of *ginkgo* trees (C14-3 in Figure 1) and thorn trees (C14-5 in Figure 1) to fuse the 'Elements side by side' using the polymorphic technique. Numerous compositions were achieved after creative design application of processes such as distortion,

duplication and symmetry. The aim was to keep both the original features of the teaching aid and visual expressiveness of the new design in harmony. C14-14 and C14-15 in Figure 2 (below) are such examples.

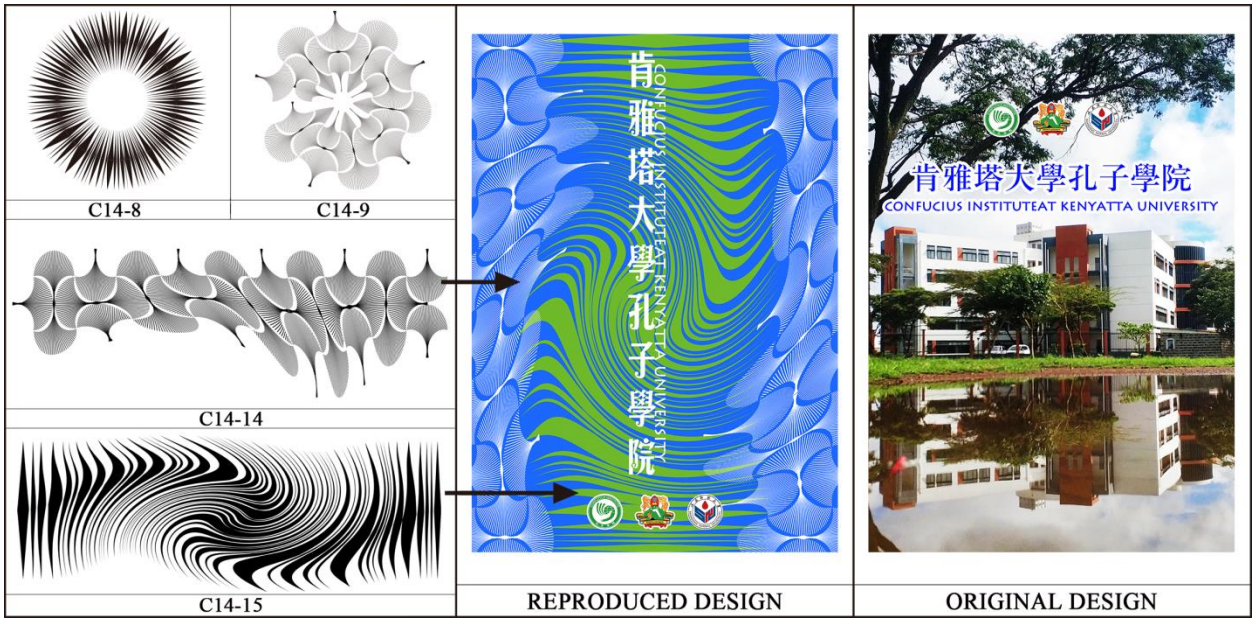

Figure 2. Original and Final redesigned compositions of poster using 'elements presented side by side' polymorphic technique
Source: The researcher's own design

The two compositions (C14-14 and C14-15 in Figure 2) were then fused 'side by side' in the final redesigned compositions shown in Figure 2. The design took advantage of the softness of ginkgo tree leaves and the sharpness of thorn tree leaves so as to develop a design that had a new balance that offers both simplicity and high performance. The comparison of the old and new redesigned posters using polymorphic fusing technique of elements 'standing side by side' are also shown in Figure 2.

(2). 'Elements fused' polymorphic technique

In the study, the designer applied the concept that cultural fusion is often reflected in philosophical values, customs and beliefs. For example, in Chinese Han folk religion, two separate martial images of door gods were posted by people on respective halves of gate to keep away the evil spirits. Amongst the traditional Kenyan Maasai culture, people carried shields and spears to protect themselves in war and also when hunting. Shields also were used in rites of passage ceremonies as symbols of identification and prestige.

The designer wished to present the above philosophies as derived from traditional Chinese and Kenyan painting works. The designer first drew and painted the Chinese door gods using Maasai painting skills and tools, (C22-1 and C22-2 in Figure 3) then painted Maasai people using Chinese ink brush pen and painting skills. (C22-3 and C22-4 in Figure 3.)

Figure 3 Cultural painting artefacts from China (l) and Kenya(r)
Source: The researcher's own design

As opposed to Kenyan painting that uses acrylics or oils, Chinese traditional ink painting is a water-based techniques. This difference in technique together with the use of additional texture derived from different materials from the two communities were used to fuse the elements using *Illustrator and Photoshop Software* (see C22-11,C22-15, C22-16 and C22-20 in Figure 4.) Figure 4 also shows the fused polymorphic elements of Chinese Han door gods and shields and spears used in Kenyan Maasai combined into one new composition and compared with the original design used at the Confucius Institutes.

Figure 4 Final redesigned compositions of publicity bag using 'elements fused' polymorphic technique
Source: The researcher's own design

(3). 'Background presented side by side' polymorphic technique

Backgrounds of artworks need not be made up of abstract designs only. Multiple images fusing side by side in the backgrounds can also be used. In the study, two types of masks, one from Kenya and another from China and which possessed different art effects though they both used warm colours, were studied. The below figure shows

part of the Kenyan wood carved face mask (C19-1 in Figure 5) and part of Chinese opera mask (C19-2 in Figure 5) being stylized before fusing.

Figure 5 Sample elements for cultural artefacts of ornaments sampled from China (l) and Kenya(r)
Source: The researcher's own design

As a dramatic art form, Chinese opera mask represented by different colours and patterns embodies the personalities and intense moods of characters in a Chinese Opera. In contrast, Kenyan Maasai wooden carved mask served both as a means to scare opponents and an identification within the tribe. Many Kenyan handcrafted masks were about Kenyan warriors. To achieve this emotion the designer utilized stronger lines in Kenyan masks than those in Chinese opera masks (Figure 5).

In order to better display this feature and combine them in design, the designer developed a new technique. He first sketched the images on a tablet, then fuse them by utilizing 'side by side'

technique to bring out a mysterious feeling. The final composition of the original and redesigned composition is shown in Figure 6 below.

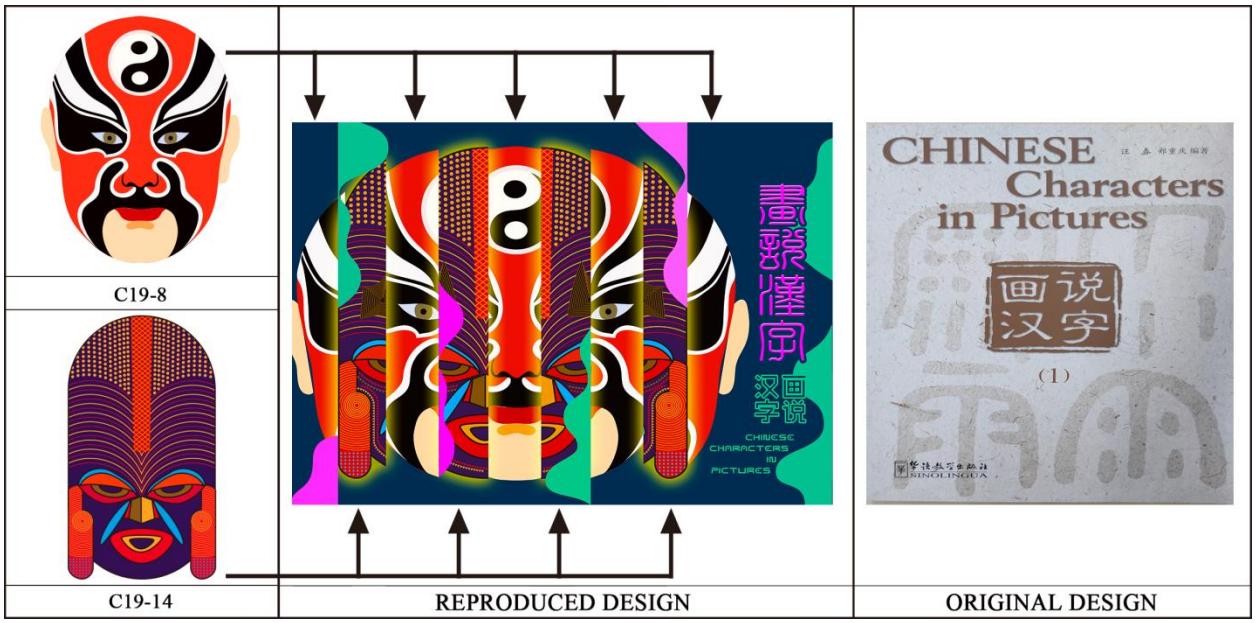

Figure 6 Final redesigned compositions of booklet cover using 'background presented side by side' polymorphic technique
Source: The researcher's own design

(4). 'Background fused' polymorphic technique

In this project, the study sought to use different techniques in designing compositions using fused cultural elements in the backgrounds of the composition. One way to do this was to let the elements fused and function as background image, which made it easier to coordinate the text and graphic elements. The designer was careful not to have a very busy or cluttered background design as this would result in the images looking dazzling, disorganized and even have the potential to overwhelm the main subject. In order to avoid this, the backgrounds were created with the intention to be used for social media messaging in a globalized context.

Figure 7 shows elements from Chinese Han wedding dress (C26-1) and Maasai wedding attire (C26-2) selected as they were used for

similar function and had similar colours. Indeed there were more similarities than differences between them, making it possible for the designer to fuse into an abstract background.

Figure 7 Sample elements for cultural artefacts of clothing sampled from China (l) and Kenya(r)
Source: The researcher's own design

The resultant fused compositions (Figure 8) tended to not only be very colourful and artistic, but also clean and versatile. Even more successful results were achieved when the designer folded and rubbed brown paper to imitate the texture of Maasai goat skin cape then used crayon and oil to display colours.

In some of the compositions, the image of Maasai people remained and could be easily identified at a glance (see C-26-8 in Figure 8). In other compositions, the image of auspicious clouds, sea and mountains from Chinese Han culture was highlighted because they symbolized eternity and union which was in consistent with the good wishes to the newly wedded couple. (See C-26-8 in Figure 8). Figure

8 also shows an example of the original and re-designed compositions. This re-designed composition focused more on the core elements with the theme "we rise as one" and which was applied to the final leaflet design.

Figure 8 Final redesigned compositions of leaflet with 'background fused' polymorphic technique
Source: The researcher's own design

(5). 'Both elements and background presented side by side' polymorphic technique

A fifth method of fusing cultural elements, 'both background and background presented side by side' polymorphic technique was also experimented upon technique. The study found that jewellery and accessories were a rich part in both Chinese Han and Kenyan Maasai culture. Both had an incredible history and profound symbolic meaning to the shapes, materials and vibrant colours reminiscent of jewellery.

The exquisite hair ornaments in ancient Chinese Han culture (left in Figure 9) implied marriage, sincere love, elegance and social status.

Beadwork in Maasai culture (right in Figure 9) represented tradition, beauty and strength, age, marital or social status. Both were considered as valuable traditional components in the rights of passage of two communities and are still in use today. This were part reason for their selection by the researcher.

Figure 9 Sample elements from cultural artifacts of jewelry and accessories sampled from China(l) and Kenya(r)
Source: The researcher's own design

In order to create a series of posters to be used for different occasions by the Confucius Institutes, various distortion, duplication and colour contrast experiments in *Illustrator and Photoshop Software* were done. Figure 10summarizes these experiments. The successful compositions were applied to a series of polymorphic posters that were used during the Spring Festival Ceremony at the Confucius Institute at Kenyatta University (See redesigned poster in Figure 10). Maasai elements and Chinese elements can easily be distinguished in the re-designed poster.

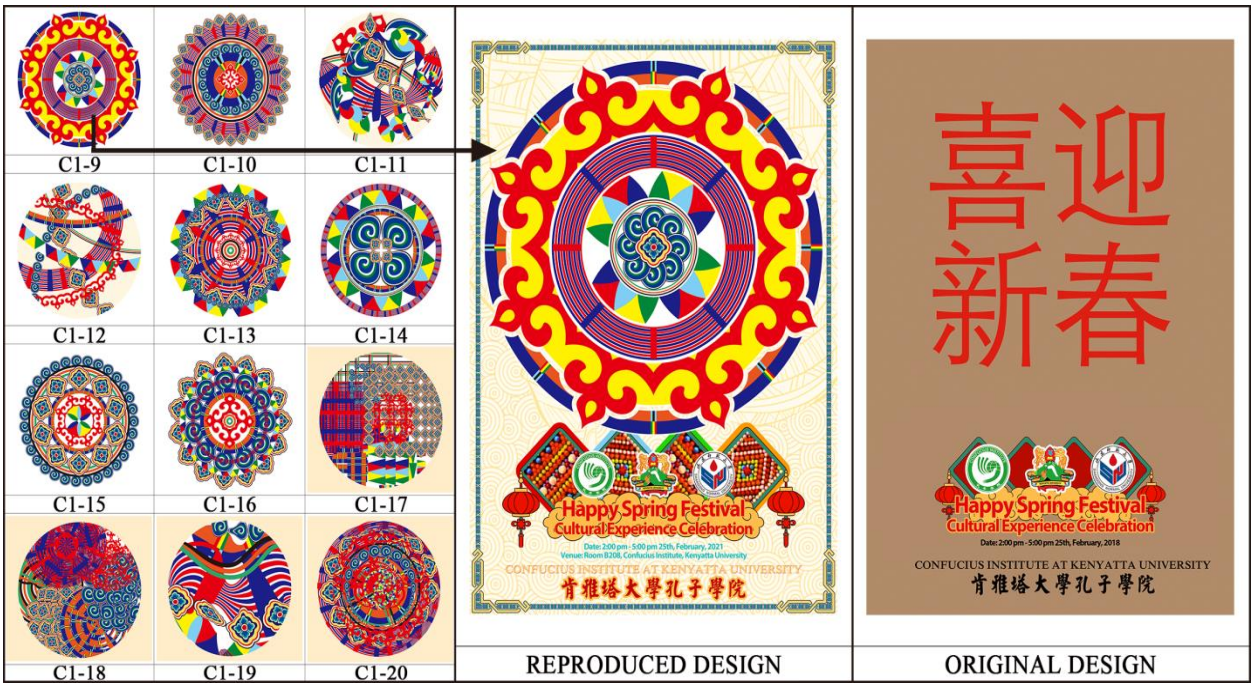

Figure 10 Final redesigned compositions of poster with both elements and background presented side by side
Source: The researcher's own design

Figure 10 also shows the application on one of the redesigned compositions (C1-9) in redesigning and reproducing the original poster design of the Confucius Institute. It should be noted that any of the other redesigned compositions could be used as well.

(6). 'Both elements and background fused' polymorphic technique

The procedure of using technique was similar with all the other experiments. The designer first drew the texture and outline of elements using pencil and charcoal pen on a piece of paper, as seen in C6-1, C6-2, C6-3 and C6-4 in Figure 11. Crepe paper was used to provide additional texture.

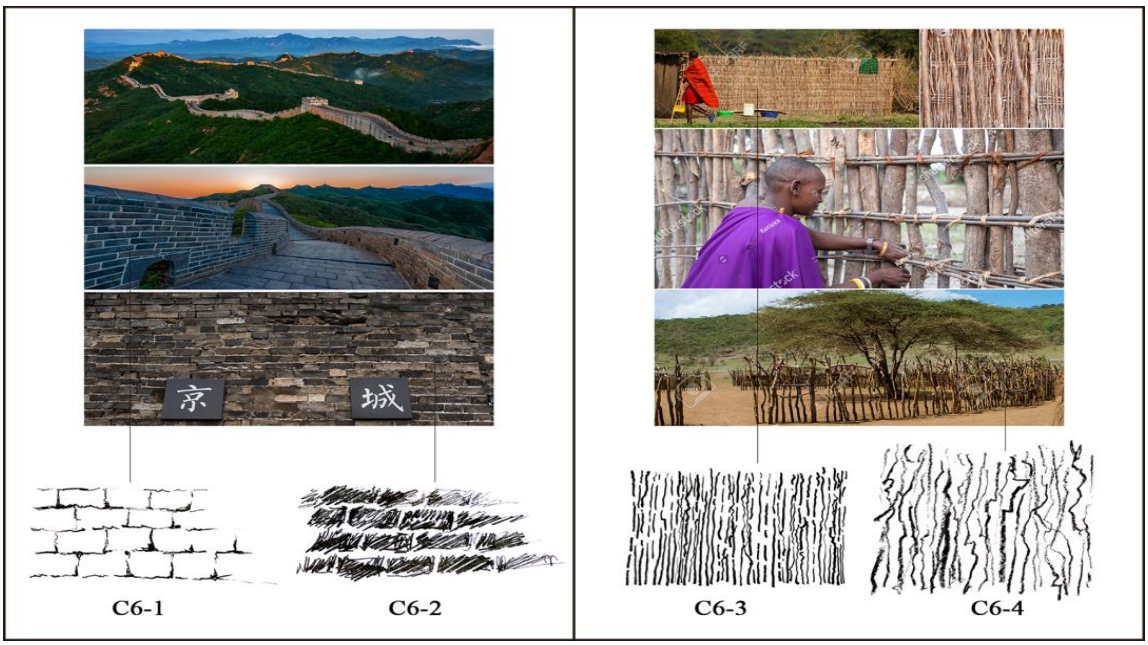

Figure 11 Sample elements from cultural artefacts of architecture sampled from China (l) and Kenya(r)
Source: The researcher's own design

The second stage was to create design compositions using *Adobe Illustrator and Photoshop* software. What followed next was placing the scanned image created out of the pencils on the compositions and adjusting them to create different textured effects. This is shown as examples in visuals coded C6-5 to C6-12 in Figure 12.

Based on the adage that 'Architecture design is the fusion of *culture* and *function'*, the designer sought, in Figure 12 to also achieve the combination that best highlighted the meaning of architectural design in the redesigned folder composition using Illustrations, colours, typography, layout and texture. It should be noted that Figure 12 shows the application on one of the redesigned compositions (C6-12 and C6-21) in redesigning the original folder. Any of the other redesigned compositions could have been used.

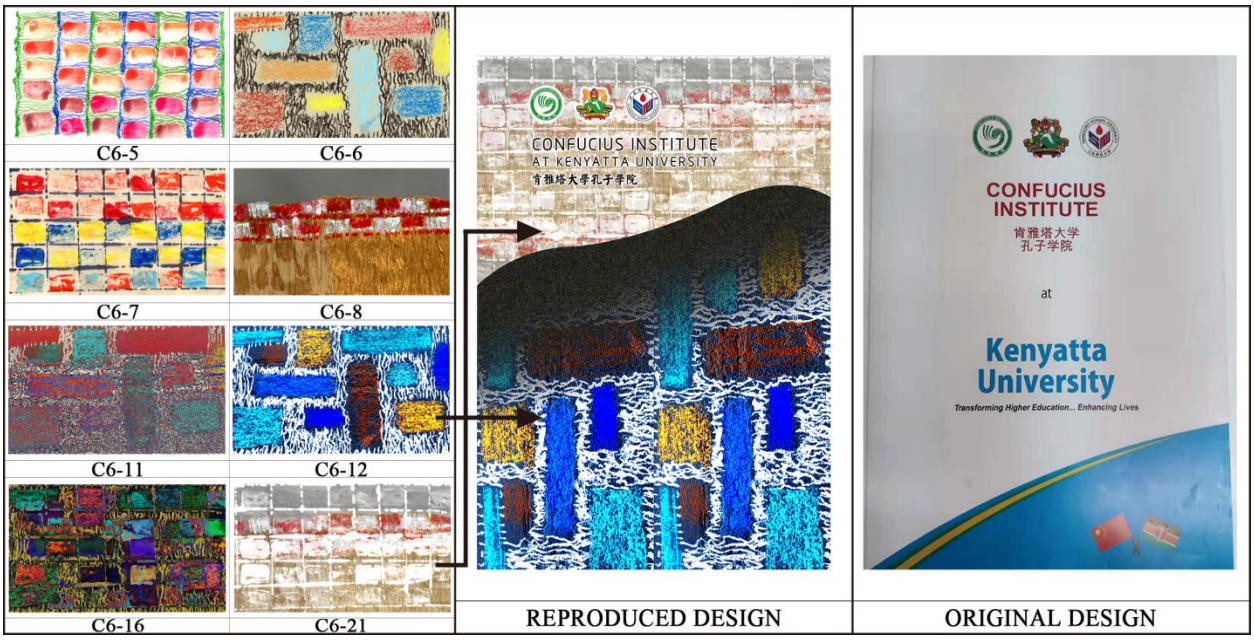

Figure 12 Final redesigned compositions of folder with both 'elements and background fused' polymorphic technique
Source: The researcher's own design

Conclusion

Graphic design is a universal language of expression. Different designers have different views based on their own cultural backgrounds and values. Fusion of different cultural elements in graphic design therefore could generate new perspectives and enhance expression and effective communication. This is also apt for materials that are for use in foreign language teaching and learning. This paper proved that the fusion of different cultural artifacts has the potential to bring a fresh breeze in graphic design. The fusion of different cultural elements to maintain cultural diversity has played vital roles in the cultural nativization for the language learners to achieve effective foreign language learning. Learners should now be able to better understand the language (and culture) being introduced to them with more insight and perspectives that make them better informed and involved.

The paper further showcased a new and emerging novel technique, polymorphism, which was used in developing new designs in graphic design. This process can be replicated to other areas of Art and Design. Polymorphism enhances creativity and encompasses a wider range of applications of the design. This paper also affirmed the hypothesis that polymorphic designs using fused elements from cultural artifacts from different communities when applied on teaching aids can ensure effective learning of new languages. The reproduced designs of teaching aids should therefore be beneficial to learners of new languages in teaching institutes.

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Ayallo Zilper Adhiambo is a student at Kenyatta University, Kenya, currently pursuing her Master's Degree in Fine Art and Design, specialising in Fabric Design. She is also a freelance fabric designer. Fabric collages is her field of interest which enables her to explore and express her creativity.

Jane Githinji has over thirty years teaching experience at University level, currently teaching at the School of Creative and Performing Arts, Kenyatta University. Her speciality is in Woven and Fabric Designs with special interest in African textiles, their design, development and production. Her other areas of research are in clothing with a focus on its impact on the environment.

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FABRIC PATTERN DEVELOPMENT AS INSPIRED BY TRADITIONAL HAIRSTYLES FROM THE SAMBURU AND MAASAI COMMUNITIES OF KENYA

Ayallo Zilper Adhiambo, ***Kenyatta University, zipayallo@gmail.com***

and

Jane Githinji, ***Kenyatta University, githinji.jane@ku.ac.ke***

Abstract

This paper reports a study that sought to document the development of fabric patterns that had been inspired by traditional hairstyles drawn from the Samburu and Maasai communities of Kenya. The paper describes hairstyles, a cultural resource from the two communities and highlights their use as a basis of pattern development for printing on fabric. In the visual arts, hairstyles have been explored as sources of inspiration by different professionals. They have done this for documentation, presentation and as foundation for their works. The documentation of the process of design development has however not been adequately done. It is for this reason that a study that sought to document the process of inspiration of designs from the material culture of African Communities was done. Traditional hairstyles of the Samburu and Maasai communities were studied. An exploratory research design was followed. This paper presents that design process and the patterns that were developed before printing on fabric was done.

Keywords: ***hairstyles, pattern development***

Introduction

Material Culture is an essential aspect of African societies. Hair grooming and styling, as a material culture practice amongst African societies, has however had little recognition and appreciation in the arts. Historically, hair held important value in the lives of individuals of all ethnicities. It however had heightened worth in traditional African cultures (and in cultures closely related to the African descent) because of the roles it played. Reason for this is the distinctive nature and texture of black hair (Johnson and Bankhead, 2014). Another reason was that hair reflected one's status, gender, ethnic origin, leadership role, personal taste, or place in the cycle of life depending on the way it was worn. Hair was also a medium for chasing bad omen and bad spirits from the society. This was done by cutting hair off and it is worthwhile to note that different communities practised unique hair cutting styles. This made the community barber an influential person in the society. Barbers used to arrange marriages and baptise all children during tribal times. Hairstyles were also used for communication. The Mende, Wolof, Mandigo and Yoruba for example, utilised hairstyles to send a message (Nyambura, 2017). Most other hairstyles were just for beauty: since the fifteenth century Africans have been manipulating their hair into elaborate aesthetic styles by incorporating adornments such as clothes, beads and shells in the styles. From the foregoing, hair and head dressing in Africa has always had a deeper richer meaning than taste and trend. Hairstyles were done purposefully to construct social identities. They were symbolic to individual cultures even though some of the styles were shaped by influences from other cultures. Adiji, (2015) argues that hairstyles are therefore the most universal and inescapable form of body art.

This is because they occur in the context of individuals, human life and culture, ideas and history; they are uniquely distinctive, independent and self- contained, unified, devoid of the extraneous and complete in themselves

Hairstyling had been an African art form that began at birth. As indicated earlier, hairstyling was not only about beauty. It was for much more. Africans saw their hair as an important element of their spirituality and creativity. Men and women committed a lot of time to their hair (Nyambura, 2017). In East Africa, for example, only warriors of the Maasai of Kenya were permitted to wear long hair. This they did by weaving their hair in thin braided strands (Schurz, 2000). Amongst the Samburu, morans too were elected as prominent members of the society and had their hair exemplify the prestigious and vital symbol of their status and manhood in society. Hair was also seen as a source of strength, courage and masculinity. The Samburu Morans had specific hairstyles only for use by their warriors (Nyambura, 2014).

To highlight the hairstyling as a material culture in African societies, the following section of the paper details the different hairstyles of the Maasai and Samburu Morans.

Hairstyles worn by Maasai Morans

The Maasai are pastoralists from East Africa who live semi-nomadic lives. The group is well known for its strong traditions and dedication to cultural preservation. Amongst the Maasai, warriors and non-warriors were differentiated by the hair they wore. Maasai

culture and society is divided into age groups (age-sets) for both men and women, and hairstyles are dictated by these age-groups. Maasai hair is described by cultural traditions, in which each hairstyle reflects the Moran's passage from one life phase to the next, as well as one's social status in society (Bon, 2021). The phases involve:

'*Enkipaata*' (Pre-circumcision) life phase

This life phase entails a period when the Moran's bird hunt using stones, cubs, and arrows as a means of demonstrating to their family their capability of passing into the next step of life that is circumcision. Hair is shaved completely to symbolise this readiness. The shaven hairstyle is is known as '*Embarnoto*' (Bald).

'*Emuratta*' (Circumcision) life phase

In this phase, hair that grew during the healing period must be shaved to symbolise a new beginning of life and a commencement of the Moran into the next phase of life- initiation rite. '*Olmasi*' is the name given to the hairstyle.

Figure 1 'Olmasi' hairstyle worn by a circumcised boys during the healing process Source: masaimara.travel

'*Emanyatta'* (Warrior initiation ceremony)

During this ceremony, the Morans leave their homes and travel across Maasai land for seven years to learn about their environment. The Morans grow their hair at this time. The warriors' long hair symbolises manly beauty, and their hairstyle is known as '*Oltaika.'* (Fig 2)

Figure 2. Maasai Moran with 'Oltaika' hairstyle
Source: en.freejpg.com.ar

'*Olng'esherr'* (Junior Eldership)

The period of junior eldership, known as '*Ilmorijo'*, then follows. It is here that the wedding ceremony ('*Enkange ekule')* takes place. The Moran is shaved to become a junior elder. This is to symbolise a new beginning in his life. '*Embarnoto'* is the hairstyle worn here.

Figure 3. A mother shaves off her Moran son's hair
Source: PD/Manuel Ntoyai

Hairstyles worn by Samburu Morans

The Samburu are quite close to the Maasai in terms of language and culture. The Samburu are a Maa-speaking nomadic community as they are a branch of the Maasai people that sprung from the same stock (Spencer, 2004). The term 'Maa speakers' refers to a large cultural group of herders who share a common language, economy, social structure and history.

The personal decoration of the Samburu is remarkably comparable to that of the Maasai. This can be explained by a common genesis and interaction that moulded their technology and ornamentation practises. Hair is one of the most important forms of decoration. Hairstyles distinguish between age and gender groups of the Samburu. A married woman usually shaves off her hair clean or wears a round hat and shaves roundly from the forehead to above the ears and at the back of the neck to create a circular hairline. '*Kub'* is the name of the style (Nyambura, Matheka, Waweru & Nyamache, 2014).

Figure 4. 'Kub' Hairstyle worn by married Samburu women
Source: marjaschwartz.com

According to Nyambura *et. al*, (2014), the changes to the Samburu men's hairstyles happens just like it does in the Maasai community when there is a transition from one age group to another.

Circumcision Ceremony

At the start of boys' circumcision ceremony, mothers shave their children's heads leaving a small tuft of hair at the very top of the head. This symbolises the end of boyhood and entry into warrior hood. '*Imanjeu'* is the name given to this hairstyle. (Figure 5)

Figure 5. Boys wearing the 'Imanjeu' hairstyle.
Source: Nyambura et. al., (2014)

Moran Stage

Different hairstyles are braided during the Moran stage of the Samburu community. This all depends on the length of the hair. Warriors braid each other's hair for hours on end. The various hairstyles are for the warrior's personal pride. '*Sakara Oirena'* is the name given to virgin hair that is greased and twisted into tiny plaits and divided by separating hair across the centre of the skull. The virgin hair is normally very short.

Figure 6. 'Sakara Oirena' hairstyle worn by Samburu Morans
Source: discoverimages.com

'*Sakara Olaa'* is when the hair becomes longer and can be plaited to hang loosely around the neck. '*Ilmasi Wala'* is a style in which the hair is parted midway down the back and knotted into pigtails over the forehead. This hair is referred to as '*Sorror'* if it grows to the hip. The hair can still be pulled back into two long pigtails known as '*Ilmasi Opiaya'.*

Figure 7. 'Sakara Olaa' and 'Ilmasi Wala' hairstyles
Sources: Nyambura et. al., (2014) and pinterest.com

Hairstyles as inspirations in the Visual arts

According to Aboagye (2017), material culture and hairstyles in particular, has been explored in the visual arts by sculptors, poets, painters, photographers, traditionalists and anthropologists for documentation, presentation and as a basis of their works. A study conducted by Adiji (2015) for example, explored the use of photography as a tool for documenting traditional Nigerian hairstyles for preservation of the images in museums. The process of development of designs from the African traditional material culture inspirations to the final artworks has however not been adequately documented. It is for this reason that a study that sought to document the process of inspiration of designs from hairstyles, a material culture of the Samburu and Maasai communities of Kenya, was done.

Pattern Development

Tortora and Johnson (2014) explain that in the discipline of textiles, patterns are decorative elements of ornamental designs that are done on a piece of fabric and are produced by applying the designs in a specified manner. The patterns are often described in terms of the visual pleasure they produce (Johnstone, 2017). Musa (2019) agrees with this standpoint and states that patterns in the arts are a repetition of specific visual features that are significant for human society because they influence how people perceive objects. Patterns therefore ensure continual interactions with the viewer by enticing them to look at the designs for a much longer time. Mawufemor (2019) writes that patterns are types of themes of repetitive events or objects sometimes known as elements of a set.

The elements tend to duplicate themselves in an anticipated manner (for example block, half-drop, brick and so on) thus producing fundamental patterns that have been built on repetition and regularity.

Patterns are therefore collections of elements or motifs that repeat in a predictable manner to achieve a specific effect or goal. All patterns fall into one of two categories: Geometric or Organic. Geometric patterns are rooted in geometry and are a study of shapes that can be abstracted. On the other hand, organic shapes are of two types: Realistic and Stylised. Patterns that are realistic are repeats of natural items, but those that are stylised are simpler repeats of natural objects (Ivy & Pearl, 2018). An example of these is shown below.

Figure 8. Geometric and Organic Patterns
Sources: istockphotos.com and www.africanfabrichouse.com

According to Debeli (2013), patterns in traditional African society represent symbols, proverbs, sayings as well as cultural landscapes and natural items. Patterns were made by employing a unique weaving process in which several fabrics of similar design and colour were woven in strips. Sewers twined the weave strips together to

create a single cohesive design, after which the strips are bonded together to generate the requisite continuous woven fabrics. Stephanie (n.d) also explains that in traditional African society patterns were created by dyeing clothing, sometimes using a substance called a resist that is applied to the surface of the fabric to repel the dye. Patterns can also be made using a stencil or stamp or can be painted or stamped.

Development of textile patterns in this modern era has been influenced by western civilization and technology (Arowolo, 2010). Agu & Ibrahim, 2021 agree that technology has brought about incredible innovation in many areas, the clothing and textile industries being no exception. Designers previously used to work manually using stencil and graph papers but they today produce innovative designs by 'playing' with a mouse or a stylus pen. The outcome of this is not only a rise in speed and increased productivity but also greater precision than the manual procedure (Aboagye *et. al,* 2017).

Figure 9. 'Nkabom' (Unity is Strength)
Source: www.ijird.com retrieved on 12/05/2022

The image in Figure 9 shows a fabric pattern derived from a hairstyle and produced after being designed using CAD software like Adobe Illustrator, Adobe Photoshop and Corel Draw in the production of

designs. What is lost however, is the process followed when deriving the pattern from the hairstyle.

Methodology

This paper reports a study that used Computer Aided Design (CAD) software to develop patterns derived from traditional hairstyles from the Maasai and Samburu communities. The study applied exploratory research design. According to Saunders *et. al.* (2007), exploratory research is conducted when there is not enough information regarding an occurrence or an issue that has not been precisely characterised. Brown (2006) on his part states that exploratory research designs are frequently used to determine how best to proceed in investigating a topic that has received little or no prior investigation.

The study this paper reports was studio based with much of the development of the patterns carried out in the art studios at at the Department of Fine Art and Design, Kenyatta University. Secondary sources of data were used to collect information on the traditional hairstyles of the Maasai and Samburu communities. This data was obtained from books, journals and periodicals.

Themes

Themes of study were first developed. These included: pre-circumcision, circumcision, Moran stage and junior eldership. They were then coded into general categories. The categories were based on the kinds of hairstyles Morans had to wear as they moved from one rite to the other. For purposes of discussion, this paper will only present hairstyles worn by Maasai and Samburu Morans during the warrior initiation ceremony of the Moran stage only.

Procedure of Pattern Development

The procedure of pattern development was as follows:

a) **Identification of the requisite hairstyle and sketching of the hair design on paper. Figure 10 shows a Maasai Moran wearing an *'Oltaika'* hairstyle and the resultant sketches that were developed from the hairstyle. Also shown is the progression in the artistic development of the sketches.**

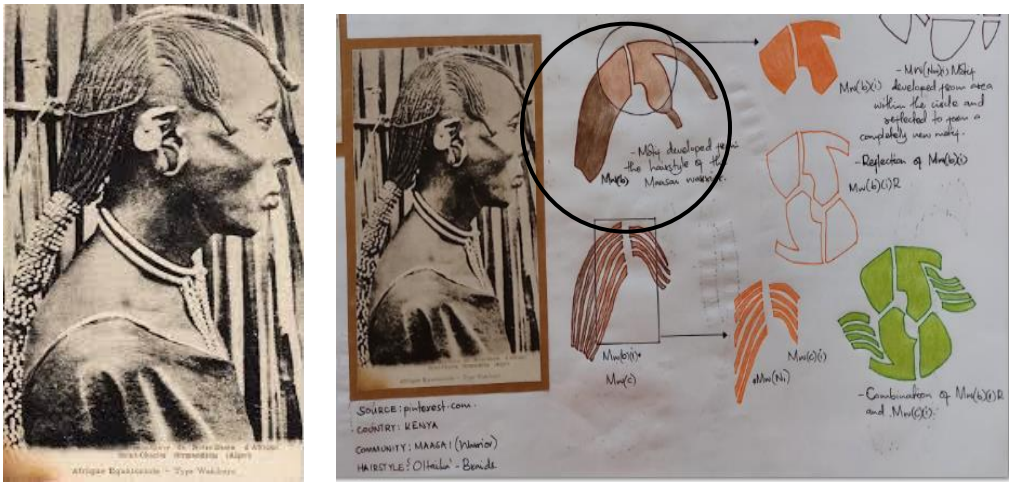

Figure 10. Development of designs from Maasai Moran 'Oltaika' hairstyle Image Source: pinterest.com

b) **The second stage involved the transfer of the sketches to the computer and tracing out the design using CAD software. Figure 11 is a computer screenshot showing the use of Adobe Illustrator CS6 in tracing the designs.**

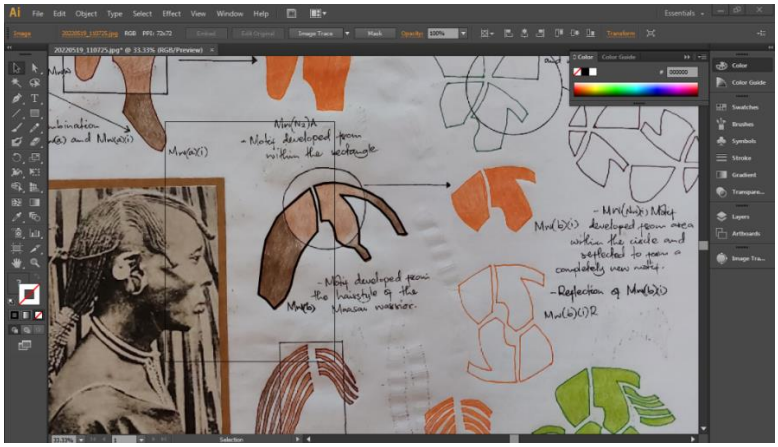

Figure 11. Transfer of the sketch to computer and trace it out using Adobe Illustrator CS6

c) The alignment of the traced out sketch to make a motif then followed. This process was done using CorelDraw software. (Figure 12)

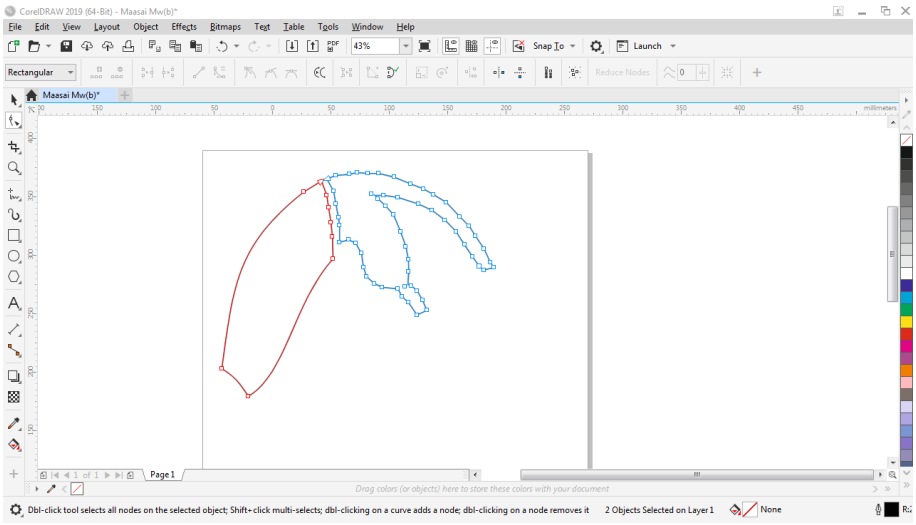

Figure 12. Screenshot showing the alignment of the traced out motif using CorelDraw, 2019

d) The developed motif was then duplicated into a pattern using the various principles of pattern development in fabric design (Figure 13)

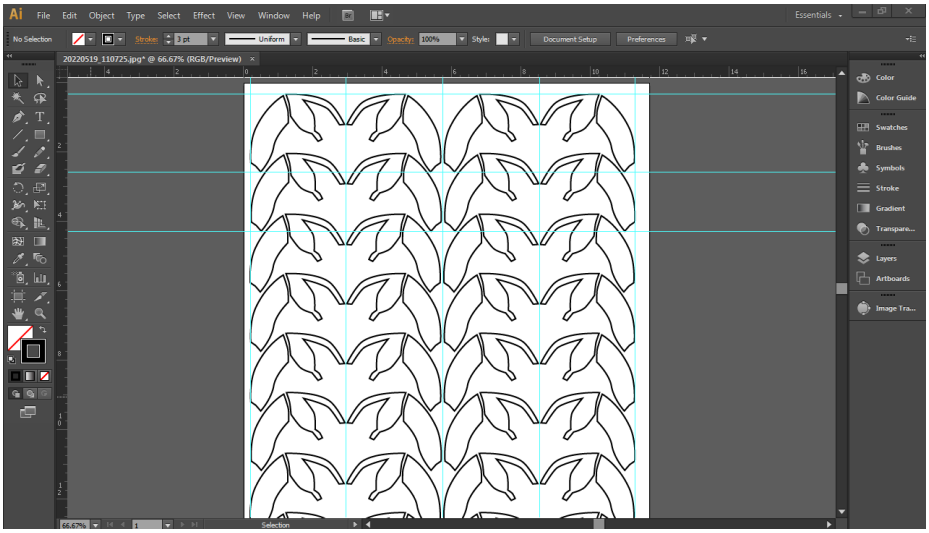

Figure 13. Screenshot showing the development of a pattern from a motif using CorelDraw, 2019

e) Colour was then applied to the pattern using Adobe Illustrator CS6. Figure 14 shows an example from a computer screenshot.

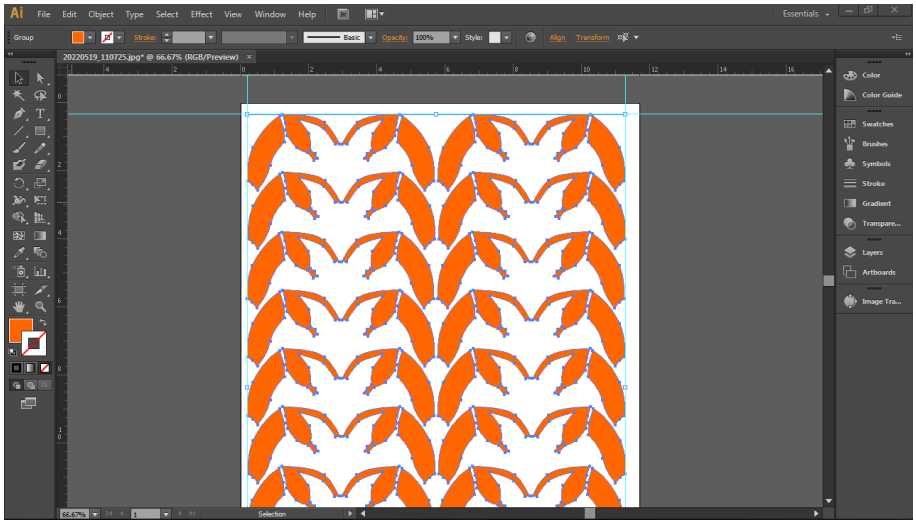

Figure 14. Colour Application using Adobe Illustrator CS6

f) Different computer effects were then applied. In Figure 15 Reflection, Superimposition and Overlay were used to create variety, interest and uniqueness.

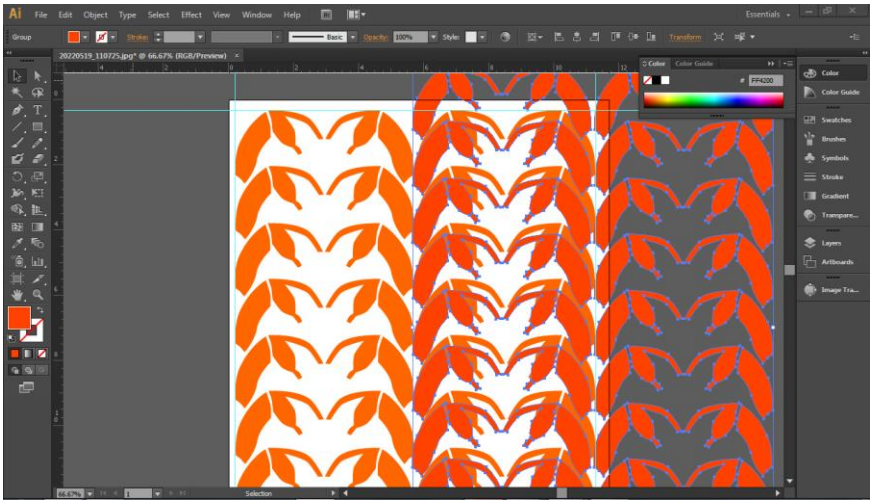

Figure 15. Application of computer effects on the select pattern

g) The process of designing on computer stopped when the desired new pattern was achieved (Figure 16)

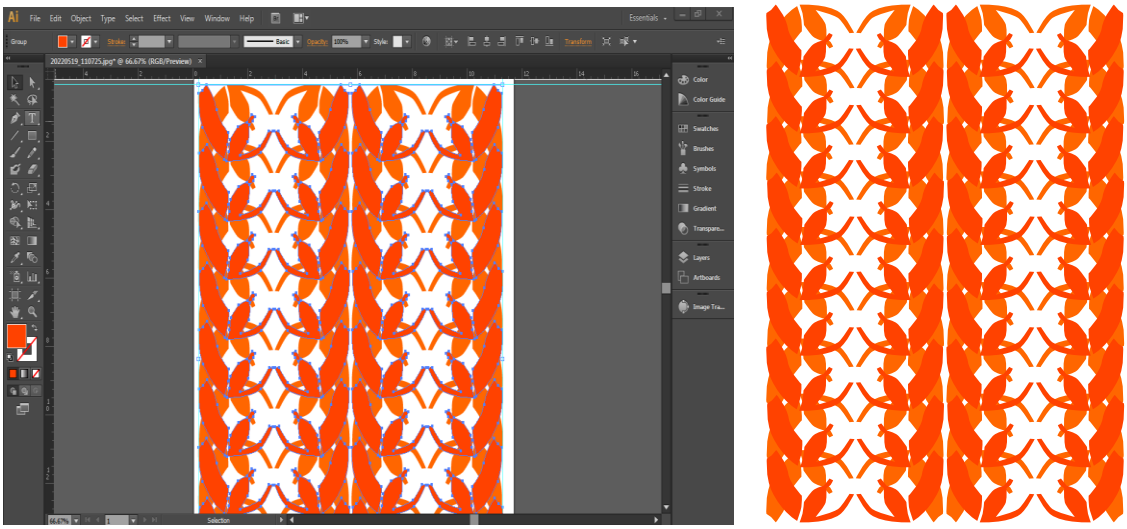

Figure 16. Developed design from Maasai Moran 'Oltaika' hairstyle

A similar process was followed when developing patterns from hairstyles selected from the Samburu community. An example of the process is shown below:

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a) The Samburu *Sakara Oirena'* hairstyle was used.

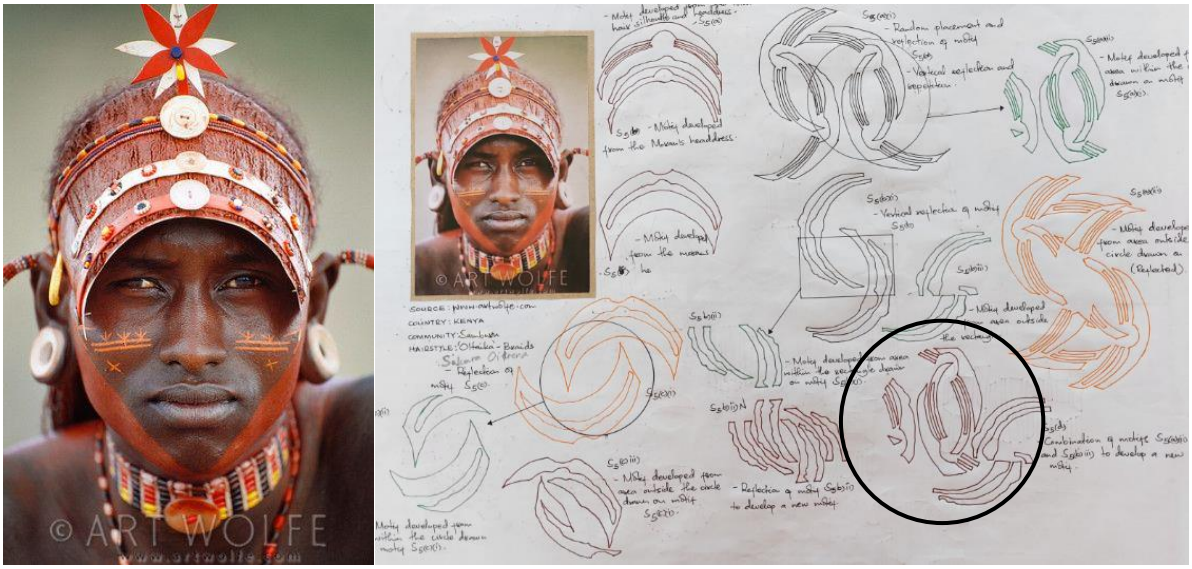


Figure 17. Development of designs from 'Sakara Oirena' hairstyle
Image Source: www.artwolfe.com

b) The sketches were then transferred to the computer and tracing out the design using CAD software.

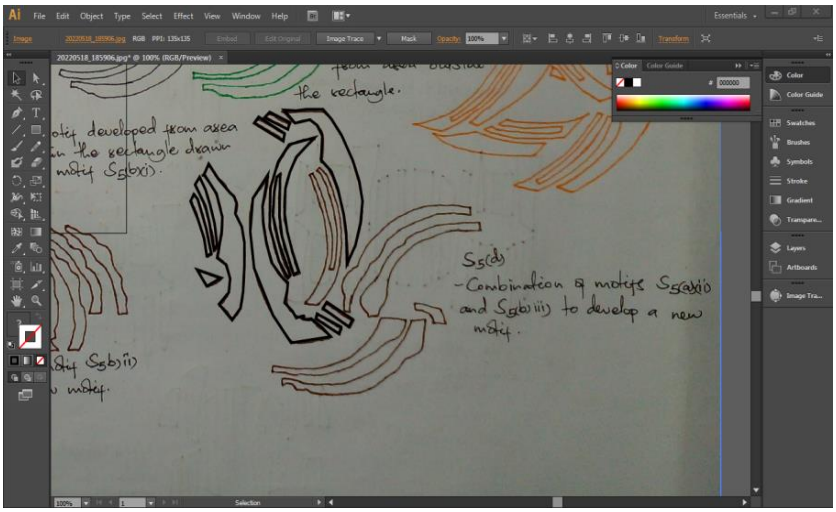


Figure 18. Transfer of the sketch to computer and trace out (Done on Adobe Illustrator CS6)

c) The traced out sketch was then aligned to make a motif.

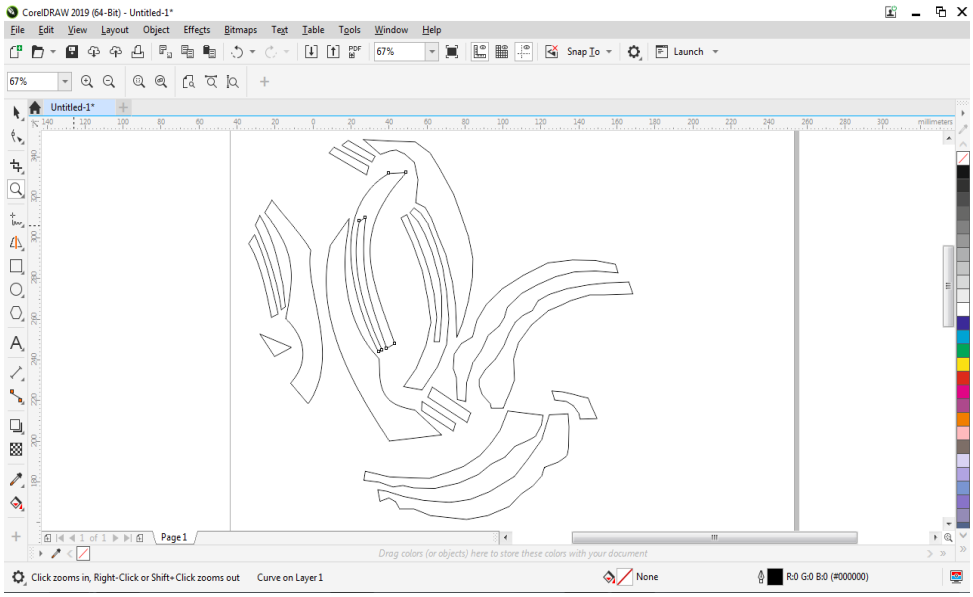


Figure 19. Alignment of the traced out sketch (CorelDraw 2019)

d) The developed motif was then duplicated into a pattern using the various principles of pattern development in fabric design (Figure 20)

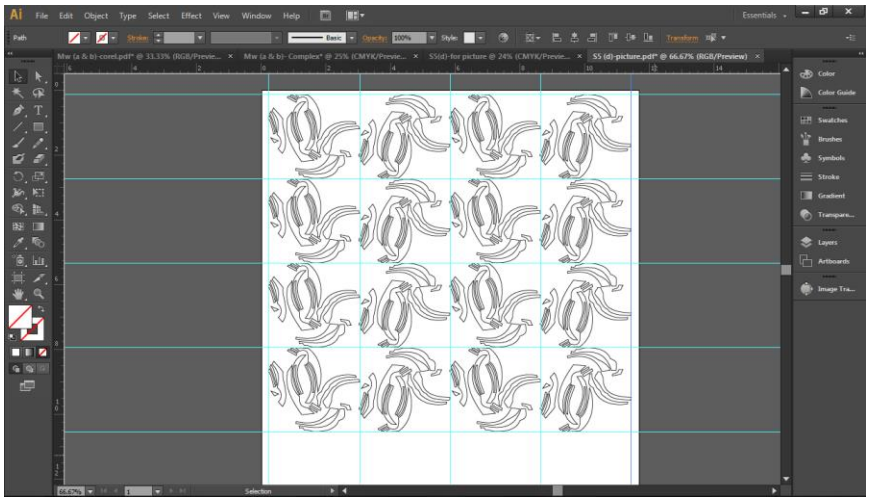
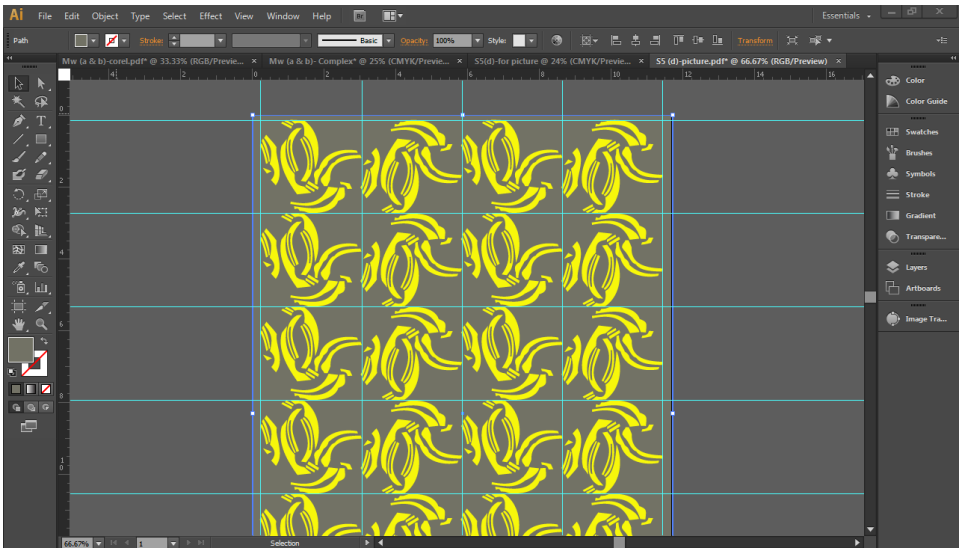


Figure 20. Screenshot showing the arrangement of the pattern using Adobe Illustrator CS6

e) Colour was then applied to the pattern using Adobe Illustrator CS6. Colour could be applied in one or more colours. Figure 21 shows screenshots illustration the application of one and two colour to the developed pattern respectively

One colour



Two Colour

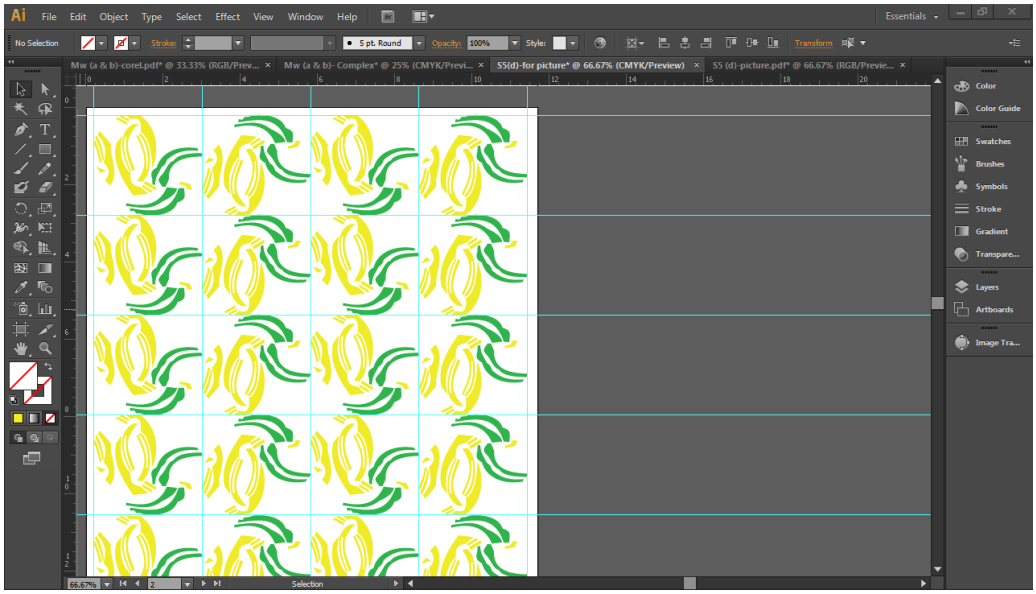


Figure 21. Colour Application to the pattern using Adobe Illustrator CS6

f) **After manipulation of the coloured pattern on computer using block reflection the following are the final designs developed from the select hairstyle.**

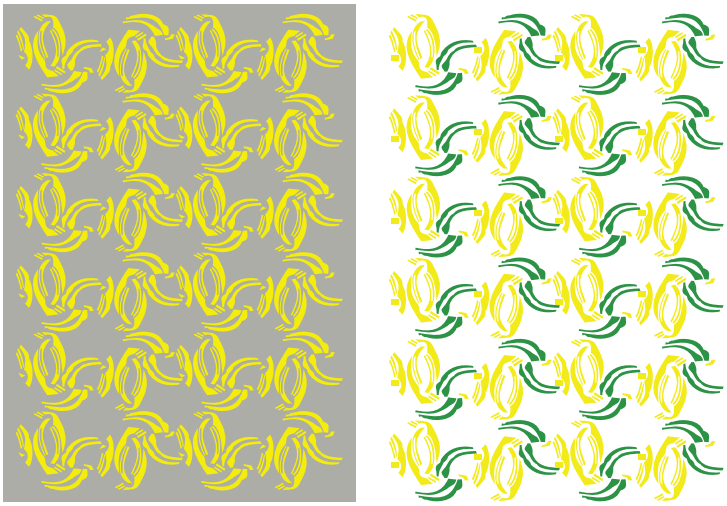


Figure 22. Final design developed from Samburu Moran 'Sakara Oirena' hairstyle

Conclusion

Patterns are probably the more visible features of fabric design. Pattern development, however, is a more obscure feature although the development has a lot more time, thought and creative input being placed into it. Patterns are often inspired by existing sources. Documentation of the process of pattern development from its inspirations is hardly ever done. This paper has attempted to document the process of design that has taken place in the development of patterns to be printed on fabrics. These patterns were inspired from hairstyles worn by Maasai and Samburu Morans. It is hoped that designers will take a cue from this documentation and capture for posterity, the creativity they infuse in the design process.

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Oluwaseun Isaac Abati **is a Ph.D. student at the Department of Fine Art and Design, Kenyatta University. He earned a Master of Art in African Art Studies from Obafemi Awolowo University Ile-Ife after completing his undergraduate studies at the University of Nigeria Nsukka. He has nine years of teaching experience at the University of Jos in Jos, Nigeria. He is an active lecturer with a gift for simplifying complicated themes in art history. By advancing his academic career as an art historian, he wishes to get exposed to more cultures and forms of art that may impact African artists who feel that art is a catalyst for environmental sustainability.**

Kehinde Adepegba **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. Kehinde Adepegba, 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 architecture, Yoruba artists, and communal art. He is a member of the Lagos Chapter of the Society of Nigerian Artists (SNA).

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A COMPARATIVE ANALYSIS OF ART FORMS IN NDEBELE AND IGBO WALL PAINTINGS

Oluwaseun Isaac Abati, ***University of Jos, Nigeria, isaacabati@gmail.com***

and

Kehinde Adepegba, ***Lagos State Polytechnic, Nigeria, adepe200us@yahoo.com***

Abstract

African art is a kaleidoscope of many expressions. There are traces of it in every aspect of the people's culture which include their beliefs, behaviors, practices as well as their material items. All the expressions combine to define the African way of life. Similar expressions are found in African architecture where wall painting is done to shelters that people live in, shelters that are dedicated to their royalty and also to shelters where they worship their gods. This paper reports a study that sought to put into context the significance of wall painting as a form of African art. Descriptions of wall painting from various African societies are first presented before a comparative analysis of the art forms in the wall paintings of the Ndebele of South Africa and the Igbo of southern Nigeria is done. This is in an effort to demonstrate the socio-cultural significance of African wall art.

Key Words: ***Wall Painting, wall art, art forms.***

Introduction

The practice of traditional art in Africa is not a hobby; it is a way of life of the people of the continent. The worldview of the African people, with all of its consequences, is deeply ingrained in their diverse artistic expression. African art is an integral component of the culture of its people. Whilst Macionis and Plummer (2005) define culture as 'the values, beliefs, behavior, practices, and material things that define a people's way of life,' it is difficult, in the Africa sense, to separate art from culture. Culture is said to be '*the art of the people'*, as the 'art *of the people'* is expressed in their culture. This is because the people on the African continent, on a daily basis, lead a life that is heavily influenced by the art they find and interact with everywhere. Visona *et al* (2001) affirm by stating that Africa is described by the visual force and ingenuity of its art as it is a continent with stunning cultural richness of outstanding variety. This is evident in the cosmology, language, architecture, religion, dance, rituals, textiles and fashion of the African people.

Africa's art is categorized as being either two or three-dimensional. Wall painting, the focus of this article, is a two-dimensional art as it is produced on flat surfaces such as the walls of secular dwellings, royal palaces, and religious worship sites. Vansina (1984) while supporting the point that wall painting is rendered in two-dimension, further argues that it can be referred to as a graphic art because it requires the creation of greater illusion of space, texture, and atmosphere than three-dimensional arts, aspects that are easily achieved with the application of graphic art techniques.

Early humans made wall paintings (called rock art) in caves where they resided with incredible ingenuity and power (Clottes, 2016). Gillon (1991) writes that neolithic man made tens of thousands of stunning paintings and engraving on the rock walls of their caves not only to retain and recount their activities in their society but also for fun and for magical purposes. Brain (1980) agrees and notes that whereas rock painting was used for purposes like sympathetic magic, art for art's sake and cosmology, wall painting of the traditional architecture (like houses, palaces, and religious worship places) was mostly done for socio-aesthetic reasons that include beautification.

After the shift away from residing in caves, wall paintings are today evident on walls of man-made buildings around the continent. The goal of African architecture today isn't only for providing shelter for humans and storing treasures, but also for showcasing the people's artistic abilities. Though the architectural features of African design are, in most instances, works of art in their own right, wall paintings are often executed on surfaces where they may connect with the public and be enjoyed by everyone. African architecture is therefore decorated and ornamented with geometric patterns in low relief made out of various materials. Not all wall paintings are permanent however. Those that are temporary are refreshed regularly, particularly in preparation for a specific event. The inside of the buildings are themselves embellished with ceremonial artifacts, carved furniture and wooden utensils.

Since wall paintings are found across Africa, the following are descriptions of some from different communities on the continent.

a) Mangbetu wall painting: Figure and geometric murals were painted on the walls of houses and other places by the Mangbetu people of Congo. Visual language and symbolism are reflected in the Mangbetu wall paintings. Their designs are complex and extremely specialized (Figure 1).

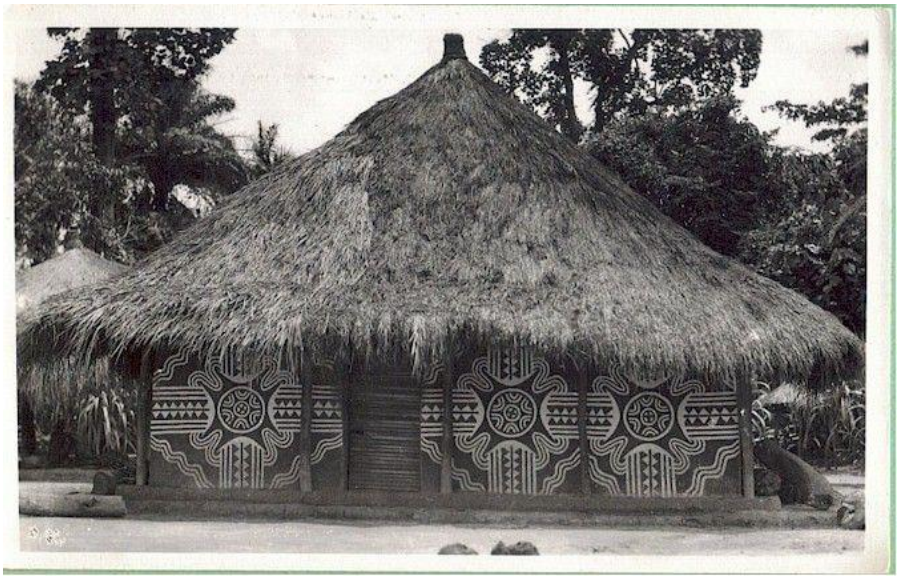

Figure 1. Mangbetu wall painting from Congo.

Source: https://www.pinterest.es/pin/300122762648846103/

b) Ekoi wall painting: The Ekoi live along the Cross River in Nigeria. Ekoi wall paintings are commonly found on the walls of the people's club houses. Their club houses are similar in nature to the Igbo club houses. As seen in Figure 2, the mud paintings are usually painted in multiple colours and have esoteric symbols drawn on them.

Figure 2. Ekoi wall Painting with esoteric symbols from Cross River, Nigeria. Photograph by: Herbert M. Cole, 1973

c) Yoruba shrine painting: Yoruba shrine painting is a spiritual art form found across Yoruba land. The anthropomorphic and zoomorphic objects associated with the gods of the Yoruba are shown on the walls of Yoruba shrines (Figure 3). White, red and green and the most common colours used.

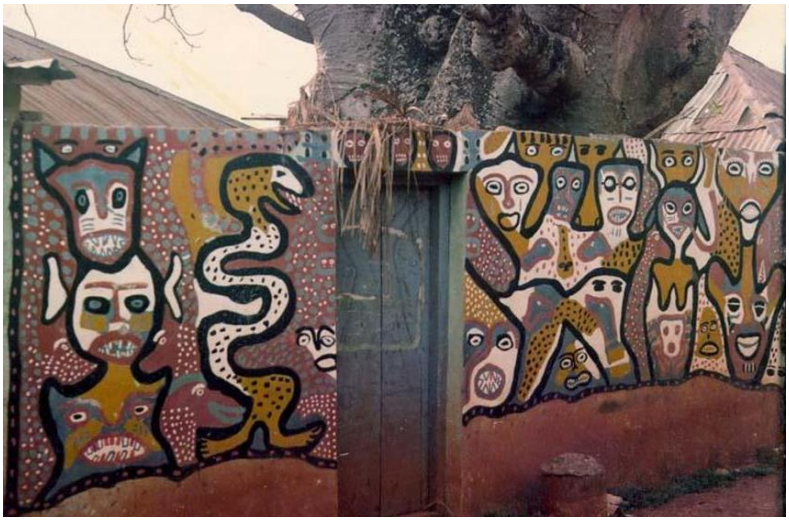

Figure 3. Yoruba Sacred Painting for Ogun (god of Iron) from Ilesa, Osun State, Nigeria. Source: Stewart Baker
https://slideplayer.com/slide/14953083/

Sirigu wall painting: Wall paintings are created by the Sirigu people who live in the Upper East region of Ghana. These paintings are made out of natural materials and feature narratives that depict various cultural symbolism using animals such as snakes, crocodiles, cows, and other animals. The primary purpose of these paintings is to satisfy cultural needs (Figure 4).

Figure 4. Sirugu wall painting from Ghana

Source: https://www.travelblog.org/Photos/7601147

This paper purposes to do a comparative analysis of two distinct forms of African wall painting- the art forms in the wall paintings of the Ndebele of South Africa and the Igbo of southern Nigeria. The comparison will cover the history, functions, forms and motifs, materials, and forms of production of the wall paintings.

Methodology

This study applied a desk research design. This is research design based on secondary sources and involves setting the objectives of the research, collating and summarizing the data required before analyzing and synthesizing it to draw the required conclusions. Desk research was chosen because it provided information needed to

understand the art forms in the wall paintings of the Ndebele of South Africa and the Igbo of southern Nigeria.

Ndebele Wall Painting

History of the Ndebele of South Africa

The Ndebele are part of the Nguni ethnic group of South Africa. Until the early 1900s, the Nguni people, regarded as ferocious warriors and landowners, occupied a huge portion of southern Africa (Lalioti, *et al*, 2001). Their ruler, King Mampuru, was a fierce opponent of white colonization in the area. Boyd, (2017) writes that because of this resistance, the ruling Boers declared a formal declaration of war against the Ndebele people in 1883. The Ndebele homes were demolished, and the whole tribal territory taken over by the Boers. King Mampuru was arrested and hung. The Ndebele lost the war that resulted in their long suffering. The citizen's sadness and suffering were shown in emotive art that expressed cultural opposition at the hands of the Boers. This emotive art was painted on Ndebele mud-walled homes (Figure 5) by the women in the society (Frescura, 2011).

Figure 5: A typical Ndebele Wall Painting.

Source: http://afaithfulattempt.blogspot.com/2012/02/ndebele-african-animal-drawings.html

Functions of Ndebele Wall paintings

The Ndebele used the expressive paintings as a form of communication amongst themselves. The wall paintings comprise colorful symbols and sentiments that portray personal prayers, self-identification, values, emotions, and marriage. In many cases, the paintings were done to commemorate male initiation, which is referred to as *wela*. Frescura (2011) writes that the paintings on the walls have remained secular as they have never been utilized for any kind of spiritual expression.

As indicated earlier, the artists who made the wall art on the houses of the Ndebele were women (Figure 6). Ndebele women were responsible for painting the outside gates, front walls, sides and the inside of her house as well. The women were responsible for passing on the tradition and style of wall painting from one generation to the next. It was believed that a woman who takes time to beautifully paint her house was also a devoted wife and mother.

Figure 6. A Ndebele woman wall painter at work.
Source: www.academic.evergreen.edu

The wall paintings of the Ndebele are also an indication of a women's fertility. Normally it is customary for the Ndebele to wait for two years after the birth of a woman's first child to begin construction on a homestead and its subsequent decoration. A woman's fertility also makes her husband a member of the Community Council of Men and has a voice in the public affairs of the group.

Wall painting amongst the Ndebele also indicated the time of transition in the life of a woman. Such time included the marriage of a daughter or the period when her son attends initiation school. The wall paintings in essence therefore presented the status of the woman in the community, such as being a mother, head of the homestead, and a responsible adult.

Ndlovu (2020) writes that what has changed over time with the decoration of the homes is the style in which the wall art is done. Artists have begun to incorporate imagery from their lives, particularly the details drawn from their work as domestic servants in white households in the cities. They now incorporate electric lights, swimming pools, multi-storey buildings, telephones, airplanes, and water taps in their paintings as these reflect present-day happenings.

Forms and motifs of Ndebele wall art

The patterns of the Ndebele wall paintings were one of the most important aspects of the art as the Ndebele used the patterns to communicate through painting. Most of the patterns in the Ndebele wall paintings were linear with different shapes of simple triangles.

The triangles were usually painted with colour. The symbols and patterns were often based on Ndebele's beadwork patterns, an essential part of the Ndebele ancient cultural heritage (Figure 7).

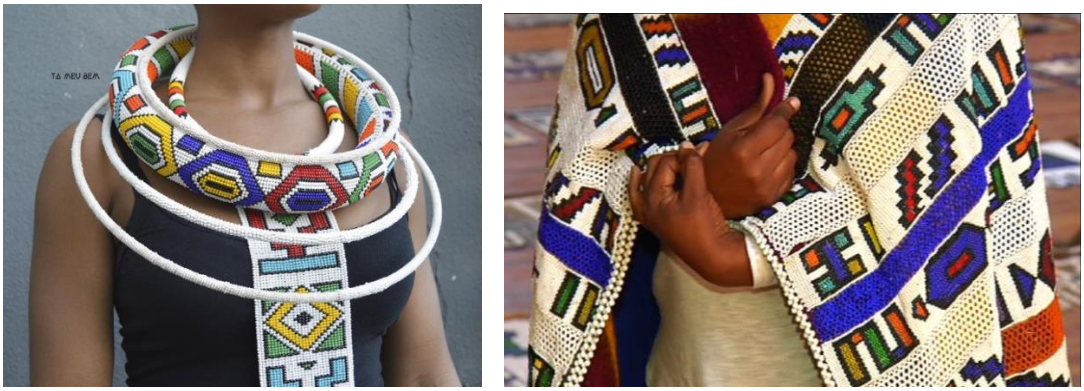

Figure 7. Ndebele beadwork designs that inspire their wallart
Sources: www.tameubem.com and www.enca.com respectively

The communicative patterns in the Ndebele wall paintings are usually repeated throughout the design with only a slight variation in the choice of colour. The geometric patterns and shapes are first drawn out with a black outline before being filled in with colour. The patterns are then grouped together to cover all the walls of the building.

Figure 8. Detail of Ndebele wall painting.
Source: www.pinterest.com

Process of production of Ndebele Wall painting

Prior to the start of the painting, the entire wall surface was painted white using limestone whitewash. The whole wall was then divided into sectors with each sector filled in with contrasting finger-paint patterns.

The designs were painted in by the women using their fingers. They scooped the fingers in wet plaster that had been made using cow dung. A wide range of marks, squiggles, zigzags, and straight lines were then drawn on the walls. Natural colours like browns, blacks, and other ochers were then added in the wet plaster and painted on the walls. The result are beautiful works of art as seen in Figure 8.

Figure 8. Ndebele's house with wide range of marks
Source: https://www.stocksy.com/18612/ndebele-woman-painting-her-house-south-africa

The patterns and symbols on Ndebele wall paintings today are rendered with a rich black outline and vivid colours. A total of five main colors are used. These are: red and dark red, yellow to gold, sky blue, green, and pink. White colour is always used as the background colour because it makes the bright patterns stand out more.

Another change in the practice today has to do with the tools of trade. It has become necessary to design specialized tools that can paint large geometric forms of flat colours quickly and extremely tiny brushes that can paint small areas and outlines. The solution to this has been the importation of new tools which have allowed more complex designs to be painted.

Uli Wall Painting of the Igbo of Southern Nigeria

History of the Igbo of Southern Nigeria

Like many ethnic African societies, the actual origin of the Igbo people is shrouded in mystery and mythology. Archaeological discoveries and records indicate that the early Igbo first migrated from the Niger-Benue confluence and the territory between Awake and Oulu, approximately 4,000-5,000 years ago. At the time they were hunters and food gatherers though they later turned into farming as they developed social institutions, specialized in crafts and practiced religious beliefs. (Smith, 2010).

During the ninth-century, bronze castings were discovered at Igbo-Ukwu, a town located near the city of Awka in the Nigerian state of Anambra. With this, the ancestors of present-day Igbo are known to be renowned makers of the most inventive and technically accomplished bronzes. Other remarkable finds at Igbo-Ukwu include

decorative pottery, glass beads, copper figurines and animal head pendants which by all contemporary standards remain among the most technically advanced artifacts found south of the Sahara (Cole and Aniakor, 1984).

Uli are the curvilinear traditional designs of the Igbo people. Uli painting tradition is as old as the history of the Igbo people. It comprises both body and wall art. It is not clear which between the two arts came first but what is certain is that body decoration gained prominence as wall painting flourished. Uli art is a practice that is rooted in the people's cultural beliefs.

Functions of Uli Art

Igbo painters devoted their efforts to advance the community philosophy of their people. The wall paintings were intended to be used for community or village rituals, weddings, and other important life events. Uli art was made on walls of private homes, compound walls, and community shrines.

Figure 9: A typical Uli wall painting. Source: www.onepageafrica.com

Traditional Igbo women were exponents in the wall painting (Adepegba, 1995). Uli art was commissioned by patrons who would be lauded when the work is done instead of the artist who would be given none of the attention. The artist was instead be referred to by the term '*omena,'* a muted show of regard of her talent *(nka)* (Kabir, 2018).

Young girls and women emulated the skills and techniques of Uli painting from their mothers, grandparents or other women who lived in the neighborhood in which they grew up. Once a woman achieved the mastery of Uli painting, she was commissioned to present her artwork in variety of social contexts, including in the marriage process, the celebration of changing seasons and in funerals and memorials of the deceased.

Forms and motifs of Uli art

The *Uli* artist drew forms and symbols that completely depended on her personal interpretation. *Uli* symbols, whether on the body or surface of walls, are known by a variety of names, depending on the region they were used. This notwithstanding, it is still possible to evaluate the degree of creativity and skill the Uli artist has from her finished work.

Uli artists conceived their designs from the environment. They were influenced by the forms and intricate patterns of objects found in nature. Nnadozie (2006) affirms that most of Uli art motifs are derived (or abstracted) from natural phenomena that includes plants, animals, the cosmos as well as man-made objects and are all combined to make one composition.

Process of production of Uli Wall painting

Uli art is a communal affair done by many women at a time (Figure 10). The painting involves the use of several colours. The patterns were drawn big and asymmetrically placed in the composition. This was to create additional attention.

Pigments used in painting Uli art were found in riverbeds or eroded gullies caused by heavy rains and flooding. Their exposed soils could easily be dug and then ground into an applicable paste or slip which was then applied to already prepared walls by the artist. Women can also today buy coloured pigments that are on sale in local village and community markets.

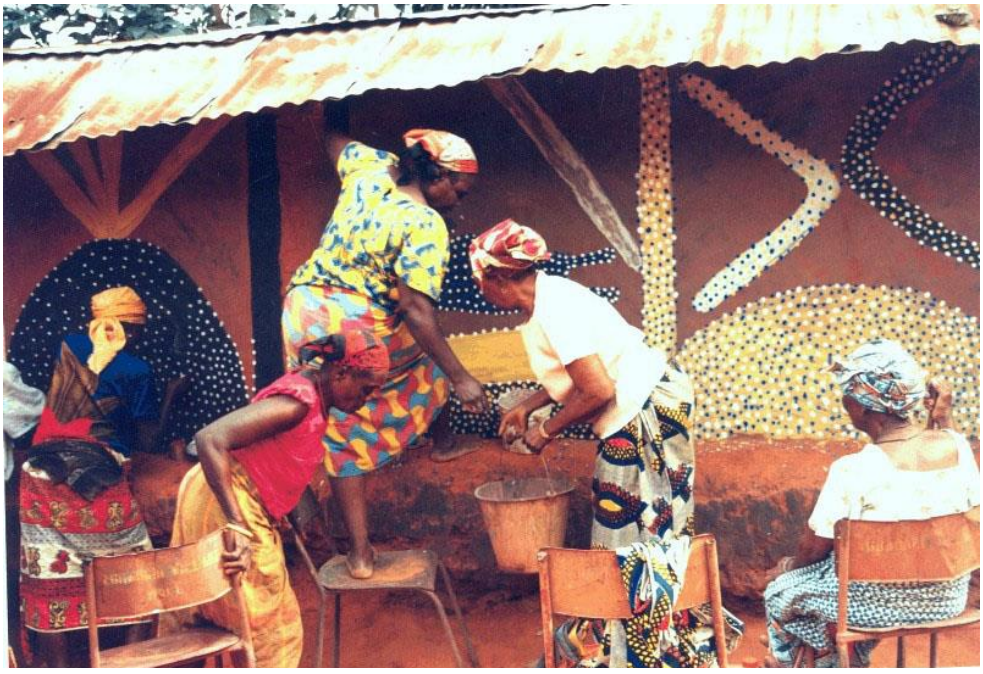

Figure 10. Communal Uli wall artists painting a wall
Source: www.onepageafrica.com

The wall paintings are created during the dry season and because artists do not add binder to their pigments, the paintings generally

wash or wear off during the subsequent rainy season. A repeat of the process has to therefore be done the rainy season (Nortey, Bodjawah, & Kissiedu, 2019).

Comparison of Ndebele and Uli Wall painting

From the presented text, it is worthwhile to note that though Ndebele and Uli wall paintings share a lot in common they also have marked differences. Their peculiarities are what makes each art form unique. Some of the similarities drawn from the discussion are presented below.

Ndebele and Uli wall paintings are both carried out by women. This is done on the walls of their dwelling shelters and homes. Both art forms are cultural expressions that were started in the two communities a long time ago.

In both cases, Ndebele and Uli wall paintings influence the status of the artist in the community. The artist social standing is held high owing to their talent in making the art. In both communities, apprenticeship is the method of transfer of art skills from the older generation to the younger one.

There are marked differences in the two art forms. While Ndebele wall art is a product of grief that was suffered by the people in the hands of their enemies, Uli art forms are purely an expression of cultural beliefs and values. Another difference is that Uli wall painting is often carried out communally as it is a cooperative effort (Figure 5) while Ndebele wall painting is a single person effort.

Another contrast between Uli and Ndebele wall painting is that Uli wall art is curvilinear as it does not show the use of regular lines whereas Ndebele wall painting is linear and geometric. Ndebele art is also usually done using bright colours and has large angular patterns while Uli wall art is monochromatic in nature.

The sources of inspiration of both form of art are different: Symbols of Ndebele wall painting are influenced by the patterns of their bead design tradition while Uli wall painting is derived from the patterns of their body decoration. Records have also shown that Ndebele art is not used to edify religion as it is only carried out in homes while Uli wall art is done on both homes and community religious houses like shrines.

Conclusion

The paper focused on an important tradition of art in Africa- wall painting. Discussion also drew a relationship between African culture and art and argued how wall painting stems from the aspect of its architecture. Examples of wall art were highlighted with general characteristics of the art form presented and a comparative study of Ndebele and Ibo painting done to justify the socio-cultural importance of the art on the African continent.

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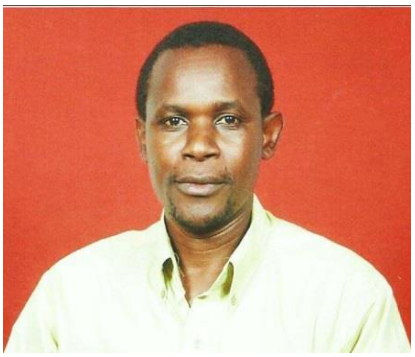
Ruth Mwangi is a scholar at The University of Nairobi pursuing her Doctoral degree in Design. Her Masters was from Nairobi University in the Arts; Undergraduate Degree at Kenyatta University in Fine arts. She lectures at various Universities in Kenya including Machakos University and Kenyatta University. Her research has been in Wildlife conservation which has been her passion over the years and has published two papers on the same.

Dr. Michael Munene who suffers from severe profound hearing loss is a Lecturer at the Department of Art and Design, University of Nairobi Kenya and also a practicing Interior Designer for the last eight years. He holds a Doctorate in Universal Design; MA in Sustainable Design; BA in Education Design, and various postgraduate qualifications. Michael is currently involved in Disability Mobility Grant Research. His personal experience as a disabled person continues to inspire him to champion the needs of PWDs.



Dr. Samuel Mwituria Maina is a senior lecturer of industrial design at the School of the Arts and Design, College of Architecture and Engineering of The University of Nairobi, Kenya. He also teaches in other institutions and universities in Kenya including but not limited to Jomo Kenyatta University of Agriculture and Technology, the Technical University of Kenya, Nairobi Institute of Technology and Kenya Medical Training College. He has contributed many articles to academic journals on ecodesign, eco-ethics, and construction and sustainability. Dr.Maina has also authored course books on design materials and processes volume 1, 2, 3, 4 & 5, Introduction to ergonomics- a learner's manual, Qualitative & Quantitative research methods simplified, How to Write a Good Proposal and communication skills for college and university students. Among other interests, Dr. Maina has researched on glass as design material, recycling of solid waste and human factors for interior ambience. He has also been involved in several consultancies and exhibitions individually and collectively.

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HUMAN CENTRED APPROACH TO COMMUNITY BASED CONSERVATUIN IN MBIRIKANI, KENYA

Ruth Mwangi, ***University of Nairobi, mwangi.ruth@gmail.com***

and

Dr. Michael Munene, ***University of Nairobi, munenemichael@gmail.com***

and

Dr. Samuel Mwituria Maina, ***University of Nairobi, mwituria@yahoo.co.uk***

Abstract

Community based conservation has been used as model to encourage the community surrounding protected areas (PA) to participate actively in conservation program. Protected areas were created to conserve wildlife species and reduce human wildlife conflict (HWC). The community inhabiting the landscapes felt infringed as they could not access PA that were fenced for they needed to gather plants for medicine, firewood for cooking, pastures for their livestock. Conservation managers stepped in and created programs for the community that could benefit them as they protect the wildlife for tourism and for future generations. The program constituted benefits that the community would enjoy and need. These includes: health facilities, education scholarships, school structures, reduced poverty, alternative livelihoods and energy sources. Funds were set aside for the conservation project that has

kicked off in most PA and have been short lived for as soon as the funding was over the community were stuck. The projects were short term and were beneficial only for a moment which left the community feeling needy and discouraged. Hence the need for a long term solution to alleviate poverty amongst community members and meet their fundamental needs. An approach that is holistic and sustainable will improve livelihoods and create development in the region of conservation. Design thinking is one such approach that the researcher is implementing to identify community needs and solutions for the people. Human Centred design is a discipline in design thinking that works to create solutions for community members by involving them in decision making, planning and implementation stage of every project for sustainability and development purposes. Community at Mbirikani Group Ranch would be the case study to evaluate the approach used and its effectiveness towards conservation of wildlife in the area.

Key Words: ***Community, Conservation, wildlife, Human Centred Design, Sustainable development***

Introduction

According to International Union for Conservation of Nature (IUCN), 'a protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values.' Protected areas are mandatory for conserving nature and the resources it has: food, clean water supply, medicines and protection from the impacts of natural disasters. Global awareness of protected areas is an

indispensable instruments in achieving the objectives of the Convention on Biological Diversity and the Sustainable Development Goals.

These protected areas were set up in areas with high populations of big mammals and are the emphasis of the wildlife policy act. It aims to protect wildlife species inside national parks and reserves and assist landowners to coexist with wildlife in conservancies through revenue from tourism and compensation for loss of life. In Kenya, protected areas that are governed by wildlife laws fall under three categories. These are: national parks (managed by the Kenya Wildlife Service), national reserves (managed by county governments) and conservancies (Whitelaw, King, & Tolkach, 2014).

Historically wild animals roamed the earth and multiplied in numbers until the era of urbanization, prevalent in Africa where encroachment into marginal lands inhabited by wildlife increases leading to habitat fragmentation, poaching, pollution and climate change (Maxwell, Fuller, Brooks, & Watson, 2016) (Makindi, Mutinda, Olekaikai, & Olelebo, 2012). Poaching and illicit trade in high-value species is rampart in Asian markets for use as medicine, luxury foods and ornaments being one of the main reasons for wildlife population decrease (Challender 2011; Biggs et al. 2013; Underwood et al. 2013). Changes in climate have affected biodiversity across the globe to near extinction. (WWF, 2018) (Foundation A. W., 2016) Global warming caused by carbon footprint has altered the patterns of wildlife migratory patterns. Wildlife population of some species is endangered and nearly extinction according To IUCN Red list. Without measures to restore wildlife

African elephants, Lions, Grevy zebra and Rhinos will be historical. Future generations will not have a glimpse of the spectacular wildlife in their habitat but will be a story that necessitates imagination to experience the majesty of the species. Hence the need for conservation and programs that are geared towards wildlife increased population, biodiversity conservation and community conservation.

Community conservation by definition is one which community members are involved in efforts to protect the landscape and environment they inhabit through the highest levels of participation and that they gain economically from wildlife. Community-based conservation (CBC) is an approach to biodiversity conservation in protected areas through participation at all levels with local communities. The community is aware of the benefits accrued from conserving wildlife population to attract tourists and tourism in the area.

The traditional reliance on government sources to support protected areas is increasingly untenable, in both the developed and developing world. Conservation benefits deriving from short-term project expenditure are only sustainable if either external funding continues to be pumped in, or if local revenues rise to replace it, and grow with local needs and aspirations (Hulme & Murphree, 2001). Different authors have cited debates arising from community involvement towards conservation programs. These arises from questions on distribution of resources is not equitable, involvement of community in decision making (passive participation), little compensation during loss of crop, life or livestock and projects that were not delivered due to short term goals from donors.

This paper fills an important gap in current understanding of conservation-based conservation nexus debate. It seeks to (1) determine local perceptions of livelihood improvement through protected area management and tourism. (2) analyse models of conservation that are sustainable in the long term. (3) examine use of Human centred design to empower the communities to implement conservation programs through active participation.

Methodology

Study area

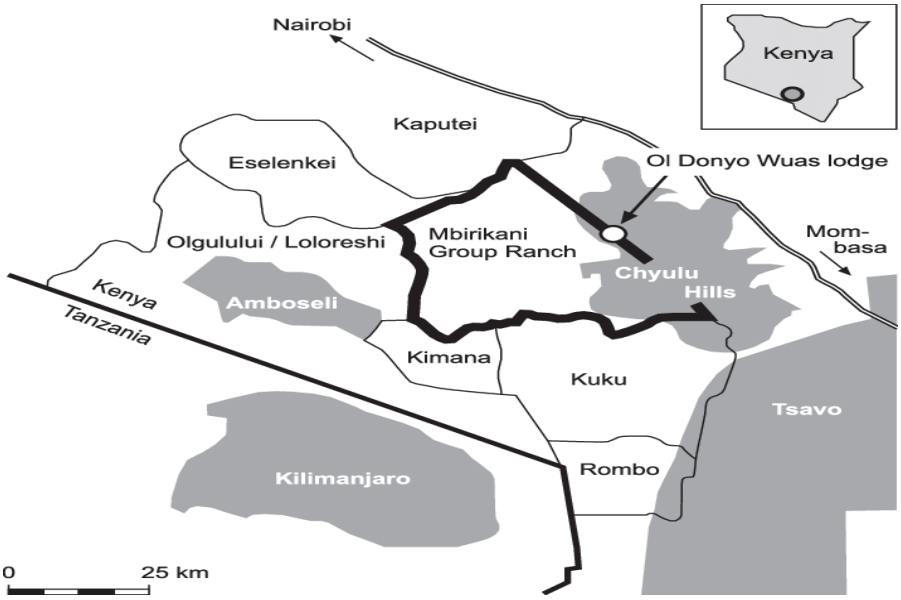

Figure 1 Location of Mbirikani Group ranch
Source: Research gate

Mbirikani Group Ranch (MGR) lies on 130,000 ha of land in Southern part of Kenya . It is bordered on the eastern edge by the Chyulu Hills National Park, which connects it to Tsavo West National Park, and Amboseli National Park is close to the western boundary. The

Ilkisongo Maasai community owns this land with a membership of 4650 members who are registered (Groom & Harris, 2008). It is a flat area with electricity and piped water servicing its community. Wild animals thrive in this environment with vast numbers of herbivores from Amboseli and Tsavo West National Park. Big life Foundation and Ol Donyo Wuas Trust have been working with community members to conserve wildlife through employment opportunities available, providing security, education and revenue benefits from tourism. "The revenue-sharing program from Amboseli reflects the use of the Ranch as a wet season dispersal area for the Park's wildlife. Each year, Mbirikani Group Ranch committee receives 850 000 Kenya shillings (US$ 12 143) from Amboseli gate fees (Groom & Harris, 2008).

The researcher used random sampling of interviewees using questionnaires with structured questions. The community members sampled were from male and female gender to get a complete view of wildlife interactions from both sides. Several questions were asked to measure their understanding of wildlife conservation and community conservation. The responses were positive with members citing examples of wildlife that is endangered in the area (Rhino Lions and Pangolins). They have adopted conservation policy by having a native name for conservation '*Era matare ongwesi'*. There was one voice in responding to No" when asked if they would participate in poaching for a small fee.

Community participation was measured by soliciting responses to several (yes/no), (often, regularly, never) statements. The responses included: 1) I often attend meetings for conservation 2)

Yes I participate in conservation programs 3) yes I do speak at the meetings. Gaps that stakeholders such as the government needed to provide some amenities that re lacking. The responses varied from 1) schools 2) Provision of water 3) women empowerment 4) Fence and 5) prompt compensation.

Discussion

Drawing on community conservation and protected area literature focused on conservation models used in the past and the success indicators, this study examined individual member's perception of Community-Based Conservation (CBC) in relation to participation and the benefits from conservation and development efforts including tourism, improved livelihoods, availability of resources and infrastructure.

Further, the study examined associations between stakeholder involvement, human- centred design (HCD) and sustainable development. Participation used by conservation managers is a top down approach through passive participation whereby people are told what has been decided or what is to happen (Hulme & Murphree, 2001). This approach has not been effective as only leaders and employees (lodge staff, scouts and rangers) actively participate while the rest of the population are indecisive about conservation.

Sustainable Development is vital to successful conservation of wildlife and communities. Effective implementation requires integrated planning with the community as key stakeholders to the project. As an embodiment of the long-term view of wildlife

conservation, it is necessary to deal with human wildlife conflict at the root level by developing the approach of community conservation management, in developing these CC, we need to asses constraints of compensation payments, which may not always incentivize conservation (Paudel, Potter,G, & Phelps J., 2019). A more sustainable way of CC is evaluating the assets that exist within the community at the grass root level. To assume that all communities surrounding conservancies experience poverty will be an understatement as the Maasai communities have wealth through their cattle and land resources. Policies developed and implemented should be context applied to encompass the characteristics of the area. Analysis of policies should be evaluated and communicated with the members of the community for effective active participation that goes beyond cultural barriers and constraints as discussed by participatory design for community development.

Human- centred design (HCD) is a way of thinking that places the people you're trying to serve and other important stakeholders at the centre of the design, innovation and implementation process.
"Today's human centred design is based on the use of techniques which communicate, interact, empathize and stimulate the people involved, obtaining an understanding of their needs, desires and experiences which often transcends that which the people themselves actually realized (Giacomin, 2015). Humans have been coexisting with wildlife and natural resources freely before any scientific invention or adoption of conservation programs. Wildlife thrived in their habitat and so did the communities living alongside. Then science came and proposed use of protected areas to keep animals in and people out-Fortress Conservation Model. This created a huge debate and it was deemed inhuman and sustainable

development was adopted in its place having people and wildlife coexisting with certain measures in place to create order. The design-based approach towards innovation encompasses multiple elements from traditional indigenous knowledge practices, a systems approach and a holistic approach to community based conservation of biodiversity.

Figure 2 are the steps taken in HCD approach:

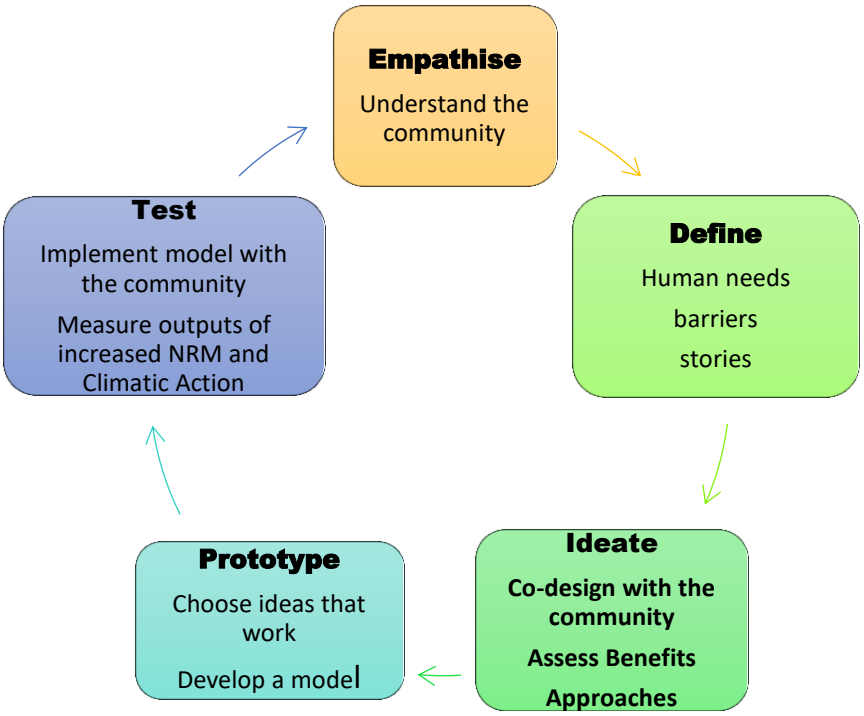

Figure 2: HCD Model
Source: Author

Big Life Foundation is a private non-governmental organization established in 2003 that works with the community in Mbirikani to conserve wildlife. The model they have adopted is a HCD approach that has worked and can be implemented in other conservancies in Kenya. The organization has empowered the community through training, governance and alternative livelihoods for sustainability.

The community members have achieved the well-being index through success indicators of health, environment, physiological and physical factors, environment, health and social domains. There are still needs that need to be met but BLF stands out as an exemplar case study in developing countries.

Figure 3 is an analysis of the BLF model:

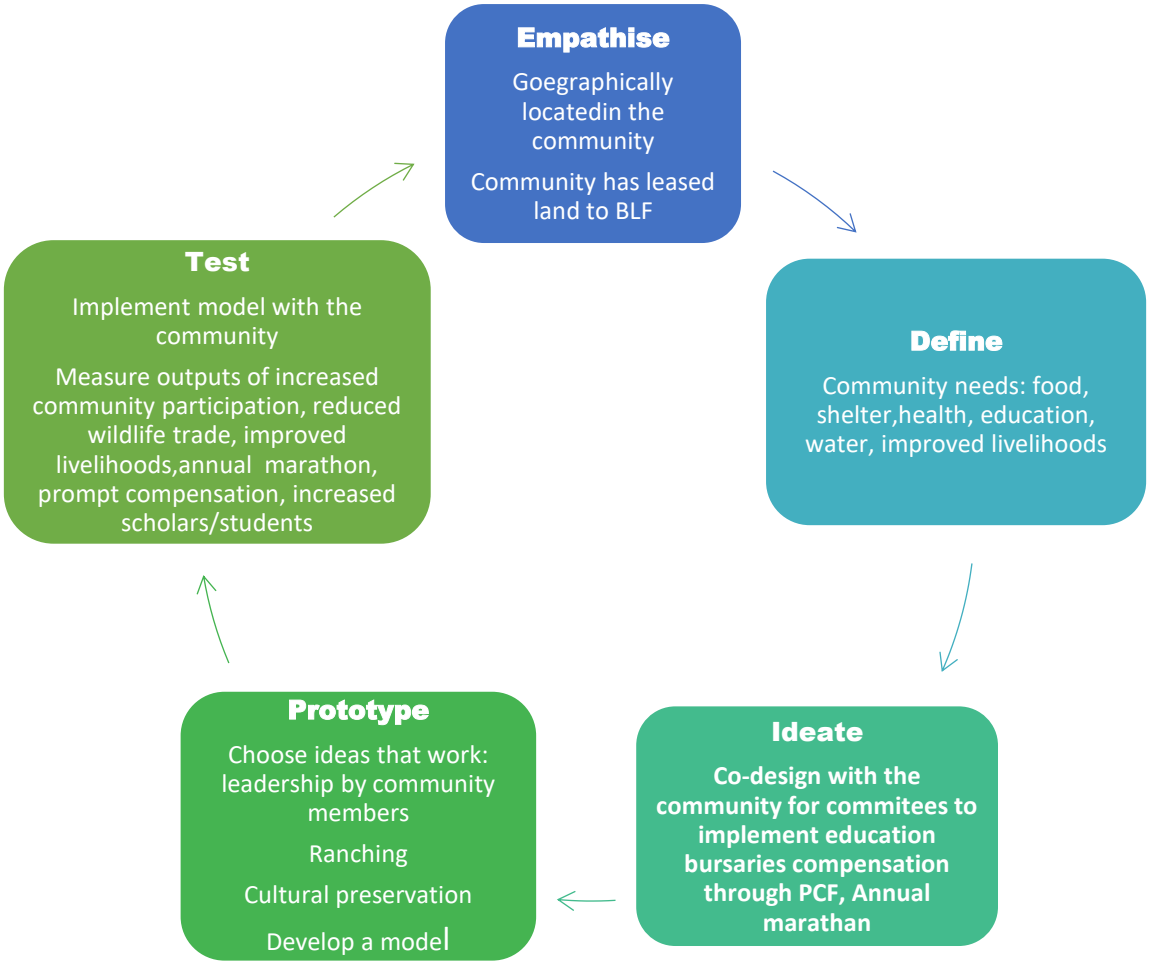

Figure 3. Big Life Foundation Model to CBC
Source: Big Life Foundation

Conclusion

Sustainability of any project is mandatory to its success. Sustainable development goals (SDGs) stipulate the need to have: Goal 7: Affordable and clean energy use, Goal 12: Responsible consumption and production, Goal 15: Life on Land. Community conservation in Kenya seeks to develop strong relationship between the community and the environment to increase wildlife population and tourism in the country. Conservation projects have been implemented in different regions and its success rate is dwindling as an effective approach to alleviate communities from their current situation. The reasons have been cited by literature where various authors have questioned the conservation models used in the past. They lack community involvement and sustainability which is a key pillar in development projects.

The main actor, the community, is missing in the development process of project as they are not involved in the decision making and planning phase. Involvement is at the implementation phase of the project. Community based conservancies rely on government and non -governmental institutions for financing and when it stops so does the project hence the need for community empowerment to run projects in the long term.

BLF has empowered the Maasai community at Mbirikani Group Ranch through active participation and involvement of all stages of conservation programs so that they can uphold the project now and into the future. Human centred approach places the community at the heart and seeks to develop solutions for the members after assessing their assets and what needs that haven't been met and

creates a model with the members for the members. Social innovation calls for developing and implementing effective solutions to current global issues, by prioritizing people and planet first. Creating solutions facing wildlife decrease in population and habitat degradation through climatic change and human activities through assessing alternative approaches to meeting needs in a less harmful way. Biodiversity conservation should be geared towards improved quality of life now and future generations to come.

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Letter from the Chairman's Desk By Sunil Bhatia PhD

Primitive people started communicating with the natural tools or god's given gift to humans through their body parts. They might have expressed their anger, anguish or happiness by pushing by hands or actions of kicking or gruelling or widening their eyes for scaring others or expression of laughs was visible to all that person is happy. What they see, what they hear and interpretation in the brain makes them think for the best possible solution by using and coordinating other body parts. This war survival era and individuality phase. As they realized the limitation of individuality compared to limitless nature and its secrets that forced to live in collective form for knowing and conquering limitless nature. What other collective sees and what collective hears make them find the best solutions in different individual minds for collectively acceptability. Need of different individuals to come for actions for assigning the different task for performing specific jobs as he was doing at an individual level for action by coordinating different body parts for performing. They were forced to think of such system that should not completely rely on individual body parts but some external factors for communication. They found body parts were not fulfilling their requirements of achieving desired results. The moment they thought of communication and started by drawing pictures with some external tools that was the birth of Art and Design. Mango depiction

by drawing for communication informed about the mangoes but the idea of filling the colour gave a more realistic picture helped in removal of web of confusion what earlier version was not communicating properly. 'The biggest enemy of communication is confusion.' What source is trying to tell, the receivers is taken interpretation in different angles is the primary source of confusion. The confusion is the reason for growth of art and pushed for making realistic picture by applying more and more external tools for designing for realistic picture. Once the minds started notices the certain items in detail and tried for copying made the faculty of minds growth and later on proved reason of development of languages. This exercise of detailing and expressing for others by realistic picture a, expression and other tools was reason of foundation of mass communication of our modern times.

Art and design was clearly visible when human thought of decorating their body parts for attractions of others. As they use the scented colourful flowers in their hairs , lip colouring by external red colour and other body parts for looking much attractive. Recently I was watching a documentary on some tribes of Africa where woman was using scented smoke for making attractive of her private parts before the day of getting marrying At certain level aged factor debarred using the external factors for making body attractive for others. They thought of delay the aging by focussing on foods, exercises and other means for maintaining youth.

Idea of diet and discipline life established for delaying age . They wished to use safe water and better and safe food for cooking. Potters started copying nature role for collection of water as they noticed in pond or river by designing pitchers and for proper cooking designed various vessels.

Primitive people devised of techniques of confusing the prey by using external tools like stem or disturbing the areas where possible hideout of prey for locating and killing for foods. The moment idea of using the sound for alerting the prey makes them to notice the prey presence. Initially used the vocal sound for this jobs . Its limitations or lower ranges failed in disturbing the prey for action of safety made them to use the external devises for high volume sounds. They designed sound producing items was the first that is product of art and design.

Art simply informs the things that exist. Design is other side is functionality as solution of the problem. Art provoke thought and emotions. Design is possible solutions of the problem. Art is perceptual and design is rational. Design changes with environments, resources and change of technologies where art remains the same and no change is possible with time and space frame

I am thankful to Prof George Vikru, Department of Art and Design . I hope his efforts and contributions by other authors make this special issue a unique and our readers will enjoy.

Lambert Academic publication for celebration of 150th special issue by publishing a book by compiling editorials

"Design For All, Drivers of Design" 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:

https://www.morebooks.de/store/gb/book/design-for-all/isbn/978-613-9-83306-1

With Regards

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

Dr. Sunil Bhatia
Design For All Institute of India
www.designforall.in
dr_subha@yahoo.com
Tel 91-11-27853470®

ISSN: 2582-8304

Forthcoming Issues

October 2022 Vol-17 No-10

Lilián González-González *is an Industrial designer, Academic coordinator at Anahuac University of México and a Board member in the World design organization. Is a PHD candidate in Critical Theory about "Social design experience", currently is studying Disability Theory Certificate and has a Master degree in Contemporary art and a Specialist certificate in sculpture, drawing and art in Florence, Italy where she won different prizes as an artist and made individual and group exhibitions.*

She had the opportunity to work as a designer in the industry and as a professor in several Universities and cities around Mexico.

She had experience in the Mexican design industry, government and manufacturing. She also worked in General Electric Energy for 5

years, obtaining different certifications in the meantime about quality and design.

Also, was a Co-founder and organizer for various conferences, talks and symposiums about art & design. Also was invited as a speaker in different Universities and congresses nationally and internationally.

Her Design research and development expertise is in esthetics, symbolic meanings, manufacturing process, healthcare, disability, inclusion and sustainability.

Until today is an philosophy, art and design writer since 2009 in www.designforsociety.org

November 2022 Vol-17 No-11

Prof Dr. Cigdem Kaya *is chair of department and professor of design at Istanbul Technical University (ITU), Department of Industrial Design. She has been the vice director of Science and Society Research Center (2014-2017) and Industrial Design Graduate Programs Coordinator at ITU (2014-2017). She has been part of I-D team of Learning Lab by Relais Culture Europe, Paris; where she co-develops content and methodology in the field of cultural innovation since 2019.*

Cigdem Kaya received Bachelor of Industrial Design from Istanbul Technical University (ITU) in 2003, Masters of Fine Arts in New

Genres from San Francisco Art Institute (SFAI) in 2006 and Ph.D. in Industrial Design from ITU in 2011 with co-supervision at Art and Design Center at Sheffield Hallam University (SHU) where she closely studied with Chris Rust. Kaya's research has been funded by Fulbright and Marie Curie programs. She has published many peer-reviewed articles in best design research journals. She supervised 3 PhD thesis about craft, critical making, use-share systems, all of which aim at social innovation and sustainability.

In 2020, she has been awarded with one of the most prestigious national research awards: scientific encouragement award by Middle Eastern Technical University Prof.Dr. Mustafa N.Parlar Education and Research Foundation in 2020 for her research on social innovation and sustainability.

December 2022 Vol-17 No-12

Ivor Ambrose

Managing Director, ENAT asbl.

Ivor Ambrose has worked in the areas of accessibility and disability inclusion for over 40 years as a researcher, university lecturer, project manager, policy advisor and independent consultant. Born in England, he has lived and worked in the UK, Denmark, Belgium and Greece. He holds a Master's degree in Environmental Psychology from the University of Surrey, UK and a university lecturer/Ph.D.

qualification from the Danish Building Research Institute, where he specialised in User Evaluation of Environments and new Information and Communication Technologies.

In 2001 he turned his attention to accessibility in the tourism sector, which generally lacked awareness of the needs and specific access requirements of people with disabilities, resulting in inadequate provisions for these travellers. As a researcher and advocate of 'Design for All, which germinated in Europe in the late 1990s, and 'Universal Design' which took hold in the same period in USA, he was part of a movement which challenged policy makers and practitioners in many fields to re-think the way environments, products and services were conceived and designed. Through his research and observations of life, behaviour and cultures, Ivor has developed a driving ambition to make tourism accessible for everyone, everywhere.

In 2008 he co-founded the European Network for Accessible Tourism (ENAT) non-profit organisation (www.accessibletourism.org), with a group of European organisations active in the tourism industry and disability advocacy. He was elected as its Managing Director and has continued in that position since then. ENAT has become the premier membership association for about 300 organisations, business and individuals who support and want to learn more about this area of tourism development. As its director, Ivor manages ENAT's activities and projects including curriculum development and vocational training courses for hospitality management and staff, European and international standards work on accessibility and tourism, destination management consultancy, certification and provision of accessibility information through online platforms including Pantou, the Accessible Tourism Directory (www.pantou.org). The ENAT

Board also maintains links with the UN World Tourism Organisation, the EU Tourism Manifesto Group, the International Social Tourism Organisation, Blue Flag International, Zero Project and many national and regional tourist bodies.

Email: enat@accessibletourism.org

Athens, April 2022

January 2023 Vol-18 No-1

IMMA BONET

After high education in Pharmacy in the University of Barcelona, she developed her professional carrier in the field of healthcare, associations, education, accessibility and Design for All.

From 1975 to 1980, she was Head of the Haematology Department at the Hospital San Juan de Deu (Barcelona) and from 1994 to 1997 representative of the people with mental disabilities sector in the Governing Council of the Institut Municipal de les Persones amb Disminució de Barcelona.

From 1995 to 2000 she was responsible for the External Relations in the Resources Centre for Personal Autonomy that belongs to the Barcelona Province Government.

From 2001 to 2021, she became Executive Patron of the Design for All Foundation where she is responsible for the general management.

She has been responsible for the development of many national and international projects in her position as: Design for All in Spanish Universities, The Flag of Towns and Cities for All, Museum for All, Society for All, Auditing system for the use of Design for All in companies and has coordinated the participation of the Design for All Foundation in the European project IDeALL (Integrating Design for All in Living Labs) on processes of co-creation with users.

She has been also lecturer in several Spanish Universities, design schools and congresses.

From 2022, she is currently a freelance Design for All consultant working for organisations like Design for All International, Moventia, City of Oslo, Avanti-Avanti Studio and ProAsolutions among others.

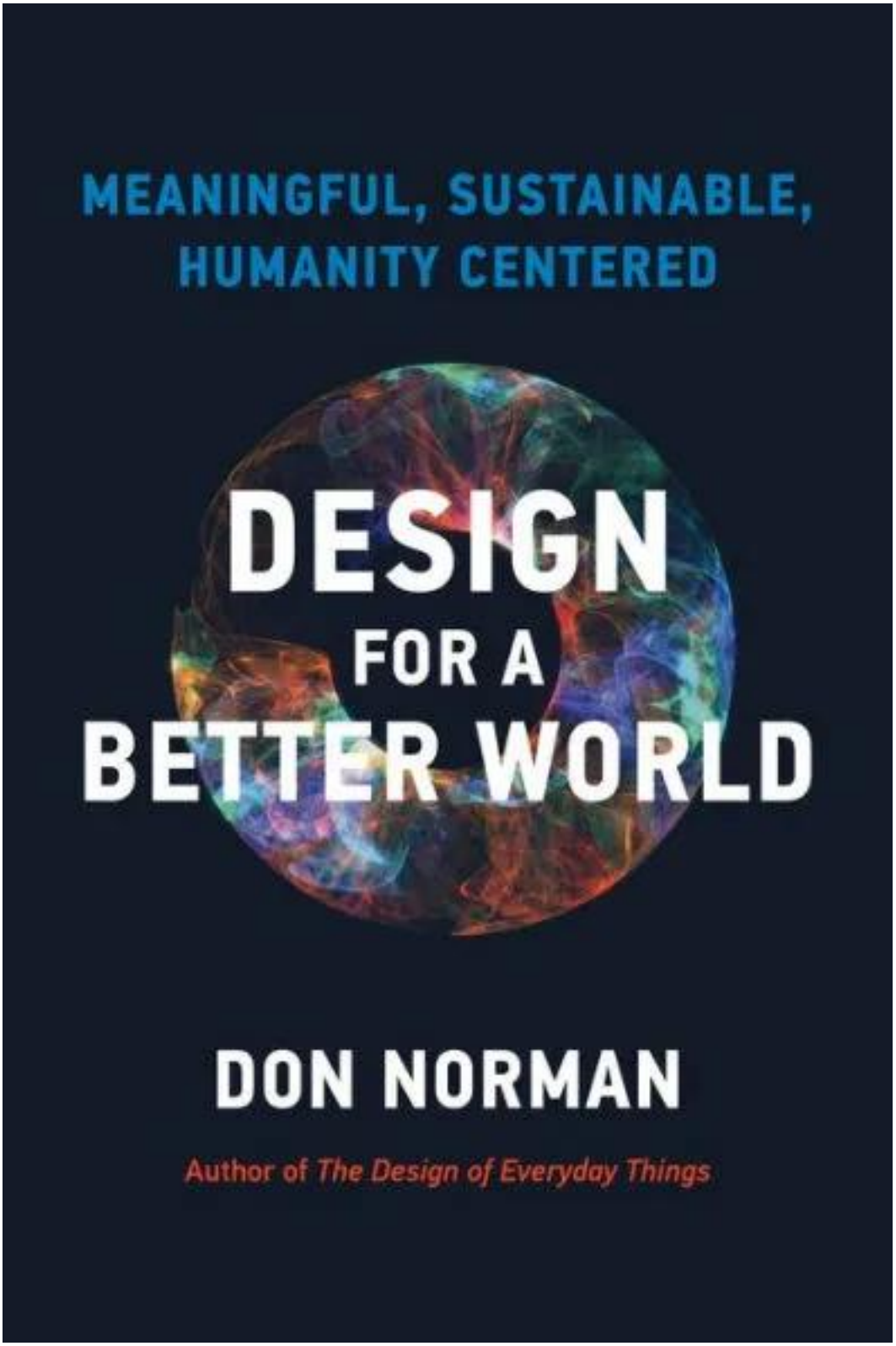
November 2023 Vol-18 No-11

Dr. Soumyajit Bhar is currently an Assistant professor of environmental studies at Krea University, India, where he offers and coordinates a course on Design Thinking. Soumyajit straddles action and academic research with more than 14 years of experience (both volunteering and full-time) working with various environmental and sustainability issues. He holds a Ph.D. in Sustainability Studies (with a specialization in ecological economics) from Ashoka Trust for Research in Ecology and the Environment (ATREE) as part of a

unique interdisciplinary Ph.D. program. His dissertation attempts to understand socio-psychological drivers and local and regional scale environmental impacts of conspicuous/luxury consumption basket in India. Soumyajit is furthering postdoctoral research at the intersection of rising consumerism, sustainability concerns, and inequality levels in the context of the Global South. He is also keen to explore how design education can broaden students' perspectives and help them delineate pathways to a better world. He has published in international journals and popular media. He is also interested in larger questions of philosophy and ethics, particularly pertaining to environmental issues.

New Books

it is available on www.morebooks.de one of the largest online bookstores. Here's the link to it:
https://www.morebooks.de/store/gb/book/design-for-all/isbn/978-613-9-83306-1


MEANINGFUL, SUSTAINABLE,
HUMANITY CENTERED
DESIGN
FOR A
BETTER WORLD
DON NORMAN
Author of The Design of Everyday Things

The Ultimate Resource for Aging in Place With Dignity and Grace!

Are you looking for housing options that are safer and more accommodating for independently aging in place? Do you want to enjoy comfort, accessibility, safety and peace of mind – despite your disabilities, limitations and health challenges? The help you need is available in the Universal Design Toolkit: Time-saving ideas, resources, solutions, and guidance for making homes accessible.

This is the ultimate resource for individuals and professionals who want to save time, money and energy when designing, building, remodeling or downsizing a home. The Universal Design Toolkit will help you take the steps to design homes for your clients or yourself while eliminating the costly trial and error challenges you'd inevitably encounter if faced with this learning curve on your own.

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.

Within the Toolkit's 200 richly illustrated pages, you'll find: Insights that distinguish *essential* products, services and resources from the *unnecessary*.

Proven, realistic tips for finding the right home.

Home features you need to look for. Nothing is assumed or left out.

Handy home checklists and assessments.

Interview questions to help you hire industry professionals with knowledge and experience.

Photographs that provide a frame of reference to inspire, clarify and illuminate features andbenefits.

Valuable resources to save you time, money and energy.

Helpful sources of funding.

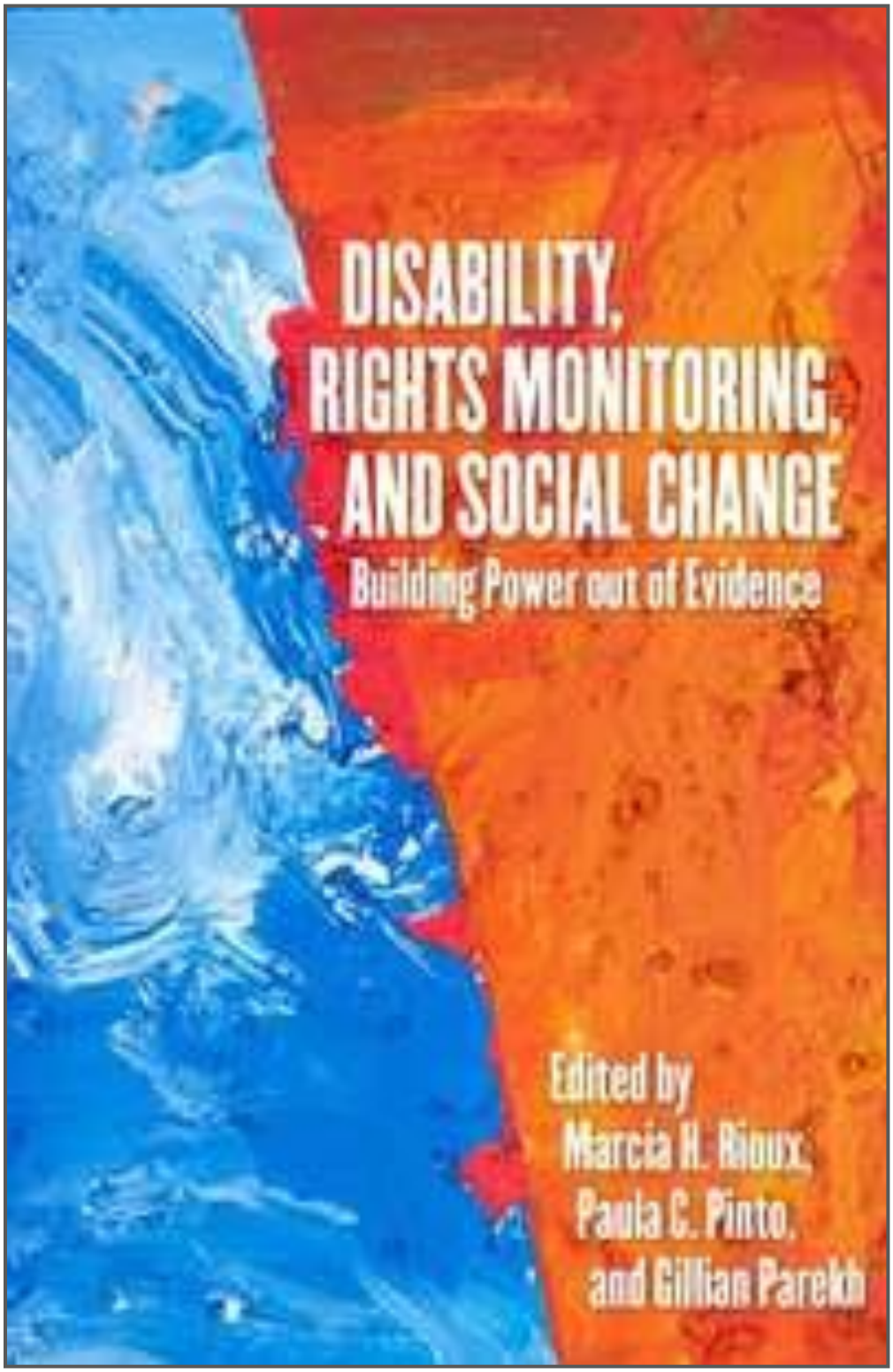
Space planning dimensions for access using assistive devices such as wheelchairs andwalkers.

And so much more!

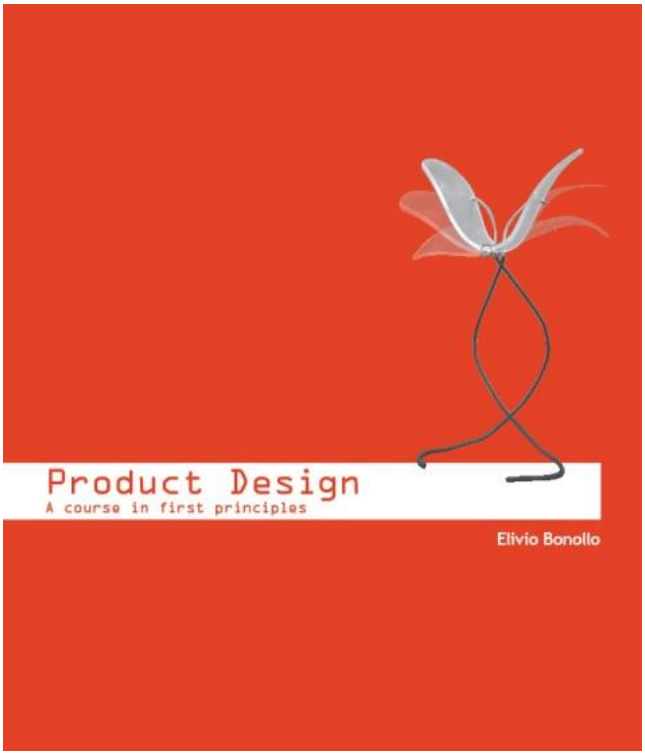
If you want useful, dependable advice and easy to implement ideas from respected experts who know the ropes, you'll love Rossetti and Leder's perspective. As a speaker, author and consultant who uses a wheelchair, Rossetti has helped hundreds of people design their ideal homes. Now her comprehensive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

Get the Universal Design Toolkit now to start your project!

Disability, Rights Monitoring and Social Change:



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



Available as a paperback (320 pages), in black and white and full colour versions (book reviewed in Design and Technology Education: An International Journal 17.3, and on amazon.com).
The 2018, eBook edition is available in mobi (Kindle) and ePub (iBook) file versions on the amazonand other worldwide networks; includingon the following websites:
ePubversion:www.booktopia.com.au
https://www.booktopia.com.au/ebooks/product-design-elivio-bonollo/prod9781784562946.html
mobi (Kindle versions):www.amazon.in
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READING HINTS: ePub files can be read with the iBook app on Apple MacBook/iPad devices; ePub files can also be read on Desktops PCs, Laptops and Surface devices using readers such as the Microsoft *freda*ePub reader. The Kindle (mobi file) reader isflexible and suitable for reading the eBook on PCs; Kobo readers can also be used to read ePub files on MacBook and iPad. All formats are very interactive with very good navigation.

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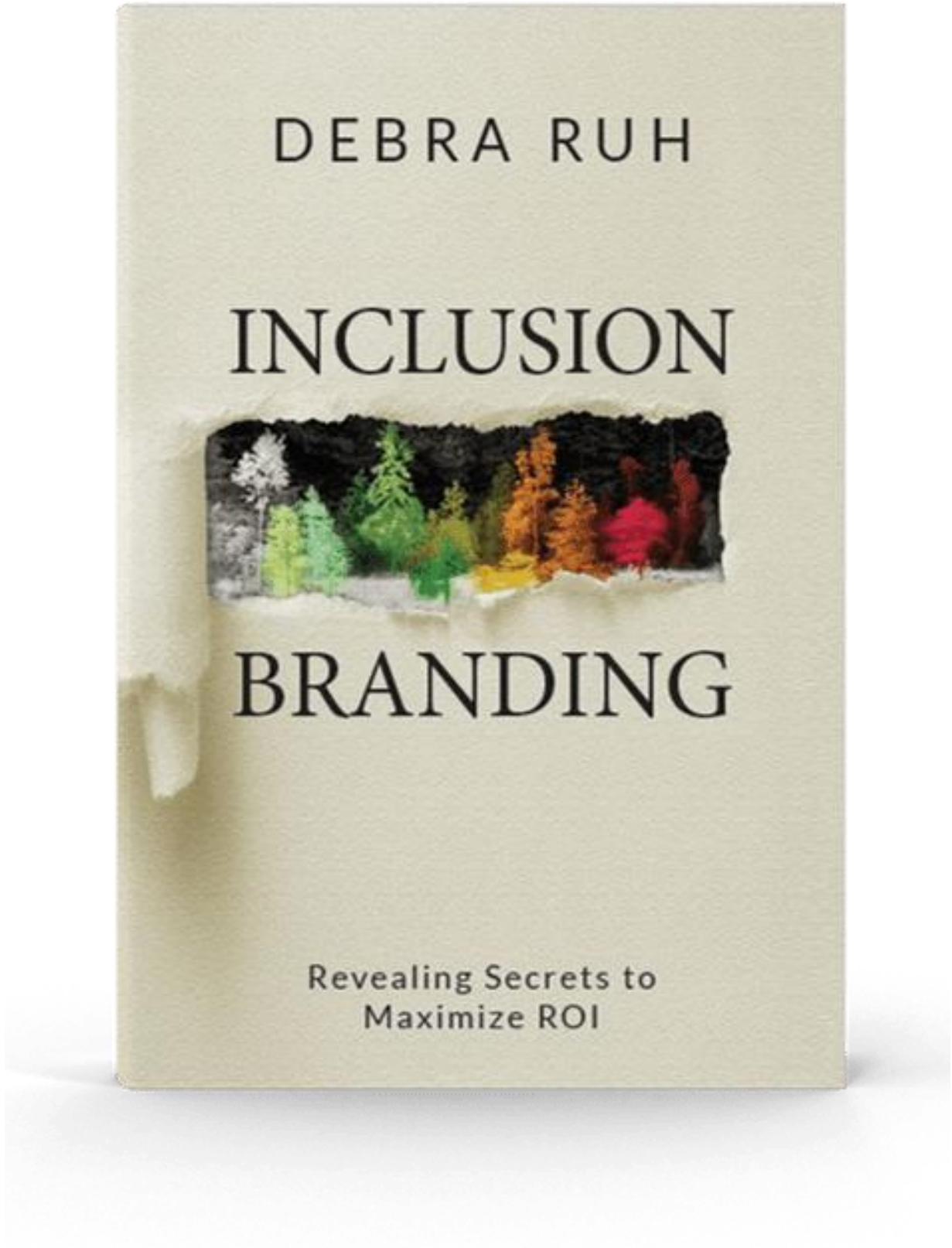
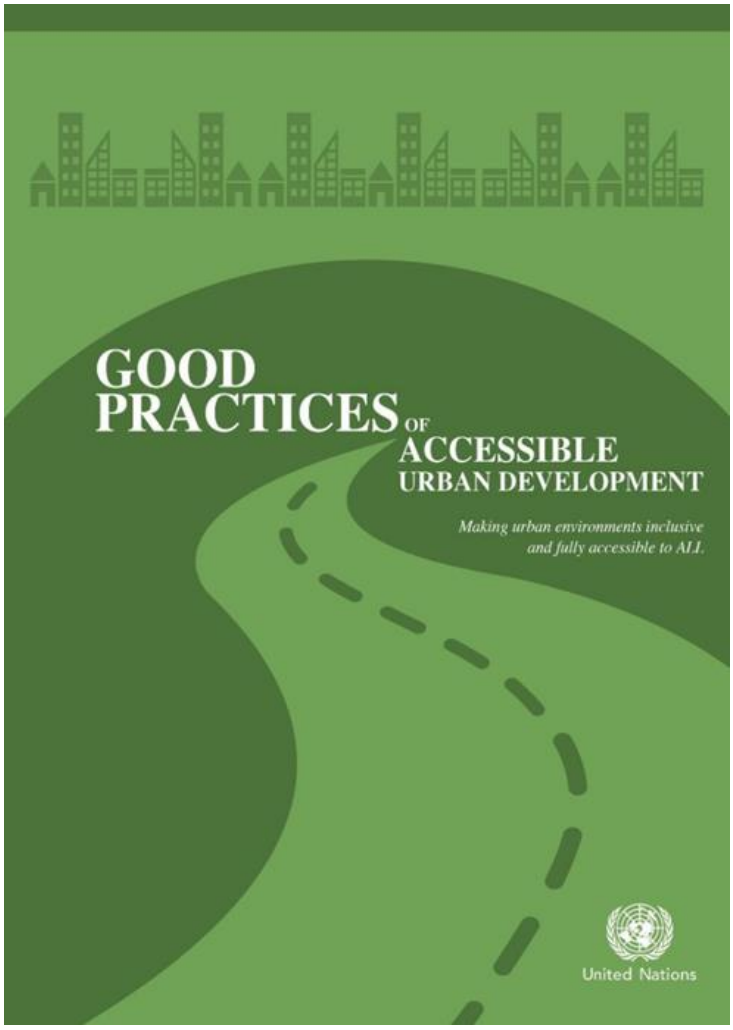
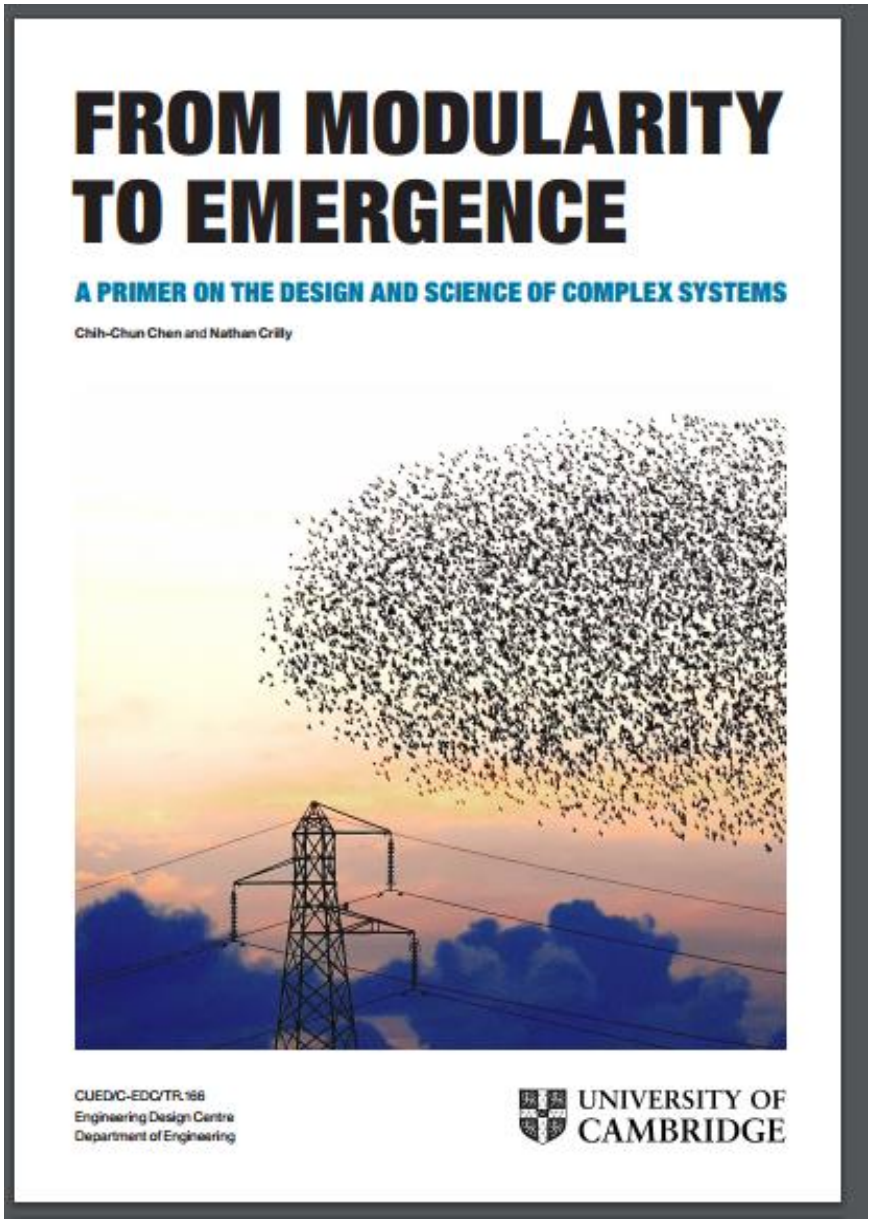




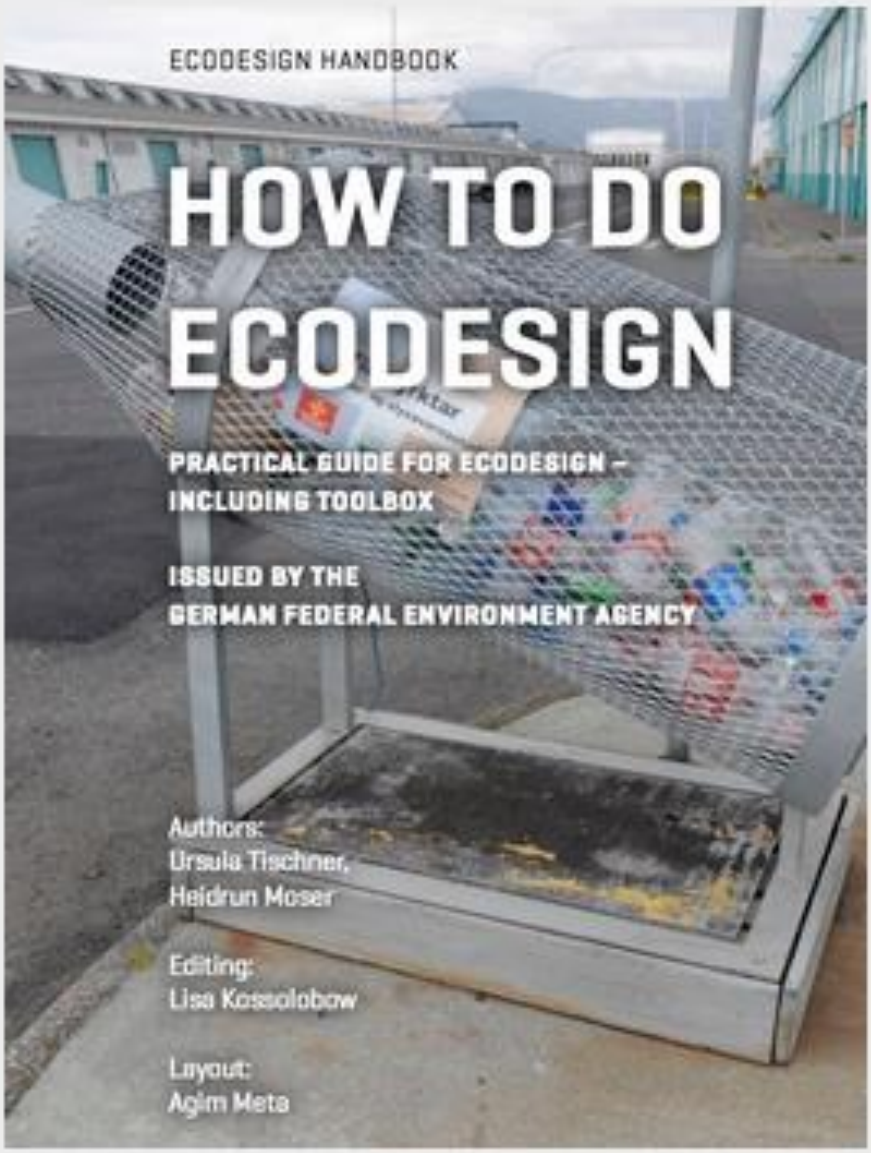
In light of the forthcoming United Nations Conference on Housing and Sustainable Urban Development (HABITAT III) and the imminent launch of the New Urban Agenda, DESA in collaboration with the Essl Foundation (Zero Project) and others have prepared a new publication entitled: "Good practices of accessible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



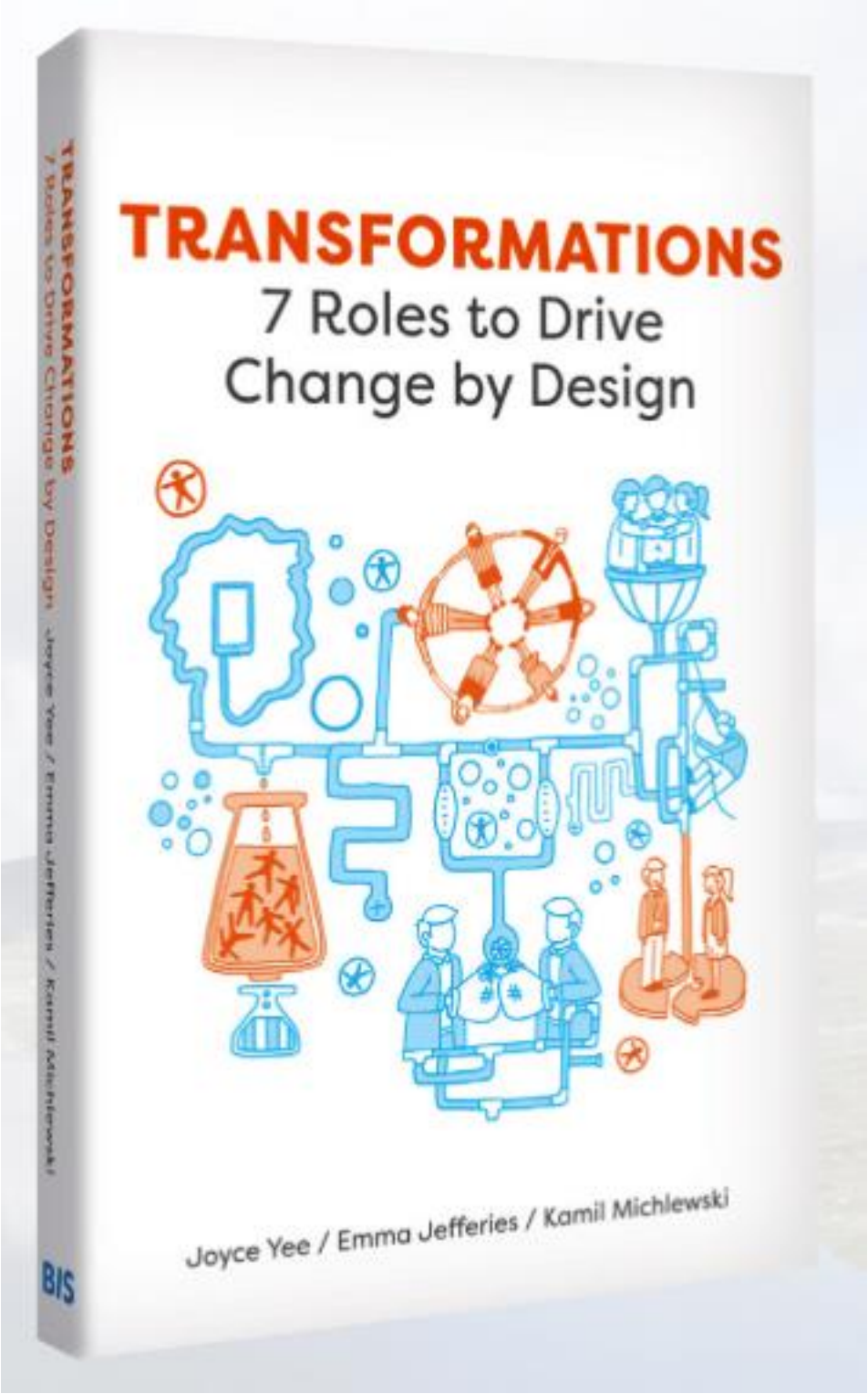
Dr Chih-Chun Chen and Dr Nathan Crilly of the Cambridge University Engineering Design Centre Design Practice Group have released a free, downloadable book, _A Primer on the Design and Science of Complex Systems_.
This project is funded by the UK Engineering and Physical Sciences Research Council (EP/K008196/1).
The book is available at URL: http://complexityprimer.eng.cam.ac.uk

Changing Paradigms: Designing for a Sustainable Future

New iBook / ebook:
HOW TO DO ECODESIGN

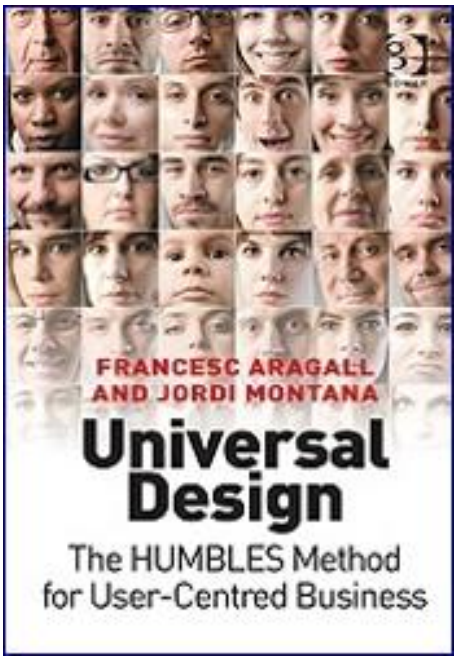


Practical Guide for Ecodesign – Including a Toolbox
Author: Ursula Tischner


TRANSFORMATIONS
7 Roles to Drive Change by Design
Joyce Yee / Emma Jefferies / Kamil Michlewski
BIS


Arnar Árnason and Sigurjón Baldur Hafsteinsson
DEATH AND GOVERNMENTALITY
Neo-liberalism, grief and the nation form

Universal Design: The HUMBLES Method for User-Centred Business



"Universal Design: The HUMBLES Method for User-Centred Business", writtenbyFrancescAragall and JordiMontañaandpublishedbyGower, providesaninnovativemethod to supportbusinesseswishing to increase the number of satisfiedusersand clients andenhancetheirreputationbyadaptingtheirproductsandservices to the diversity of their actual andpotentialcustomers, takingintoaccounttheirneeds, wishesandexpectations.
The HUMBLES method (© Aragall) consists of a progressive, seven-phaseapproach for implementing Design for All within a business. Byincorporating the user'spoint of view, itenablescompanies to evaluatetheirbusinessstrategies in order to improveprovideanimproved, morecustomer-orientedexperience, andtherebygain a competitiveadvantage in the marketplace. As well as a comprehensiveguide to the method, the bookprovidescasestudies of multinationalbusinesswhichhavesuccessfullyincorporated Design for All intotheirworkingpractices.
According to SandroRossell, President of FC Barcelona, who in company withotherleadingbusiness professionals endorsed the publication, it is "requiredreading for thosewhowish to understandhow universal design is the onlyway to connect a brand to the widest possible public, increasing client loyaltyandenhancing company prestige". To purchase the book, visiteither the Design for All Foundation website

ISSN: 2582-8304

News

1.

Designing for lifelong learning


JAMI MOHLENKAMP DAVID SCHAFER

- thing in life **When designing communities for older adults, creating spaces that foster safety, comfort and care often are at the top of the list of priorities.**
- **Now more than ever, however, owners and developers of older adult communities are making spaces where residents can enjoy a sense of community and pursue personal interests part of the overall plan. This can take many forms, from fitness rooms and yoga studios, to art studios, hands-on kitchens, greenhouses and other spaces for pursuing various types of learning.**
- **At first, it seems unlikely that there would be any overlap between architectural design for older adult communities and higher education. Design strategies for both types of building environments, however, are evolving along similar lines. Those practice areas are not as dissimilar as we may think.**
- **There are a few reasons for this. The move toward lifelong learning is a trend in higher education that supports a much greater age diversity in the student population. Inclusivity is another parallel, in that universal design is an important part of both older adult and campus space design, intended to support everyone, regardless of their physical limitations.**
- **Flexibility is another shared goal for education and senior living architects and designers. Increased flexibility allows instructors to deliver instructional content outside the classroom — usually online**

— using the time spent in the classroom for more active, collaborative work guided and supported by the instructor.

- **The same might be said of older adult design, where universal design elements are elevating not only the function, but the look and feel of communities intended as residences for older adults. Those communities are changing, not only to accommodate different acuity levels, such as independent living, assisted living and memory care environments, but also as a way of introducing spaces intended to foster socialization, activities and lifelong learning.**
- **With this in mind, OZ Architecture decided to explore the opportunities for intersection between older adult design and education design. Although this topic warrants continued exploration, we've identified three primary themes that represent overlapping design values of student populations and older adult communities: designing for communities, bridging differences and fostering lifelong learning.**

Designing for community

- **One of the reasons for combining design thinking from education and older adult communities is to combat loneliness and foster community. A 2016 *New York Times* article cited loneliness as a "growing epidemic," drawing on evidence that being lonely can disturb sleep, cause abnormal immune responses and even trigger cognitive decline. Another study followed more than three million people and suggested that loneliness peaks first in teenagers and young adults, and then again in the oldest individuals. Young people and old people are more alike than we think — and, unfortunately, they're both at risk of feeling isolated.**
- **By creating spaces that encourage community, we can support the users of our spaces. Student persistence and success rates are greatest for students who have a sense of belonging and are part of a larger community. Similarly, a sense of community and belonging can have a profound effect on the health and quality of life of an older adult.**
- **To support the creation of community, it is important to capitalize on common spaces such as stairways, elevator lobbies and even corridors, designing them to encourage chance encounters and promote interaction.**
- **Another strategy is to design the common destination amenities such as laundry rooms, common kitchens and game rooms to attract and encourage community engagement. Indoors, this might look like visible, common student study areas in a residence**

hall, or similar common areas in older adult communities for reading the morning paper or drinking a cup of coffee and being seen by a neighbor. If thoughtfully crafted, the outdoor space between buildings also can create valuable space that supports the community.

- **Designing those types of flexible community spaces encourages gathering together, no matter the age, and could feasibly work for multiple age groups in a single space — such as an older adult community with public space open to nearby college students, or a college with a Zen garden with time for quiet reflection and community events such as tai chi or group meditation.**

Bridging differences

- **At certain ages, it can be difficult to connect outside of one's age group. In an education setting and in older adult communities, we often are surrounded by others of a similar age. With a lack of direct connection to others of different ages, it is possible for stigmas and opinions to be created.**
- **Design can work to build bridges across different user groups and generations by creating spaces everyone can use, regardless of age or ability. For example, education design is moving toward a more student-collaborative pedagogy in favor of lecture-style learning. This is represented by a move toward level-floor classrooms with movable furniture, partitions and dry erase boards or digital screens for flexibility and ease of collaboration in the learning environment.**
- **As a result, many newer spaces easily allow someone in a wheelchair to roll up next to someone in a traditional seat and work together around the same workspace. This flexibility and usability makes the environment significantly more navigable by someone with physical or mobility challenges, regardless of age.**
- **Thoughtful housing options also can foster integration. In some cases, designing older adult housing adjacent to student housing on campus, with shared amenities between, could allow people of different ages to intermingle at their discretion and in different environments.**
- **As another example, student housing intended for specific areas of study, such as nursing or gerontology, could be attached to older adult housing as a way for students to interact daily with residents in a non-learning environment. Designated spaces in older adult housing design, such as exam rooms, can bring these groups into the same space without sacrificing privacy.**

- **This works especially well if common "everyday" spaces can be programmed to be both learning spaces and community spaces. For example, the same space might be designed in a way that it can hold a knitting class in the morning and a wine tasting mixer in the afternoon, with participant overlap encouraged.**

Promoting lifelong learning

- **The motivation to learn new things thrives across generations. Many older adults are driven to return to an educational setting later in life, to get that degree they've been wanting or simply learn to a new skill. Universities and colleges also are adapting noncredit classes and audit programs for lifelong learners to engage while minimizing or eliminating homework and exams. This encourages older adults to truly immerse themselves in lifelong learning.**
- **Designing integrated, mixed-use buildings also could create learning opportunities, such as including a public library in a 55+ community. Designing a college's maker space near an older adult community might allow retired professionals to tutor students and impart trade or craft knowledge. Younger students might even adapt their social skills by teaching older adults about updates to technology. Those interactions even may open doors for older adults and young students to work side-by-side on new products or technologies for aging populations.**
- **We're reminded of Henry Ford's words: "Anyone who stops learning is old, whether at 20 or 80. Anyone who keeps learning stays young. The greatest is to keep your mind young." Humans do well when we keep learning, no matter our age. By shifting our own thinking as to which types of spaces belong to which age groups, we can bridge generations in meaningful ways and with meaningful, intentional spaces.**
- ***Jami Mohlenkamp and Dave Schafer are principals at Denver-based OZ Architecture. Mohlenkamp leads the firm's senior living practice area, and Schafer oversees the company's education practice area. They can be reached at jmohlenkamp@ozarch.com and dschafer@ozarch.com*.**
- ***The opinions expressed in each* McKnight's Senior Living *guest column are those of the author and are not necessarily those of* McKnight's Senior Living*.***

Courtesy: (Mcknights Senior living)

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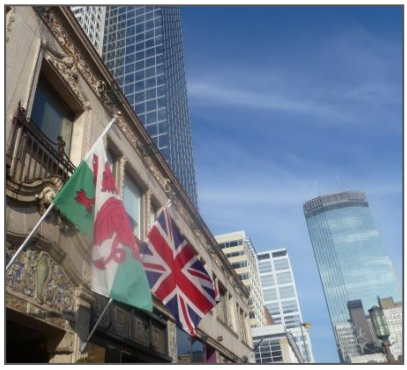

Programme and Events

ISSN: 2582-8304

GOOD DESIGN NEWS

Rewarding Design Excellence

Hyderabad Regional Chapter of IIID (Institute of Indian Interior Designers), is hosting the fourth edition of its flagship event "IIID Showcase Insider X 2022

Hot News For Students and Educators!
We're on the Final Approach for this year's Spring Semester Student submissions. We only have a few days before the final entry deadline, so if you're interested in joining the competition, please complete the submission process immediately. You know where to find us: www.sparkawards.com

The last and final deadline is Midnight, California time, June 17. The jurors begin their judging on June 18.
We're delighted with the high caliber of entries we've seen this year. Recently schools like MIT, SVA, Art Center College, Tdelft, Pratt, Harvard, Tsinghua, RAC, Honglk, SADI, Savanna, RIT and companies such as Hitachi, Samsung, HP, Midea, Philips, Dell, Google, Fuseproject, Whipsaw & Pepsi have joined the participants. It will be fun 😁
All Best--Stay Well!
--Spark

TypoDay 2022
28th & 29th October 2022

www.typoday.in

Typography Day will be held online for the fourteenth time on the 28th and 29th of October 2022 hosted by IDC School of Design (IDC), Indian Institute of Technology Bombay (IIT Bombay) with support from the India Design Association (InDeAs) and Aksharaya.

The theme for this year's event is 'Typography for Children'

THIS YEAR'S TOPIC:

ARCHITECTURE DESIGNED FOR AGING

The First Berkeley Prize 1998-99

ARCHITECTURE IS A SOCIAL ART

The BERKELEY PRIZE supports the study and teaching of the social art of architecture. The online, two-stage Essay Competition (in English) is open to undergraduate architecture majors in accredited schools of architecture throughout the world. The Travel Fellowship Competition is open to the Essay Competition semifinalists.

PURSE

Essay Competition: **35,000 USD; 8,000 USD first prize; Multiple prizes**

Travel Fellowship Competition: **Stipend and airfare; Multiple prizes**

2023 JURORS

The Berkeley Prize Committee

In honor of the 25th Anniversary, this year the members of the Berkeley Prize Committee will select the semifinalists, the finalists and the overall winners.

SCHEDULE

Competition opens: **September 15, 2022**; Stage One entries due: **November 1, 2022.**

For more information go to www.berkeleyprize.org

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Prof Dr Ravindra Singh, Delhi Technological University, India
Email: ravindra@dtu.ac.in

Special Correspondent:
Ms. Nemisha Sharma,
Mumbai, India
Nemisha98@gmail.com
Address for Correspondence:
13, Lodhi Institutional Area,
Lodhi Road, New Delhi-110 003India.

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