

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

DIVERSIFYING THE USAGES OF ASANKA BOWLS

By:

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(B.A. INTEGRATED RURAL ART AND INDUSTRY)

A thesis submitted to the Department of Integrated Rural Art and Industry

in the College of Art and Built Environment ,

In partial fulfillment of the requirement for the degree of

MASTER OF PHILOSOPHY

(CLAY AND EARTHENWARE TECHNOLOGY)

March, 2019

DECLARATION

I hereby declare that this thesis is the researcher's work undertaken under supervision, and that it contains no material that has been presented either in whole or in part to any other institution for the award of a degree or certificate except where due acknowledgements have been made.

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ACKNOWLEDGEMENTS

My heartfelt gratitude goes to God for granting me the strength and wisdom to finish up the course. It has been an interesting and tedious journey but His grace has seen me through.

I would really want to thank my supervisor, Mrs. Vesta E. Adu-Gyamfi for her patience, dedication, tuition and love to successfully complete this project. Not forgetting Dr. Rudolf Steiner, Mr. Andre Eric, (Ceramic Section, KNUST), Mr Donald and all other fellows who helped in the execution of this project. I am truly grateful. God richly bless you.

DEDICATION

I affectionately dedicate this research to the loving memory of father, Pius Kweku Nyan. He has believed in me from day one and I am pleased to present to him this research work. Your investments have produced fruit. Thank you so much Daddy. Your memory still lives on.

ABSTRACT

In Ghana pottery basically comprises cooler, akatekyewa, asanka bowls and flower pots. Traditionally, cooler is used for storing water, akatekyewa for storing medicine and cooking, asanka bowl for grinding and as an eating bowl, and flower pots for growing flowers. Research proves that for the past four decades the use of these products have fallen drastically, resulting to the collapse of most local pottery centers. The fall of their usages are due to the fact that, technological products have been substituted for pottery products. For instance refrigerator has replaced cooler, blender and plastic bowls for asanka bowls, plastic flower vases for flower pots etc. This alarming situation if not curbed will lead to the loss of our prestigious pottery forms. Therefore, using the asanka bowl as a case study in the pursuit of addressing this challenge. The research aims at establishing the possibility of using asanka bowl as an art medium to diversify its conventional usages. This will serve as alternative choice for local potters, sellers and users to envision asanka bowls beyond their customary form and uses. Hence breaking the conventional perception for it. With devised objectives mainly to study the conventional asanka bowl, design and develop a modified asanka bowl for the production of wall mural and fountain. The diversification however, is not a means to utterly distort the asanka bowl beyond recognition since it is a traditional artefact with prestige but it is a preservative technique that will aid to explore other forms and usages of asanka bowls- the contemporary art approach. Inversely, this is an attempt to enlighten our local potters to explore intensively the possibility of producing beyond conventional purposes of the other pottery wares and salvage our dying pottery.

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CHAPTER ONE

INTRODUCTION

1.1 Overview

The research centers on diversifying the usages of asanka bowls. A diversified means to salvage the diminishing ‘asanka bowls’ in our society and to rescue the local pottery industry. This chapter therefore contains background to the study, statement of the problem, purpose of the study, motivation of the study, objectives, research questions, definition of terms, significance of the study and delimitation.

1.2 Background to the study

‘Asanka bowl’ or ‘Apotowewa’ is one of the core composites of Ghanaian traditional pottery and it is very influential in most homes because of its utilitarian purposes. Traditionally it is use for cooking, eating, religious activities and other ritual purposes. In Ghana, among the pottery wares, asanka bowls are known and mostly used.

Pottery is a traditional heritage that is highly esteemed in the Ghanaian society because of its functional purposes that are mainly pots for cooking and medicinal purposes, asanka bowls, cooler, flower vases, mugs and jugs. According to Gyamfi (1988), everywhere in Ghana pottery is similar in technique, structuring and function with many local variations. The uniqueness of our pottery wares are exceptional. However, in retrospect the industry is encountering declining shift which if not checked will lead to the dying of our prestigious pottery forms.

To cite Mfensi pottery center as one of the case study is no exception because it is noted as one of the custodians of pottery in Ashanti region, Ghana. The practicality of this

project to the center and other pottery centers is paramount because of the dwindling state of the pottery occupation. The impact of modern day civilization and technology has necessitated the invention of sophisticated electrical products such as blender, refrigerator, metallic cooking utensils, glass, well-processed packages that have substituted pottery in most homes.

Merriam-Webster dictionary defines indigenous as produce, living, or existing naturally in a particular region or environment. Ghanaian indigenous pottery has undergone very little development until the introduction of contemporary ceramics. We live in a society where cultural beliefs are highly esteemed to the extent that artefact becomes couriers of such beliefs- this is the nature and philosophy of our indigenous pottery. Socio-cultural beliefs attached to pottery are very significant in our society. Pottery, considered as an egg (life) must be handled with great care and passion. Pottery forms and shapes are symbolically executed with each embedded bodily design being used as a lingual tool- such is the nature of our pottery.

The diminishing and the fading of our pottery are due to the fact that, pottery wares are competing with other products as listed above. Asanka bowl which is the focus and center of this project is substituted with other lookalike plastic bowls, glass and stainless metal bowls. These products are however dominant in our society and have displaced most of our traditional bowls.

The projection of our indigenous pottery demands the application of contemporary design forms, features and uses in order to make their places in homes, institutions or public places more relevant. This is what the researcher terms as the 'art of preserving pottery for the continuity of Ghanaian pottery heritage'. This in a way will delimit the local

potter to a wider range of artefacts using pottery- that is the exploration of pottery to develop other artefacts, thus, saving the collapse of the pottery industry.

Strong economy, built on improved indigenous artefacts can boost national economic growth and reduce poverty (Adutwum, 2013). The research topic is very imperative to the local pottery industries at large because according to Asmah (2013), the indigenous art industries are essential elements in reinforcing macro-economic policies for stability and sustainable growth. There is the need, therefore, to change the concept of indigenous pottery activities as a way of life to that of a profitable commercial and industrial art occupation'

Contemporary ceramics seek to give contemporary touch of beauty to clay works not only for them to be functional but to also fit the times they are in. Ghanaian indigenous pottery is gradually losing its touch in our society due to some of the listed above factors. The concept of contemporary art is that, it influences artworks to be meaningful or purposeful within their era.

Reinstating Ghanaian pottery in our society demands a touch and a perk of aesthetic design and influence. Rebranding is very important in marketing of every product because it rejuvenates the taste of consumers. The dominance of our pottery in the various parts of our society calls for initiation of applicable aesthetic theories that can impact the individuals.

1.3 Statement of the problem

“Asanka bowl”, as stated in the research topic was so dominant in Ghanaian homes in time past. However, the influx of highly sophisticated technological products such as blender, ceramic products, glass and plastic bowls are competing vigorously with the

above-mentioned indigenous pottery ware thereby relegating it to the background. The effect of this is the less recognition, dismissal and the fall of Ghana's prestigious indigenous pottery.

From the various pottery centers the researcher visited; Mfensi, Apiadu, Pankorono and Culture Center, production of pottery wares have reduced drastically because demand has fallen and profit returns are very low. In circumspect most of the potters have ceased operation and the youth are not attracted to the pottery business venture. This has rendered most of the local potters jobless leaving the young generation no prospective reliable pottery industry. Most of the pottery centers are now on the wheels of old men and women who have little to do by adding less value to the pottery wares that meets contemporary demands. An industry that can be a great economic asset is dying out.

The industry is no longer attractive to investors and stakeholders due to very low profit returns but they would rather import pottery wares from America, Europe and Asia, which sell at a competitive global market. This as a result has rendered most of our local pottery centers redundant- Pankorono, Mfensi and Apiadu. The collapse of the industry is however undeniable.

The form and aesthetic features of Ghanaian indigenous pottery wares are treasury of wisdom and depict the social and family life of a society. They are also good sources of income for the indigenous people or the potters. However, technology and the 21st Century lifestyles are a threats to their survival since there is fierce competition from other products. To cite Ceramica Tamakloe is no exception to the fall of the local pottery industries. The researcher is of the view that, the relevance and attraction of our pottery wares to today Ghanaian society is what has affected their patronage.

1.3.1 Display of asanka bowls

These are the most commonly made asanka bowls. These bowls are fired red or yellowish brown. In some pottery communities or centers they are smoked immediately after removing from firing.



Plate 1.1: Different sizes of darkened asanka bowls
(Source: Ghana Web)



Plate 1.2: Yellowish red fired asanka bowls
(Source: Mfensi- Ashanti Region of Ghana)

1.4 Purpose of the study

The project is to establish the possibility of using asanka bowl as an art medium to diversify its conventional usage. This will serve as alternative choice for local potters, sellers and users to envision asanka bowls beyond its customary form and uses. Hence breaking the conventional perception for it.

It is high time the asanka bowl is seen more openly in the public places. Since scientific innovations and technology are becoming a threat to the existence of most of our traditional art/artefacts. Cementing their positions in our society can be through diversifying their uses- the researcher's method.

1.5 Objectives

1. To study the selected pottery (asanka bowl). This is to enable the researcher understand the form and its features.
2. Design a modified asanka bowl to develop a wall mural and a fountain concepts.
3. Using the modified asanka bowls, execute a wall mural and a fountain with enhanced aesthetic features.

1.6 Research questions

1. How does the asanka bowl look like?
2. How can asanka bowl be redesigned and modified without distorting its features that make it unique?
3. Which other forms can the asanka take with new functionalities or usages?

1.7 Delimitation

This study is limited to diversification of the use of asanka bowl. Pottery is a vast area of different kinds of clay wares. It is expedient therefore to delimit the focus on asanka bowl and thoroughly research on the topic for concrete results.

Moreover, among our traditional potteries, asanka bowl is well known and entrenched in our Ghanaian societies; hence communicating the purpose of the study through it to the people will be more effective.

1.8 Significance of the study

The research seeks to add more value to our Ghanaian asanka bowl by broadening its concept and uses that challenge traditional boundaries; it seeks to project other forms and uses which the selected pottery form can take to the benefits of the pottery industry.

This will serve as an exposure for the local pottery industries in terms of not limiting themselves to the conventional asanka bowl uses and to revamp the local pottery industries by patronage.

Our local pottery wares can make more impacts in the Ghanaian society if the forms can take new looks with diverse functionalities. The ever-changing global world is a threat to most long lasting traditional art works of the society. Therefore, the concept of enhancing the uses of the asanka bowl is very essential to thrive and preserve the continuity of the pottery industry.

1.9 Motivation of the study

Adding value to traditional pottery to fit contemporary lifestyle will aid preserve the beauty and the heritage of Ghanaian indigenous pottery. Pottery however, is one of the key elements of Ghanaian traditional heritage that must be upheld, valued and preserved irrespective of the threat of advance technology. It is certain that the influx of advanced technological products has displaced pottery, which is inevitable. Certainly our pottery should not lose their places in our society. That is why the concept of providing alternative uses and enhancing the forms and design to meet contemporary needs is significant to ensure their places are maintained for the continuity of Ghanaian pottery heritage.

1.10 Definition of terms

Pottery- it is the asanka bowl produced at the various pottery centers.

Ware- it implies sellable indigenous pottery or products.

Asanka Bowl- this is an indigenous pottery ware, which is used for grinding, cooking, serves as eaten bowl and other religious activities.

Indigenous- this refers to the typical pottery ware native to a pottery community/center.

Pottery center- designated local community, area or place where pottery wares are produced.

Aesthetic- it refers to the outlook or the physical appearance of the pottery wares.

Akan- ethnic groups at the southern part of Ghana

Throwing- the art of forming bowls on the potters wheel.

Turning- the art of trimming excess clay to reduce weight of the asanka bowl and creating the foot.

Prime- first coat of paint given to a bisque ware.

Extensions- metal rods on which the asanka bowls sit.

Receptacles- they are the asanka bowls that serve as water containers.

Contemporary- the concept an artist expresses out of an executed project and how meaningful and usable within the same time period.

1.11 Arrangement of the rest of the text

The proceeding chapters follow in this chronological order. Chapter two presents relevant related topics that were reviewed by the researcher for insight and a pathway for knowledge build-up to address and solve every facets of a challenging research work. The research methodology follows by presenting the research designs as a formative process or guide to execute the project work. Chapter four also explicate the results and discussion of the executed work. More so, chapter five encompasses summary, conclusions and recommendations deduced by the researcher as a result of studying the research. It concludes with the references and the appendices.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Overview

This chapter entails sourcing for literature with relevant information to the research topic being studied. The various literature to be reviewed are, pottery, brief history of pottery, earthenware clay, brief history of pottery in Ghana, indigenous, contemporary art, art appropriation and supporting philosophical theories. The relevance of these literature is to equip the researcher build fundamental and in-depth knowledge for the designated area of study.

2.2 POTTERY

Pottery undoubtedly, is one of the ancient art forms and occupations that according to archaeologist has played significant role in the history of human existence. Delving into the subject matter is needful because the art of pottery making is culturally inspired and economically beneficial. The definition of pottery can be categorised into three different segments. Carr (2016), simplifies it as “dishes, plates, cups, cooking pots, and storage jars made out of clay”. Carr, highlights on the products made in the art of pottery. Rado (1988) refers to it as “art or craft of a potter or the manufacture of pottery”, Meriam-Webster Dictionary also defines it as “a place where wares such as plate, cup, mug, jug and pot are produced”.

The three definitions are related and thereby explain that pottery is an art which involves the production of clay wares in a specific working environment.

2.3 Historical background of pottery

From the historical point of view, the early man used pottery in diverse ways: for storing water, food and some ritual purposes. Pottery has undergone series of evolution and development since man discovered the art of potting with the use of clay. The Asians, Romans, Egyptians, Greeks have contributed immensely to pottery development in time past.

The early man in his quest for survival sought the need to preserve food and water, thereby using molded clay as a storage container. These clay containers were fired in the open or in a pit to make them strong and impervious.

According to Carr (2016) “People first started making pottery out of clay in East Asia, in both China and Japan, around 14000 BC, long before they started farming, probably people had always known how to make pottery. The early pottery was made by just pinching a hole into a ball of clay, or by making a long coil of clay and coiling it up into a pot shape. It may have gotten started by making baskets and coating them with clay. In Japan, early pots were buried in the ground for storage. One reason for starting to make pottery was to preserve fish by fermenting it into fish sauce in these buried pots”.

Carr (2016) further added that ‘The use of pottery also spread to the west from East Asia, reaching Mesopotamia and the Eastern Mediterranean, and then North Africa, around 6000 BC, near the beginning of the Neolithic period. West Asian and African people may have begun to make pottery as a way of storing grain when they started farming. But, like people in Japan, they also used pottery to make fermented fish sauce. Pottery reached Greece about 5000 BC.’

According to Patty and Morty (2016), ‘Ancient Greek vases are highly valued for form and decoration. The graceful lines and perfect balance speak to our desire for beauty. The pottery was decorated with pictures (by painting and carving) of the daily lives of the people and stories of their gods, goddesses and heroes. On the red figure vases the background was painted black and the figures were left in the natural red color of the clay. The color was reversed on the black-figured vases’. According to Carr (2016) “from the beginning, people used pottery as a way of constructing their social identity, or showing who they were and how they were different from other people. Many of the designs used on pottery were borrowed from cloth, which was also used to identify people of one group from another”.

The above account is not different from how Africans identified themselves with the art of pottery making. In our quest to store water, preserve, prepare and cook food, pottery artefacts were made out of clay and it however became household utensils. The fashioning skills and processes of making the artefact are transitional generational assets that have been passed on till this time.

The evolution stages of pottery making introduced equipment such as the kick wheel or the potter’s wheel. This was necessitated by the growing demand of communities thus pottery becoming an occupation. Pottery is semi-labour intensive. With the mechanized and the manual or hand building methods huge and beautiful pottery forms were executed, the Greeks are no exception.

In this 21st Century pottery making has advanced in terms of the machinery, tools and materials thereby making pottery production highly industrious. Machines that never existed in time past have now been introduced by means of technology. Due to this

pottery making has become industrial occupation. For pottery to be made, a piece of clay must be formed into a required shape (bowl, plate, cup or pot) and fired in a kiln at a high temperature when bone dry.

The subjected temperature drives all the natural water from the clay inducing the fired clay to permanent hardness and in a bisque state. Pottery however, is made by some of these production methods; coiling, slabbing, throwing and pinching.

Pottery wares are made of different kinds of clay but the commonest is the earthenware clay. Some of the kinds include stoneware, ball clay, kaolin, porcelain, etc. The choice of a particular kind depends on the functionality or the purpose of the ware. Thus the potter's choice for a clay or clay body may differ from potter to potter since every clay has its own properties and characteristics.

2.4 Earthenware clay

Earthenware usually means a porous and soft clay body with a low maturing temperature. Earthenware clay is usually not fired to vitrification (a hard, dense, glassy, non-absorbent state - cf. porcelain). Thus, earthenware pottery is one that has not been fired to the point of vitrification and is slightly porous and coarser than stoneware and porcelain.

According to Britannica encyclopedia, to overcome its porosity (which makes it impracticable for storing liquids in its unglazed state; for example, the fired object is covered with finely ground glass powder suspended in water and is then fired a second time. During the firing, the fine particles covering the surface fuse into an amorphous, glasslike layer, sealing the pores of the clay body.

Earthenware clay is commonly found in nature and it is the raw material to make tiles, bricks and pottery products across the globe. It contains a percentage of iron and mineral

impurities high enough for it to mature at low firing temperatures from bonfire heat at around 1300 degrees F, up to about 2120 degrees F (cone 018-cone 3). In its natural state, the presence of iron oxide makes this clay appear brown, red, gray or greenish. When fired, it is anything from red to brown or black.

2.5 Brief historical background of pottery in Ghana

Pottery products are distinctive part of the visual culture of indigenous peoples in most parts of the world. In traditional Africa, pots are widely used for many purposes and different types of pots are made in different communities for household and also for religious purposes. (Asante, Adjei, & Opoku-Asare, 2013).

Indigenous pottery is handmade by shaping plastic clay into objects and firing them to appreciable temperatures in the open fire or in pits to bring about a permanent physical and chemical change (Baba, 2009).

In Ghana, pottery is a distinctive part of the cultural life of the people. Pots are widely used for many different purposes and there are many different pots that are made for use in the communities, household and other special purposes including religious ones.

According to Asante (2009), indigenous pottery is almost exclusively the work of women. The art of pottery is traditional in certain families and communities who usually work in groups.

Glaze is not common with indigenous Ghanaian pottery and the color of the pot depends largely on the type of clay used (though the most common clay used is the earthenware clay). Pots are still used to prepare, cook, and store food. Perhaps the most functional is the asanka bowl, which is shallow with ridges on the inside so that vegetables are ground with a small wooden pestle. Pots are low fired, therefore fragile, but inexpensive, for sale

in every market and often along the roadside. Traditionally only women make pottery, but some men are among the contemporary potters with many design departures from the women's pots.

Traditionally, everywhere in Ghana pottery is similar in technique, structuring and function, with many interesting local variations, Vesta (1988). Trans-cultural beliefs denote therefore that pottery has been women's occupation until men later engaged themselves in the craft because of the influence of contemporary ceramics.

The researcher discovered that pottery in Ghana is mostly for utilitarian purposes and it is a convincing factor that has set boundaries for creating outside the original utilitarian concept. They are mostly pots (for medicinal and religious purposes, cooking, storing palm wine and local beer from guinea corn), flower pot and grinding bowl.

According to Asmah (2013) 'the forming and finishing techniques employed over the years in the production of traditional pottery for their aesthetic, philosophical and utilitarian values have varied in many ways. These production methods range from solely labour-intensive to semi-automated forming techniques'. Products from these techniques were often embellished with simple incised lines and complex geometric designs or relief plant shape patterns as decorations. However, these acts have not translated into any meaningful economic growth (Speight and Toki, 2000).

According to Adutwum, (2013) strong economy, built on improved indigenous artefacts can boost national economic growth and reduce poverty.

The state of our pottery is evidential by the account of Anna and Barbara. Researchers who earlier visited and researched on 'Pottery of Northern Ghana'.

Craven (2007) stated that, in the 1964 pottery wares were high in demand and dominated the Tamale (Northern Ghana) market. According to Craven, most of these pottery wares were trucked down the main road south of the nation.

However, the influx of metal and plastic products has displaced most of these pottery wares. Barbara (colleague researcher to Craven) further added that, that they did not come across any women potters from the south who established limited markets in the 1970s (mainly in the east of the Northern Region). Most of the local pottery centers have abandoned the craft and most of the pottery centers no longer exist.

It therefore implies that there has been a drastic downward shift in the Northern pottery industry and this case is not different from that of the Southern sector according the researcher's personal research done in 2013 in Ashanti region major pottery centers- Mfensi, Pankrono and Kumasi Cultural Center.

2.6 Indigenous

Shils (2006) remarks that, if one could imagine a society in which each generation created all that it used, contemplated, enjoyed and suffered, one would be imaging a society unlike any, which has ever existed. It would literally be a society without a past to draw on to guide its actions in the present.

The statement by Shils (2006) expresses how significant indigenous life of every society contributes to the direction of its people in terms of social, economic and politics. Nyarko & Mantey (2010), explains indigenous to be the beliefs and practices native to a particular society before the influence of external factors.

Nyarko & Mantey (2010) added in an introductory poem that “a people become because they are, a people develop because they are, like the roots of a tree, the history of the people makes them, they are spineless who have no history, they are worse than dead whose origin cannot be traced” (p.18).

Expounding this poem from an indigenous perspective connotes that the indigenous life of a particular society speaks of their identity and defines the actions of the people. It also has great influence on the way their art works are done. The indigenous lives of persons are however the touchstone of development of every society, thereby overlooking one’s background is just like a tree without a root.

The art of pottery was indigenously practiced with diverse and attached cultural beliefs until the introduction of contemporary ceramics. According to Asante (2013) there are some general taboos that govern the indigenous Ghanaian pottery industry.

Examples include the following:

- One should not go to the clay pit in footwear as this would defile the earth goddess who is the custodian of the clay.
- One should not price a pot until it is fired. It is believed that doing so may cause the ware to break during the firing process. The potter should not be angered during the process of pot making. Failure to observe this may result in the breaking or producing a bad-looking ware.
- One should not break a pot intentionally; this is a sign of disrespect to the gods.
- Pots are not to be left standing empty overnight since evil spirits may put poison in them at night and dirt may also be trapped in them. These posed health hazard

to the users.

The above listed taboos are some supposed or common indigenous practices to be observed in pottery making. Due to the influence of Christianity, Islam, Western education and modern civilization the taboos are not keenly observed again.

Traditionally, asanka bowl serves as a medium to foster family unity because when family eats from the same bowl there is always a unifying spirit among them. According to Nunoo & Jabir (2013), pots in the traditional Akan setting were made by mothers and their daughters. Mothers are known to have great love and hence it is believed that these pots were made out of love. Women filled the pots with water (water is known to signify life) from rivers or streams so the household would drink from it. This practice is believed to promote unity, harmony and peace which are rich cultural values'. The pot is however likened to the egg and human life, thereby must be handled with great care and not be jeopardize with. These are some philosophical thought and beliefs associated with our pottery. The rich cultural values associated with our pottery are worth upholding.

According to Nyarko & Mantey (2010), man's ability to discover the 'self' depends not just on gathering information about oneself but also on the engaging process of restoring the scattered, hidden, suppressed, denied, distorted, and forbidden part of his ancestry.

The researcher is of the notion that in order for our pottery to gain value in its current fallen state, their usages must be redefined to suit the contemporary need and lifestyle- which is an uncompromising act of restoring our pottery. Barely stated the evolution of time and advance technology is making our indigenous pottery less relevant.

Perhaps the greatest privilege of life is man's ability to explore because without this, man will never discover anything new and thus never learn (Batovsky,1999). By this

statement, taking a critical look into the research topic again is paramount because of the current state of our pottery and how Ghanaians associate themselves with pottery.

2.7 Contemporary art

The essence of reviewing this subject is due to the fact that, the unconventional usages of the asanka bowls being addressed by the researcher categorically falls under 'Contemporary Art'.

The theme contemporary or contemporary art has undergone thorough research by numerous researchers, curators and artist over the years. To factor it and elaborate on some of the meanings and explanations are significant for this research.

Leah (2012) stated that 'contemporary by definition means existing, occurring, or living at the same time belonging to the same time. It can be very eclectic for that reason, because it is ever changing and borrows pieces and styles from all different eras'.

According to Costantini (2014), art historians grapple with the problem of defining contemporary art. One favored approach is periodization- locating the artwork's historical origins in a recent time and place'. To some curators it refers to the now or the present moment, so at any point in history, the making of new art is always contemporary. 'The definition of what is contemporary is naturally always on the move, anchored in the present with a start date that moves forward'.

It may refer to what has been made within the last six months or a year. For some curators and critics, it could stretch over possibly two to ten years. For art historians and cultural commentators with a longer view, it often begins after World War II with the rise

of abstract expressionism or with the shock of pop art in the 1960s. For many who associate it with the rise of postmodernism, it refers to art made after 1970.

For others, it is not a question of when but how the ideas expressed in the work resonate with the art of our time. Contemporary art then, as the term itself suggests, is an ever-shifting field of activity'. The term "contemporary art" refers to art made and produced by artists living today. Today's artists work in and respond to a global environment that is culturally diverse, technologically advancing, and multifaceted. Working in a wide range of media, contemporary artists often reflect and comment on modern-day society'. Among the key issues that have shaped the character of contemporary art since the mid-20th century is the way artists began to respond to new technologies.

Apart from being functional contemporary arts are also conceptually inclined since it is embedded with ideologies from different art movements namely modernism, postmodernism and Dadaism.

'The unconventional forms regarded as contemporary art ironically owe their origin to the anti-art impulse of both the 1960s and the preceding Dada movement' according (Kamhi & Torres, 2008). As pioneered by Marcel Duchamp (1887–1968), Dada movement portrays that, some established values in art can be altered and the important thing to the Dadaist is not the work itself but the statement they are making.

This idea of artistic innovation and originality, with its roots in the avant-garde, remains an important one in contemporary art. Avant-garde is one of the art movements which was introduced in the 1800's, it stress on pushing the boundaries of what is accepted as the norm or the status quo, primarily in the cultural realm and also used to describe artists who were exploring new ideas and forms.

Contemporary art however tends to challenge the traditional way of producing artefacts by presenting different phases using similar ideas. Contemporary artists may question traditional ideas of how art is defined, what constitutes art, and how art is made, while creating a dialogue with—and in some cases rejecting—the styles and movements that came before them.

Though pushing boundaries is characteristic of contemporary art, it does not mean that what is past ceases to be of interest. On the contrary, it lives on as a vital touchstone. One very tangible example of this relationship can be found in appropriation art, which is a contemporary art form that involves the reproduction and use of existing objects or artworks.

Contemporary artists, like many artists that preceded them, may acknowledge and find inspiration in art works from previous time periods in both subject matter and formal elements. Sometimes this inspiration takes the form of appropriation. Artist John Baldessari borrowed an image from 1505 of a stag beetle by the German artist Albrecht Dürer and made it his own. Using modern-day materials (ink-jet printing mounted on a fiberglass panel), Baldessari juxtaposed the original image with a piece of sculpture in the form of a giant steel pin. By inserting the steel pin into the canvas, Baldessari combines mediums in a very modern way, Baldessari (2000).



Plate 2.1: Specimen (After Dürer), John Baldessari, 2000

(Source: J. Paul Getty Museum, Los Angeles)

It however means that contemporary art may or may not be built on a traditional concept due to the aesthetic experience one wants to achieve.

Art21 defines contemporary art as the work of artists who are living in the twenty-first century. Contemporary art mirrors contemporary culture and society, offering teachers, students, and general audience a rich resource through which to consider current ideas and rethink the familiar. The work of contemporary artists is a dynamic combination of materials, methods, concepts, and subjects that challenge traditional boundaries and defy easy definition. Diverse and eclectic, contemporary art is distinguished by the very lack of a uniform organizing principle, ideology, or -ism. In a globally influenced, culturally diverse, and technologically advancing world, contemporary artists give voice to the varied and changing cultural landscape of identity, values, and beliefs. In light of such diversity, there is no simple or singular way to define contemporary art.

Often recognized for the absence of a uniform organizing principle, ideology, or label, contemporary art can often seem overwhelming, difficult, or so simple that the viewer might wonder if they are missing something. Perhaps the most helpful defining characteristic is the most obvious: contemporary art is the art of today.

From the reviewed contemporary articles it implies that, while some artists, curator, museums and art critics use dates differences to determine whether an art work is contemporary or not, others use the ideas expressed in an art work that resonate the art of our present times.

In the nutshell it implies that the various art movements; avant-garde, modernism, post-modernism and Dadaism initiated the contemporary art movements which is seen as the art of the 21st century. Today's world responds quickly to the global change happenings so is contemporary art. It can however be established that contemporary artists are adventurous and contemporary art is unending.

2.8 Art appropriation

Art appropriation is a form of contemporary art because it refines and redefines ancient or immediate past artefacts to fit current condition. Hence the study of art appropriation.

According to Kuzmenko (2013) art appropriation is the use of pre-existing objects or images with little or no transformation applied to them. It has been one of the practices through which art works are being created in time past and in the present. It serves as a renaissance to most old fashioned art works irrespective of the fact that some people see it as plagiarism or copyright. Appropriation in this project context is not a copyright or plagiarism practice because the objects or artefacts to be used are indigenous or cultural related which background cannot be traced for sole ownership of a particular person.

Appropriation leads to re-contextualization of the image's primal meaning and erasure of its originality with a purpose of commenting on institutional, social, economic and artistic issues. This leads to development of conceptual art works as derivative forms of the

original art work, thereby sustaining the old or original form with a blend of a new concept to ensure continuity of the said artefact.

According Mandiberg (2014), appropriation is a means to test with images and objects by shifting the context around them, and reframe their meaning in the process. An image has a certain meaning, given its place in popular culture, the news, etc., but when it is reworked or remixed in an artwork it takes on a different meaning, stimulating the exact nature of how images are produced and disseminated in a commercial context.

In conceptual art the idea or concept is the most important aspect of the work. (In other forms of art the concept may be changed in the process of execution.) When an artist uses a conceptual form of art, it means that all of the planning and decisions are produced beforehand and the execution is a perfunctory affair. The idea becomes a tool that makes the art. Below is Leonardo Da Vinci's Mona Lisa appropriated by Marcel Duchamp.



Plate 2.2: Appropriated and Original Pictures Mona Lisa
(source: wikipedia)

By liberating art finally from traditional concepts such as aura, originality and genius, they will lead to new terms of understanding and defining art.

2.8 Supporting philosophical theories

According to Hospers (2018), these philosophical theories help to study the nature of art, including such concepts as interpretation, representation and expression, and form. The two theories used for the project are symbolism and instrumentalism. They serve as guard to understand and develop the concepts, and interpret forms.

2.8.1 Symbolism

It is the art or practice of using objects (forms and shapes) or words to represent an abstract idea. The project centers on adding more value to our locally made or indigenous pottery (asanka bowl), so therefore the essence of symbolism is very imperative and highly considerable to aid and guide the execution of the project to achieve its said objectives.

The possible question is how symbolism can play such role in projecting or adding value to indigenous pottery. Semiotic, which the researcher project it to be a kind of symbolism theory explains that, the essence of art is the communication of important ideas and other knowledge through symbolic (non-verbal) languages.

Unquestionably, the unique form and distinct features of asanka bowl are symbolic and silently communicable to project the various project concepts/works. Projecting contemporary concepts using the indigenous pottery is a means of expressing the semiotic theory. Converting asanka bowls to water fountain and mural are one of the symbolic approaches the researcher will execute. The mural however, contains signs to

communicate to the public (viewers). Aesthetic experience which helps to determine the value of an art work will visibly be seen by the guarding principles of this symbolism theory.

2.8.2 Instrumentalism

This theory emphasizes that art should attempt to influence society. Art that is instrumental is generally didactic in nature, in that it persuades or prolytizes.

Boccioni (1911) states, this theory holds that art is and/or should be principally functional in that it is intended to do something imperative. In general term, an instrumentalist's view is one that sees the message of an artwork as its most significant aspect, and the value of art as its capacity to change the way people think, believe, or behave.

Using this theory, artwork may be judged by their effectiveness in influencing the thoughts and actions of individuals in the society. The traditionalistic approach to artefacts in our society has been one of the reasons our artefacts have not seen much face lifting.

Hence, this project is a means to challenge the traditional boundaries, explore and implement new concepts. It does not bury the nature and form of our pottery, it rather aims to discover, implement and expose different means of using the asanka bowl.

Nonetheless, the involvement of the society is crucial to ascertain the strength, dynamism and longevity of these asanka bowl concepts. More so, audience or spectators are hereby, drawn into a much more engaged relationship since the conventional purpose of asanka is compromised. It is therefore to set our society thinking and reflecting on other possibilities with asanka bowls. Breaking the boundaries set on Ghanaian indigenous

pottery is a relevant approach the researcher seeks to implement to develop contemporary concepts using pottery.

CHAPTER THREE

3.1 Methodology

This chapter entails the methodology approaches employed for the project. It involves the type of research design used, population for the study, sampling method, research instruments and instrumentation. A well-devised and analyzed research methodology helps to address the research question and acquire the relevant data applicable to achieve the research objectives and goals.

3.2 Type of research design used

Qualitative Research

This type of research focuses on description and interpretation of a particular experience that might lead to development of new concepts or theory. It also involves describing and understanding phenomenon from the participants' perspective (Leedy & Ormrod, 2005).

According to Labaree (2016) research design is a means that a researcher can employ to integrate varying components of a study in a consistent way. It can therefore be stated that research design provides the final outlook of the research study or simply put it gives direction to the study.

The two qualitative research designs used are exploratory and descriptive research. Exploratory design aims at exploring the research question(s) and the research topic with varying levels of depth which forms the basis for the more conclusive research. Descriptive design helps with describing the characteristics of an activity, event, group or individual.

3.3 Population for the study

Population can be defined as including all people or items with the characteristic one wishes to understand (Kanupriya 2009). The explanation denotes that every selected population group carefully chosen should aid the researcher to discover his purpose in relation to the research topic.

Kumasi is the chosen population for the study, this is to ensure the scope is delimited to obtain a well analytical data.

3.4 Sampling method

McLeod (2014) defines sampling as the process of selecting a representative group from the population under study. This representative group(s) is a carefully selected group to assist the researcher source for the relevant data. An essential approach that will determine, define and shape the content of the research.

3.4.1 Probability sampling

Simple random sampling as a type of probability sampling was used because there are lot of pottery centers, market places and homes spread across the length and breadth of Kumasi. Therefore the application of this sampling method enabled the researcher choose preferable target population to achieve the research aims and goals. According to Avugla (2011), among the probability sampling technique, simple random sampling is the simplest and it is free of classification errors.

The target groups for the study include; the four major pottery centers (Kumasi Culture Center, Mfensi, Apiadu and Pankrono Pottery Centers), Kejetia/Central market, Ejisu Market center, Bantama Market and some selected homes in Kumasi. Number of persons accessed were eleven potters, twenty pottery sellers and fifty-five homes in Kumasi.

Two potters were accessed at the Kumasi cultural center, six at Mfensi, two at Pankrono and one at Apiadu. Among the pottery sellers accessed: five were taken from Kejetia/Central Market, one at Bantama Market, five at Ejisu market, four at Mfensi and five at Pankrono. At Adum twenty homes were accessed, ten at Ahodwo, ten at Ayeduase and fifteen at Bomso.

From keen observation, it can be noticed that the population groups are made of producers of pottery ware, distributors, sellers, users and consumers. The link between these groups is to enable the researcher get direct or first-hand information about the state of the pottery wares at each level.

3.5 Data collection sources

Data collection sources are the relevant and reliable information outlets where data for research are acquired. The act of applying the data collection tools to source information or data is known as instrumentation. The two main data collection sources the researcher used: primary source and secondary source.

The primary sources are the first-hand or direct information the researcher obtained. These include: questionnaire, interview and observation. The secondary sources are refined outlets for information they include: journals, books, internet and articles.

3.6.1 Primary sources

Interview – unstructured interview was used due to the nature of the populace in question. The researcher considered their educational backgrounds to devise an interview draft or system that will help collect the data properly. Since this kind of interview does not follow any strict sequential order, it enabled the researcher to retrieve the salient data from the different study groups. According to Moyle (2002), unstructured interviews as

explained by Streubert & Carpenter 1999 engage the interviewer and participant in conversation about a topic in response to the interviewer asking open-ended questions.

Observation – this activity engages the researcher and the field operations. On the field the researcher takes note of the activities by participating or not participating. Participant observation ‘combines participation in the lives of the people being studied with maintenance of a professional distance that allows adequate observation and recording of data’ (Fetterman, 1998, pp. 34-35). Non-participant observation is observation with limited interaction with the people one observes. For example, some observational data can be collected unobtrusively.

Irrespective of it being one of the finest sources of first-hand information, it also has strengths and weaknesses. Depending on the nature of the information the researcher is seeking at the field, participant may or may not respond to dish out the genuine information to the researcher. Therefore, the researcher must be an adept information seeker to acquire any relevant data.

Questionnaires – these are drafted questions on paper or digitized questions to source opinions and answers for the research questions. Unlike other methods of primary data collection, questionnaires increase speed of data collection, low or no cost requirements, and higher levels of objectivity. Moreover, one possible disadvantage of this is that, respondents are limited to expressing their additional opinions since the questions have been set to achieve specific answers. Notwithstanding, the answers from respondents enables the researcher work directly to achieve the set objectives to solve the problem or challenge at stake.

3.7 Data collection for objective one

1. To study the selected pottery (asanka bowl). This is to enable the researcher understand its form, features and influence.

This demanded the researcher to visit four major pottery centers or communities in Kumasi Cultural Center, Pankrono, Apiadu and Mfensi. The researcher uncovered that most of the pottery centers or communities especially Apiadu and Pankrono are not actively engaged in the making of the asanka bowl business due to the fall in demand and the use of clay sites for real estate development.

Moreover, the researcher discovered that the asanka bowls from these centers are similar in form and features. To produce this bowl with its respective features, there are two forming methods that must be observed; mechanical method and manual method.

3.7.1 The two forming methods

Throwing is a mechanical forming technique that involves the use of a potter's wheel to form the asanka bowls. The art or forming process is guided by techniques to facilitate flawless thrown bowls. These techniques are developed by consistent practise. Throwing however, is the fastest forming method and can be used to produce bowls in large quantities within the shortest possible time. These are the steps to follow during throwing;

- Prepare plastic clay, knead it to even consistency and wedge to get rid of foerign materials.
- With a sizeable handful of clay, make a ball of clay.
- Gently bang it at the center of the wheel head and lubricate the clay with some a smear of water. Having both palms firmly wrapped around the clay whiles the

wheel is in motion. Pull the clay up and down. Technically, this process is called centering. It is done to obtain a well centered clay to prevent wobbling.

- With the palms wrapped on the clay, use the thumb to create a hole at the center of the clay and stretch it across at equal distance and pressure. During the hole creation, at least 2cm thickness should be left at the base.
- Place one hand inside the bowl and the other outside. Pull the walls of the clay upwards.
- At this juncture, the speed of the wheel is controlled to ensure that the asanka bowl is formed.
- The concentric circles are either created as soon as the bowl is formed or done during turning.
- The bowl is then taken off from the wheel head and allowed to dry for firing.
- The firing is either done in electric or firewood kiln.

The picture below depicts creating the concentric circles/lines on the potters wheel.



Plate 3.1: Creating concentric circles/lines
(Source: ceramic studio, KNUST)

Hand building is a pottery-making technique, which involves the use of hands and simple modelling tools to create forms without the use of the potter's wheel. As simple as it may look, it requires a lot of skill and experience to make the bowl. Compared to throwing, using this method leads to producing small quantity of bowls per day but produces the same form just like the throwing. The working processes are also tedious. The following steps are taken by the local potters when making asanka bowl;

- Prepare plastic clay, knead and remove foreign materials. This is to get a workable lump of clay to facilitate the molding process.
- The lump of clay is put on a small wooden board.
- With the left palm around the clay, the right hand is used to open up the clay to the shape of an asanka bowl.
- Using a wet piece of small cloth the bowl is smoothen and dried in the sun for some few minutes.
- It is taken out of the sun and a handy rectangular piece of wood known as 'Sabroba' is used to beat the bottom of the bowl to create the foot.
- A small smooth sea stone or pebble is used to smoothen the body of the bowl.
- A curvy metal called 'hwenya' is then used to remove the excess clay in the bowl.
- To create the lines/groves in the bowl, a thread known as 'dadwen' is used.
- The bowl is kept in the sun to dry for a while and ash clay is smeared on the asanka bowl, when it dries beads and mesh are used to burnish it.
- They are placed in the sun to dry properly and fired.

- Some pottery centers use firewood kiln, while other centers use the open-air firing. After firing the bowls are left in their yellowish red state or darkened using saw dust.

The pictures below show the manual or indigenous method of forming asanka bowl.



Plate 3.2: Traditional making of asanka bowl
(source: youtube)

Specifically, the asanka bowl consists of the rim, concentric circles/lines, body and foot. The foot is sometimes made flat or given tripod stand. However, the most dominant type is the flat footed asanka bowl. The weight (light or heavy) and size of asanka bowl depends on the purpose it will serve. Traditionally, it serves as bowl for eating, grinding, storing herbal medicines and for religious purpose.

3.7.2 The two types of asanka bowls.

The researcher discovered from the potters that there are two types of the asanka bowls: tripod foot and the flat foot. Among the two, the flat-footed is the most dominant in our society. Therefore, the researcher decided to concentrate on it since it is known more than the tripod foot asanka bowls.



Plate 3.3: Asanka bowl with tripod foot/base
(Source: BetumiBlog)



Plate 3.4: Asanka bowl with flat foot
(Source: Field Photograph taken by the researcher)

3.7.2 Parts of asanka bowl

These parts are the features that make and describe the asanka bowl. They make it outstanding and easily recognized.

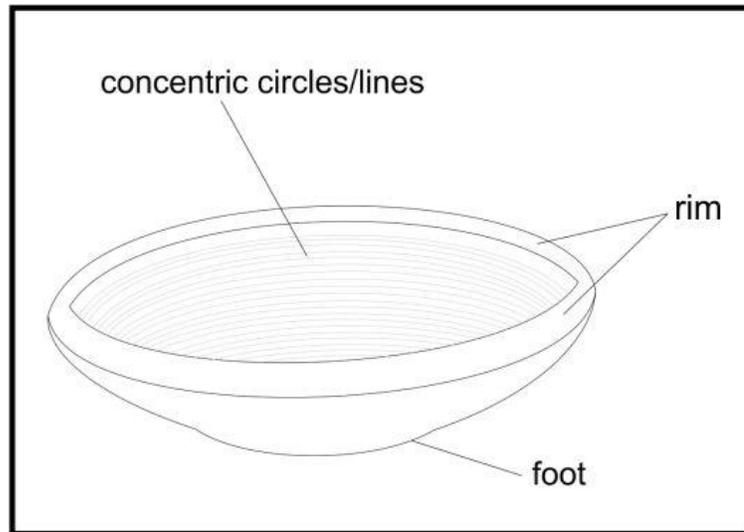


Figure 3.1: 2D Rendition of the asanka bowl

Concentric circles/lines- these are shallow ridges created in the asanka bowl. Its purpose is to support the wooden pestle grind substances to finer particles.

Rim- the opener of the asanka bowl. Conventionally, it serves as a blockade or prevent spillage of substances.

Foot- base, which supports the body of the asanka bowl to stand.

Data gathered from the field proved how prestigious this bowl is. According Asumin (2016), asanka bowl was developed to facilitate utilitarian activities more conveniently and the concept suggest how our ancestors, due to the necessity of human survival adapted indigenous technology.

The researcher in an attempt to know more about the asanka bowls discovered from the potters and the sellers, its philosophical belief to foster family bond, storage, preservation and preparation of food or herbs are of great essentials to the Ghanaian society. Hence the need to preserve it existence though modern day technology is now threat to the survival

of the Asanka bowl. Therefore, the concept of the project to diversify its usages and reinstate it is of eminent importance for the survival of this pottery.

The place of asanka bowls in our society is very relevant and must be retained because it is an embodiment of our indigenous or traditional lifestyle. Its nature or form speaks of the innovativeness or creativity of our forefathers. Before blenders, plastic, glass or ceramic bowls flooded our society, asanka bowls served immensely. Thus, such artefact cannot be relegated to the background to bury its legacy. Asanka bowls can be salvaged. This project is therefore very appropriate.

3.8 Data collection for objective two

2. To design a modified asanka bowl to develop a wall mural and a fountain concepts.

Objective one presents the nature and features of the asanka bowl. This section however, involves designing and developing on the generated ideas to achieve the modified forms. These modified forms will serve as wall mural and fountain. The populace inspired the choice of these two artefacts: according to them, it will display the asanka bowls publicly not limiting it to the kitchen or the dining places.

The openness of interviewees and local potters suggesting a varying range of products using asanka bowls showed how urgent it is to salvage the products and keep them in business. According to Asumin 2016, the fall of asanka bowl patronage is keeping most of the local potters out of business. Thus, if its usages can be more diversified then it will aid them to produce beyond the utilitarian purposes and heighten the artistic nature of it, Asumin added.

For aesthetic experience to materialize objectively and not to digress from the subject matter the forms are developed not to lose resemblance from their conventional forms. This however, is an essential approach to achieving art appropriation.

3.8.1. **Design Development Stages of Asanka Bowls for Murals.**

The transitional design stages executed are not too extensive, so that the true nature of asanka bowl can be realized. Most asanka bowls available in the consumer market or homes are mostly heavy. Therefore, using them for mural should relatively lose a bit of weight in order to fix firmly into the wood mural board (supports). The sketches below show the designing and the modification stages.

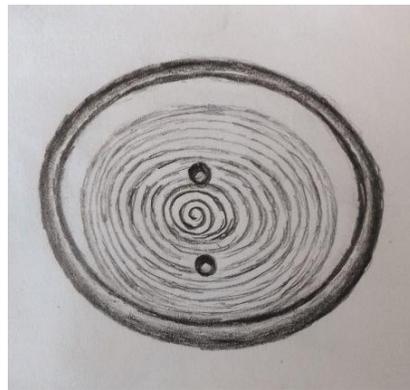


Figure 3.2: Inside view

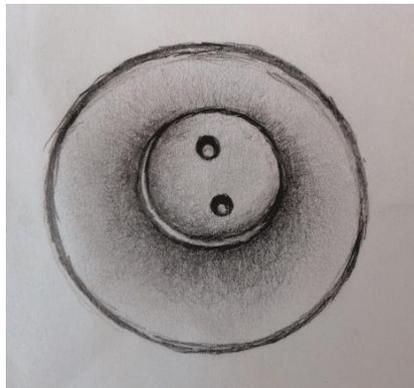


Figure 3.3: Back view

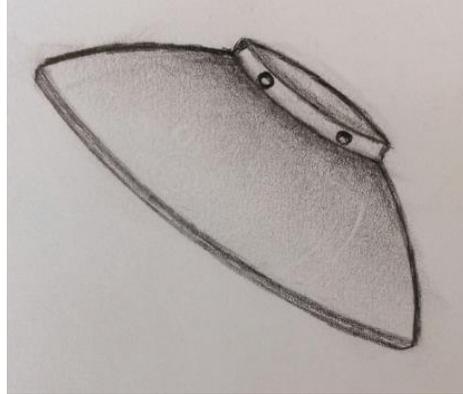


Figure 3.4: Side view

The holes at the central position of the foot (sketch 1 and 2) are known as center-holders and that of sketch three are known as foot-lockers. With the aid of nails, the foot-lockers hold the asanka bowls tightly into the wooden board and the center holders help secure the college logos firmly in the asanka bowls.

3.8.1 Using asanka bowls for wall mural

The Mural Concept

Wall mural is an artefact executed directly or indirectly on a wall, using or integrating different art media: clay, paint, wood etc. for beautification, communication or as signage. According to Kordic (2015) the initial meaning and purpose of a mural is to paint a picture of a society, created from stories, values, dreams and change. Therefore, the asanka bowls for wall mural is one of the channels through which the researcher is communicating the current state of the pottery industry and different ways asanka bowls can be use.

The mural is made of asanka bowls, KNUST College Logos, WELCOME TO KNUST plaque, wooden board (support). The wood is the support on which the asanka bowls will be mounted. The wood therefore becomes independent variable and the asanka bowls

becomes dependent variables. The asanka bowls are termed as dependent variables because they need the support of an independent variable being the wood for the mural to be projected.



Figure 3.5: 2D Rendition of the mural concept, measuring 5.2ft x 3.9ft

From fig 3.5 there are seven logos present. They include, KNUST main logo, College of Art and Built Environment, College of Humanities and Social Sciences, College of Science, College of Health Sciences, College of Engineering, College of Agriculture and Natural Resources.

However, the relevance of introducing the logos is to serve as a platform that will enable the researcher mount the mural at the entrance of the university main administration block. Thereby displaying the bowls in public. Furthermore, throughout KNUST campus publicity is commonly done by print on metal and the use of loco boards. Thereby the use of the asanka bowls to display the KNUST and college emblems is a new outdoor publicity approach. Thereby creating public awareness of the various college logos because most of the students and lecturers do not know their college logos.

As the logos are used to create awareness, they also become source of attraction to the mural or the asanka bowls. Just like the fountain, the mural is one of the primary approaches to draw audience/viewers to the asanka bowl.

3.8.2 Design development stages of the fountain

This stage commenced by designing the bowls for the fountain. It is established that the asanka bowls are not to be modified extensively, because of this, the bowls were only given spouts. Spouts are appendages attached to the body of the bowl that serve as outlets to discharge water from the asanka bowl. Two sketches of asanka bowls were made, the one with two spouts was selected. The bowls will serve as receptacles to hold and discharge water.



Figure 3.6: First sketch of the modified bowl



Figure 3.7: Final and chosen sketch



Figure 3.8: 3D rendition of figure 3.7

3.8.2.1 The fountain support concept

According to wikipedia, fountain is is a piece of architecture which dispenses water into a basin or jets it into the air to supply drinking water and/or for a decorative or dramatic effect. Fountain definition or description may vary according to how it functions and whether it is man-made or natural. Man-made fountains are influenced by the artist's concepts or ideology. They are artefacts of beauty that create serene atmosphere of relaxation and comfort.

The support concept of the fountain was developed from dried leafless oak tree. According to Urn (2014) oak tree is one of the most loved trees by human and it can be found in many artistic creations. It is also a symbol of strength, morale, resistance and knowledge. Therefore, a dried leafless oak tree denotes a dying or dead tree. It is already established that asanka bowl usages are decreasing; this can be likened to the dying state of the oak tree.

However, with fountains the most magnificent scene is the cascading flow of water. In our Akan traditional society, water symbolizes life and commonly it is said that “water is life”. Thus, turning asanka bowl into fountain is a means of restoring life to the bowls- putting them to use in a different way. Below is the picture of a dead oak tree from which the support was developed. The design development stages are as follow:

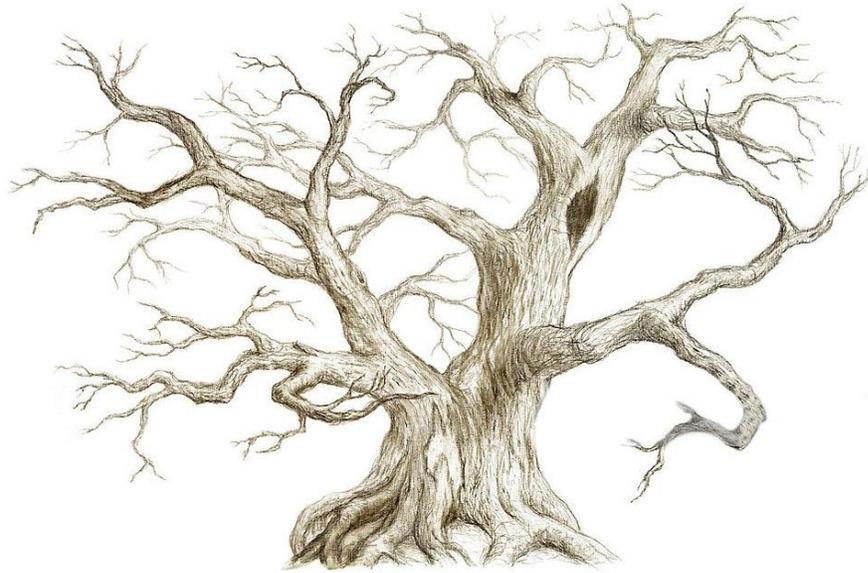


Plate 3.5: Dried oak tree
(Source: gettyimages)



Figure 3.9: fountain support sketch 1



Figure 3.10: fountain support sketch 2



Figure 3.11: fountain support sketch 3

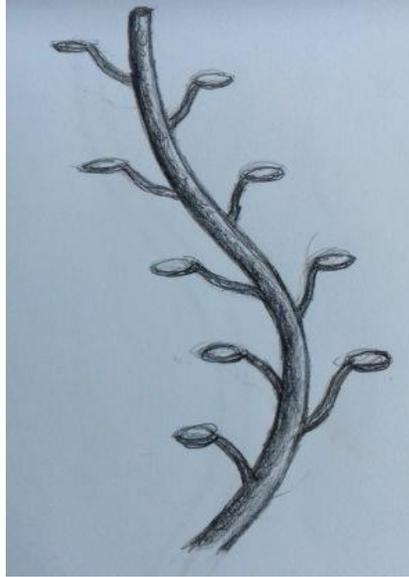


Figure 3.12: fountain support sketch 4

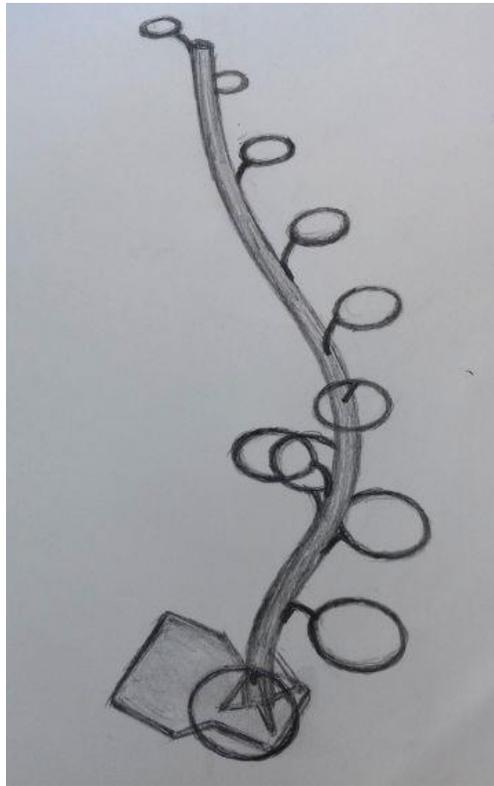


Figure 3.13: fountain support sketch 5
(final stage)

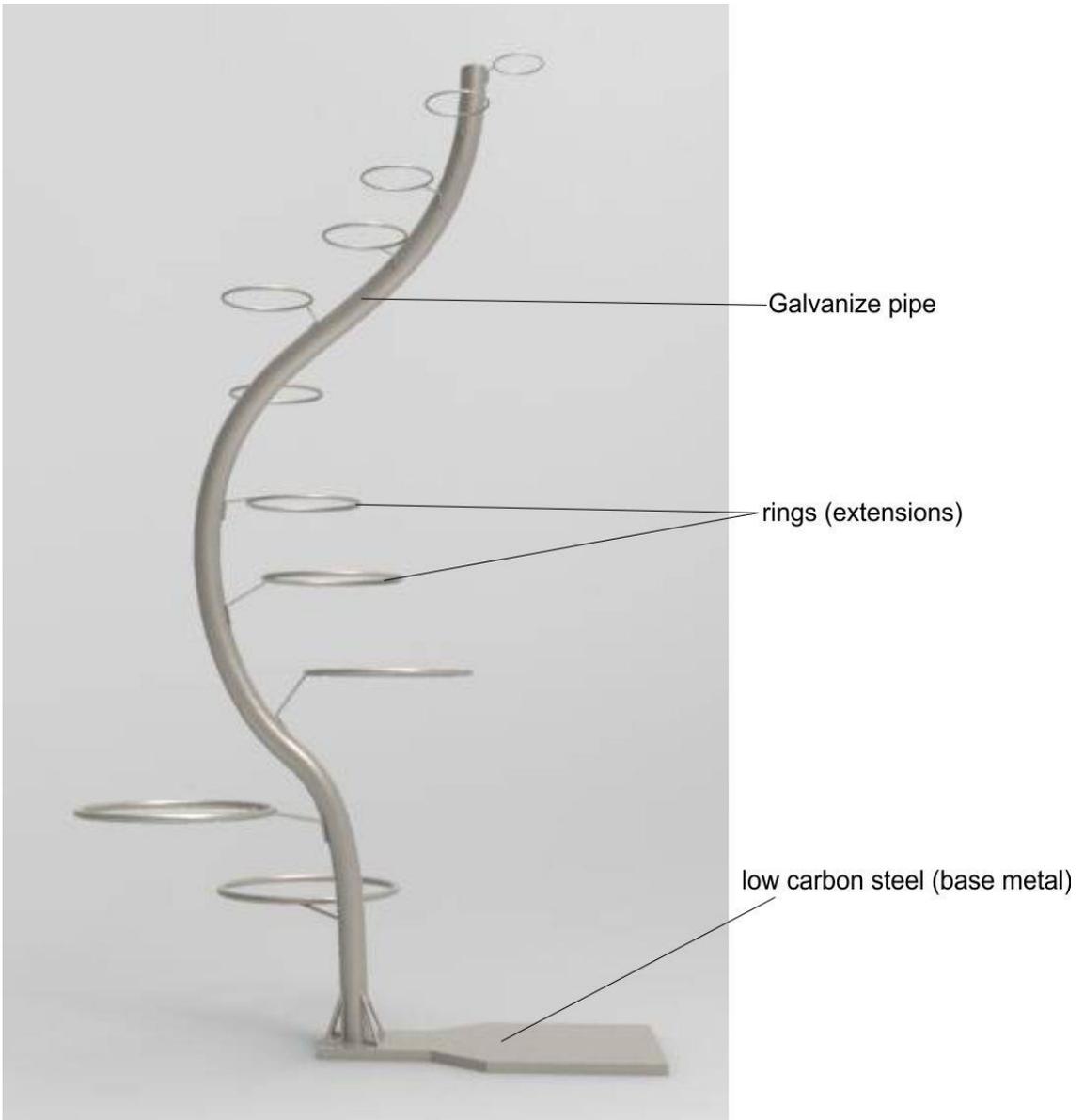


Figure 3.14: 3D Rendition of support



Figure 3.15: three dimensional rendition of the fountain

3.9 Data collection for third objective

4. Using the modified asanka bowls, execute a wall mural and a fountain with enhanced aesthetic features.

This stage dilates with executing wall mural and fountain using asanka bowl with enhanced aesthetic features. The data gathered and designs will be a guide to execute the two artefacts. It shows the working processes, tools, machines and materials for the production.

Sackboard- a wooden board covered with jute for rolling clay

Rolling Pin- it is used together with rolling pin and sackboard to make slabs of clay

Modelling tools- it is use for modelling clay works

Ruler/Tape measure- these are plastic or metallic objects calibrated into millimeters, centimeters, inches and feet used for taking dimensions.

Glaze- glass oxides for coating or decorating bisque wares.

Brushes- this is a tool with a wooden handle, ferrule and sable/bristle hair, which is used to paint.

Paints- these are pigment to colour objects

Guard sticks- these are two even stripes of wood use on the sackboard to support the rolling pin and help get thickness of clay.

Hammer- use to beat metals into designed shapes.

Disc cutting machine- use to cut metals (sheets, plates, pipe or rod)

Anvil- used as a support to form metals into shapes.

Welding machine- this a fabrication machine for welding metals.

Galvanize pipe- it is a long cylindrical metal used as the fountain support

Metal bending machine- use to bend rods or pipes to different shapes.

Iron Rods- for making extensions and braces on the galvanized pipe.

Electrodes- it is for welding.

Putty filler- for filling up cavities at the welded joints.

Sand paper- use for smoothing rough edges.

Emery paper- this is sanding material for giving smoother surfaces after applying sanding sealer on a wood.

Sanding sealer- it is a solution for sealing the pores on the surfaces of a wood.

Nails- it is use to fasten or hold the asanka bowls on the board.

Turning tools- use for removing excess clay on the body of pot during turning.

Electric Kiln- This is an equipment which is used to fire and glaze clay work

Epoxy- this is a gluing substance made of resin and hardener.

Cutting wire- this is flexible thin wire for cutting plastic clay into pieces for the removal of foreign materials.

Jig saw- this is a cutting machine for creating holes on the mural board

Spraying machine- for applying stains and auto-base clear.

Bench Vice- this holds the iron rods in place for cutting and shaping into various shapes and extension.

3.9.1 Executing the asanka bowl wall mural

The wall mural design as shown in *figure 3.5* is made up of wood, asanka bowl, KNUST college logos and ‘WELCOME TO KNUST’ plaque. These four basic components composed depict the concept of the mural and each component will be elaborated- their working processes, tools, equipment and materials used.

3.9.1.1 Throwing the asanka bowls

The throwing stages;

- Clay preparation. This involves kneading the clay into plasticity (workable state of clay without sticking to ones palm) and wedging. Wedging clay helps to remove foreign materials (debris or tree twigs) and lumps that may hinder smooth throwing.



Plate 3.6: Kneading a plastic clay

- The next step is throwing the asanka bowls to their measured dimensions. Using the cutting wire the thrown asanka bowl is cut from of the potter's wheel and place on a wooden batt for it to dry into leather-hard.



Plate 3.7: Removing the thrown bowl from the potter's wheel

- Turning/trimming proceeds at the leather state.



Plate 3.8: Turning the bowl



Plate 3.9: Creating the concentric circles in the bowls

- At this stage the bowls are put in an airtight plastic bags to ensure their leather-hard state are conserved for further executions.



Plate 3.10: Bowls in the plastic bag

Creating the interlocks in figure 3.2, 3.3 and 3.4

- Firstly, four marks were made at the side of the foot.



Plate 3.11: Making four marks at the sides of the foot

- At the four demarcated points, holes (foot-lockers) not more than one inch (1inch) were made using the pin tool



Plate 3.12: Creating the foot-lockers

- Two holes were also demarcated and created at the center of the foot (center-lockers)



Plate 3.14: creating the two center lockers

- Grooves were made on the sides of the holes at the center.



Plate 3.15: Making grooves on the walls of the foot-lockers

- Finally, the finished greenware bowls were uncovered to dry and allowed to be bone drys. This is to prepare them for firing.



Plate 3.16: drying the bowls

- The bowls were then fired. Below is a picture showing reddish brown colour of the fired asanka bowls.

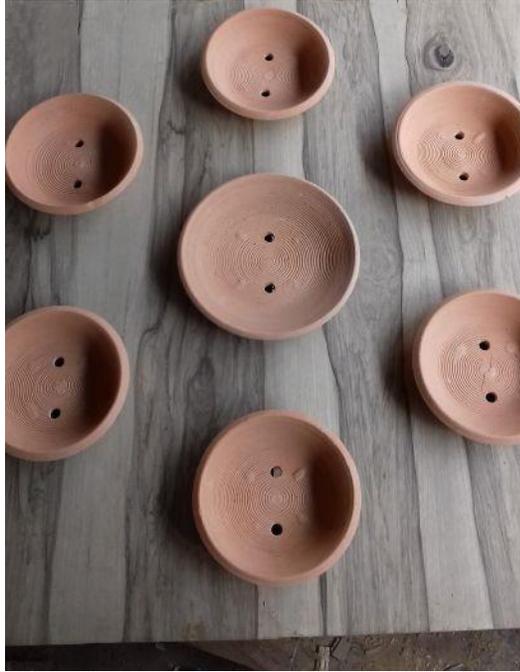


Plate 3.17: the fired asanka bowls

3.9.1.2 Executing the knust college logos.

Kwame Nkrumah University of Science and Technology (KNUST) comprises six main colleges. Namely, College of Art and Built environment, College of Humanities and Social Sciences, College of Agriculture and Natural Resources, College of Sciences, College of Engineering, College of Health Sciences. Just as KNUST has an emblem, which represents the university, so as the various colleges. In *figure 3.5*, it can be identified that the KNUST is surrounded by the six college logos. This is symbolic of its being the mother emblem or logo.

The working processes.

Tools and materials include clay, sackboard (flat wooden board covered with jute sack) rolling pin, brushes, palette knife, epoxy glue, guard sticks, ruler

- An already prepared clay was kneaded.



Plate 3.18: Kneading the clay

- Using the sackboard and rolling pin, the clay ball was rolled to 1.5cm thickness of slab



Plate 3.19: Rolling slab of clay

- A print-out paper of the KNUST logo was put on the slab and traced.



Plate 3.20: tracing the logos on the slab

- The logo was then carved out.



Plate 3.21: carving the logo

- The finished logo in greenware state.



Plate 3.22: Carved greenware KNUST logo

The above working processes for the KNUST logo were employed to develop the various six college logos. Below are some of the logos in green ware state



Plate 3.23: Carved College of Health Sciences Logo



Plate 3.24: Carved College of Engineering Logo



Plate 3.25: Carved College of Sciences



Plate 3.26: Carved College of Humanities and Social Sciences

- The logos still at the leather hard state, two shallow depths (each measures 0.8mm) were created at the back of each.



Plate 3.27: 0.8mm depth created at the back of the logos

- The logos were dried thoroughly and then bisque fired. Below is a display of some of the logos.



Plate 3.28: Fired Logos

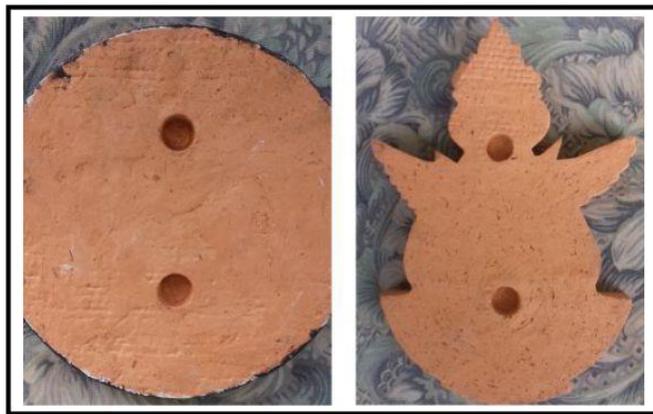


Plate 3.29: Fired logos showing the depth

Painting the logos.

Tools and materials are brushes, palette and paints

- Firstly, the logos were primed with a white paint. This serves a background paint or protective coating that enhances the brightness of the original college colours when applied.



Plate 3.30: mixing white paint in a bowl



Plate 3.31: Priming or coating the bisque logos

- Mixing colours to paint the logos



Plate 3.32: Mixing colours

The painted logos.



Plate 3.33: KNUST logo



Plate 3.34: College of Engineering



Plate 3.35: College of Health Science



Plate 3.36: College of Humanities and Social Sciences



Plate 3.37: College of Art and Built Environment



Plate 3.38: College of Science



Plate 3.39: College of Agriculture and Natural Resources

3.9.1.3 Fixing the logos into the asanka bowls

This was done with the use of metal tube and epoxy glue. The metal tube, which measures 1.5cm diameter, is a relative lightweight metal that serves as a connector between the logos and the asanka bowls. Epoxy is an adhesive made of resin and hardener that aids to fasten the metal tube into the logo and the asanka bowls altogether.



Plate 3.40: 1.5cm diameter metal tube



Plate 3.41: Epoxy glue as a gluing agent

The fixing processes

- Using the disc-cutting machine the tube was cut into pieces (6.2cm length). These pieces of metal tubes are the connectors.



Plate 3.42: marking the length of the tube before cutting



Plate 3.43: cutting the tubes



Plate 3.44: the cut out tubes (connectors)

- Secondly, the epoxy was mixed.



Plate 3.45: mixing the epoxy

- The epoxy glue was applied on the tip of the connectors and in the holes. The connectors are inserted into the holes/depth of the clay. Holding the connectors at 90° angle, they were allowed to dry.



Plate 3.46: Fixing the connectors into the holes using the epoxy glue

- This step involved inserting *plate 3.44* into the asanka bowl. Epoxy glue was applied in the center lockers and on the tip of the connectors. The outlook is shown in the *plate 3.34*.



Plate 3.47: Fixed logos in the asanka bowls

3.9.1.4 Preparing the wooden board (support)

Tools, materials and chemical include chisel, mallet, wood, dursban, jigsaw, painting brush, nose mask, gouges, drilling machine and gloves. The type of wood used for the support is “Hyedua”. According to (V.Ryan, 2008), “Hyedua” has high resistant to termite attack and very durable. Nonetheless, the above properties and its beautiful array of mid-yellow to chocolate brown coloured with greyish black strips grains were factors that the researcher considered and preferred it to the other types of wood.

Stages of preparation

- The first stage was the treatment of the wood with dursban. Dursban is a chemical that prevents insect attack that may cause the wood to decay. Dursban has potentialities for the control of premise insects such as flies and cockroaches; stored-product insects; plant-damaging pests such as aphids, mites, and lepidopterous larvae; and many other arthropods (Kenaga, Whitney, Hardy, & Doty 1965). 1/3 litre dursban was mixed with 2 litres water. This is a highly concentrated dursban solution to prevent insect attack.



Plate 3.48: Dursban and water



Plate 3.49: Dursban solution



Plate 3.50: Applying the dursban

- For a week, the board was left to dry properly.



Plate 3.51: Drying the treated board

- The upper section of the board with the brick-like lines and the space to contain the ‘WELCOME TO KNUST’ plaque were marked out and carved.



Plate 3.52: carving brick shapes



Plate 3.53: carving the space that will hold the plaque

- To demarcate a well-centered area on the board, the asanka bowls were used to mark circles. The circles were pierced out (using the jigsaw) leaving a hole that will serve as an insertion points to enable the researcher mount the asanka bowls on the board.



Plate 3.54: Demarcating a well centered area for the bowls before carving



Plate 3.55: Drilling a hole

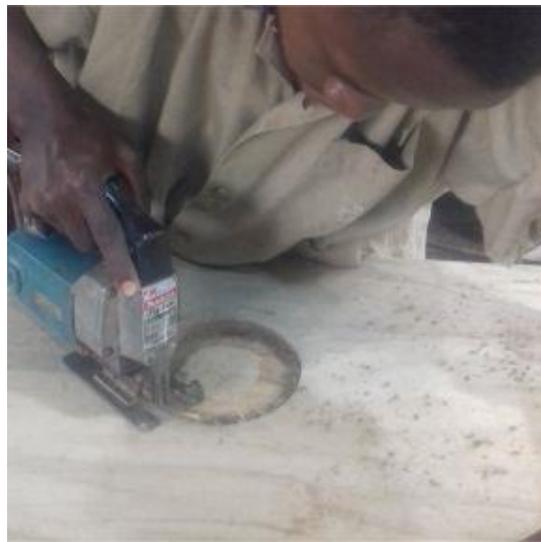


Plate 3.56: Cutting or piercing the circles out with a jigsaw

- Due to the bent nature of the wood, the back was braced with wood to re-enforce and straighten it.



Plate 3:57: the braced board

- At the back of each circle, a depression was created. The depression is 1.5inches tangential from the circle. This serves as platform to enable the foot lockers be locked securely using the locking pins.



Plate 3.58: Carving the depression

- At frontal part of the board, the edges of the holes were chamfered. This is to enable the body of the asanka bowl sit unwaveringly in the hole.



Plate 3.59: The chamfered hole

- To make the surface of the board smooth, it was sanded with 60, 80 and 120 grit of sandpapers.



Plate 3.60: Sanding the board

- Applying sanding sealer. This helps to seal the tiny pores on the surface of the wood in order to get a finer and lustrous surface when the final topcoat finishes are applied.



Plate 3.61: Applying sanding sealer

- Finally, the wood was sanded with 120grit sandpaper and and 260 emery paper to obtain much smoother surface.

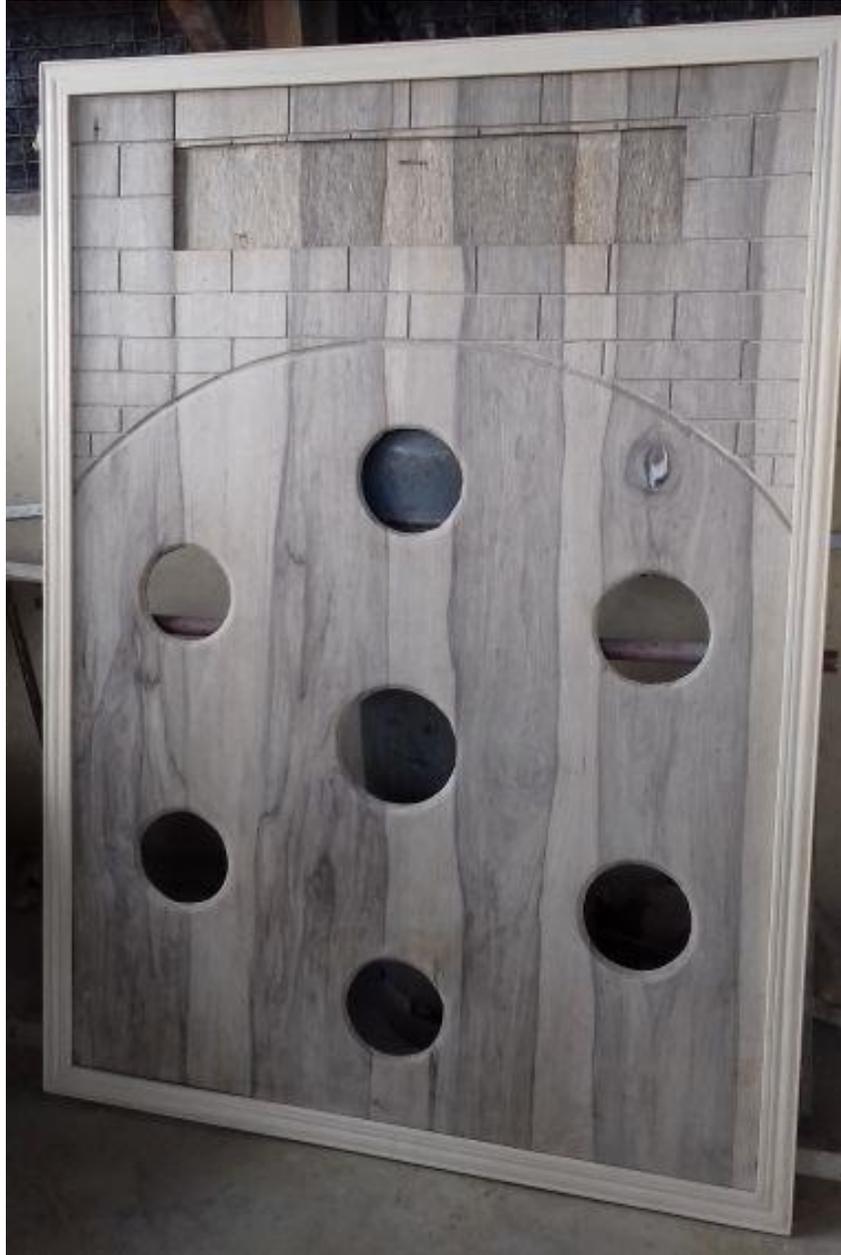


Plate 3.62: The final sanded board

3.9.1.5 Executing ‘welcome to knust’ plaque

This section however, demonstrates how the ‘WELCOME TO KNUST’ was made. The plaque measures 73.4 cm x 14.3cm.

- In order to achieve the above stated dimension, a slab of clay measuring 74cm x 15cm was rolled.



Plate 3.63: Rolling a slab of clay



Plate 3.64: Tracing the letters



Plate 3.65: Carving the letters



Plate 3.66: Texturing the background



Plate 3.67: Greenware state of the plaque



Plate 3.68: Final fired plaque

3.9.1.6 Spraying the mural

This involved the application of stains, lacquer and auto base clear to enhance the appearance of the mural.



Plate 3.69: Assembled mural ready for spraying

- Firstly, the grooves depicting the brick-like shapes at the upper section of the board was stained.

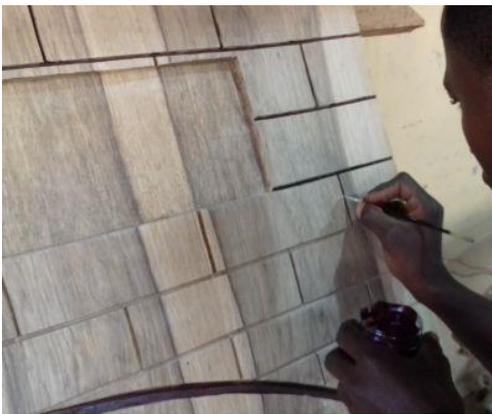


Plate 3.70: Staining the grooves

- The top section was shaded after staining the grooves.



Plate 3.71: Shading the upper section.

- The frame of the board was also shaded and fixed using nail. Proceeding from this stage was the fixing of the ‘WELCOME TO KNUST’ plaque. This was done using fevicol glue and screws.



Plate 3.72: The shaded board with the fixed plaque

- Lacquer was applied and when it had dried, auto-base clear was also applied.



Plate 3.73: Applying lacquer and auto-base clear.

- The background of the plaque was then painted to make the inscriptions stand out.



Plate 3.74: Staining the background of the plaque

- The logos were sprayed.



Plate 3.75: Spraying the logos

- Finally, the bowls were fixed into the board. At the back of the board, nails were inserted into the foot-lockers to secure the bowls firmly on the board.



Plate 3.76: Final display of the finished mural

3.9.2 Executing the asanka bowl fountain

Fountain is an ornamental artefact, which pours water into a receptacle/container in a recycling motion powered by a pump. They are made of different materials, which includes metal, cement, resin, clay etc. depicting different concepts and fascinating figures and forms. Fountain is therefore an illusion of sorts. It emulates an outdoor environment (natural waterfall) including an endless flow of water coming from an unseen source 'upstream'. Unlike in nature, however, the water that just flows by goes back up stream and flows repeatedly. Fountains are in two categories, indoor and outdoor fountains. The design concept has been developed to serve both purposes.

From the concept developed, the fountain is made of asanka bowls and metal. The bowls serve as water receptacles whilst the metal serves as support (6.6ft tall). The working stages are as follows;

3.9.2.1 Throwing the bowls

The steps in pages 52-53 were repeated accordingly. Unlike the mural, these asanka bowls range from small sizes to bigger sizes. They are 12 bowls thrown into their calculated dimensions. Having conserve the bowls in an airtight plastic bag to ensure it is in leather hard state, the spouts can then be fixed.

3.9.2.2 Fixing the spouts

Spout is an appendage of the asanka bowl that serves as an outlet channel to ensure the flowing water cascades from one receptacle into the other. Steps to fixing the spouts are as follows:

- A thick coil of clay was rolled. It was allowed to dry to be leather hard.



Plate 3.77: Coils of clay

- They were cut into pieces.



Plate 3.78: Cut pieces of the clay

- At this stage, the cut pieces were made hollow, using the palette knife and chamfered at one end.



Plate 3.79: Chamfered and hollowed spout

- As shown in the picture below, holes were made below the rim of the bowl about 5cm below the circumference. This is where the spouts are fixed.



Plate 3.80: Fixing the spouts



Plate 3.81: Asanka bowl with the fixed spouts

- The bowls were left to dry, fired and glazed



Plate 3.82: The bowls in the bisque state



Plate 3.83: Fired and glazed bowls

Due to the porous nature of bisque earthenware clay, the inside of the asanka bowls were glazed so as to seal the pores to prevent the water from wetting the bowls and also to ensure free flow of the water.

3.9.3 Fabricating the support

Support is the metal structure or stand that holds the asanka bowls firmly in position to facilitate constant free flow of water. It is made of 2-inches diameter galvanized pipe (5.5ft), 1.5cm thickness metal plate and iron rods.

Tools, equipment and materials include, iron rods, metals plate and pipe, welding machine, hammer, spirit level, anvil, gloves, goggles, grinding machine, electrodes, rod binder, metal grinder

3.9.3.1 The working processes

- Using the rod binder the pipe was bend to the shape in plate 3.80



Plate 3.84: Bending the pipe



Plate 3.85: The bent pipe ready to be removed

- The base of the pipe was tacked on the plate to ensure definite alignment.



Plate 3.86: Tacking the pipe to the base metal.

- After checking the alignment of the pipe, it was braced and welded with iron rods. Due to the pressure that will be exerted by the bowls and the water, welding the base was significant to withstand that pressure.



Plate 3.87: The braced pipe on the base metal

- Creating the rings followed. The extensions hold the bowls around the support.



Plate 3.88: Forming the rings



Plate 3.89: Bent extension that holds the ring.

- Grinding the joints of the extensions to make them smooth.



Plate 3.90: Grinding the extension

- The extensions were then welded to the pipe.



Plate 3.91: Welding the extensions to the pipe

- To prevent imbalance of the rings, spirit level was used to check their alignments. The imperative use of the spirit level is to ensure that the bowls sit into the rings imbalanced.



Plate 3.92: Checking for alignment



Plate 3.93: The final fabricated support

- Grinding the rough welded joints proceeded to enable the filler cover the holes or cavities at the joints of the extensions and the base.



Plate 3.94: Covering the cavities with filler

- It was left to dry and then sanded with 80 grit sand paper; filler was reapplied, allowed to dry and sanded again with 80 and 120 grit sandpapers. This was done to cover dents and ensure smooth surface for spraying.



Plate 3.95: The sanded support due for spraying

Spraying then continued.

- Applying primer, this served as a base coat.



Plate 3.96: Applying primer

- Dark brownish stain (auto base paint) was applied after the primer.

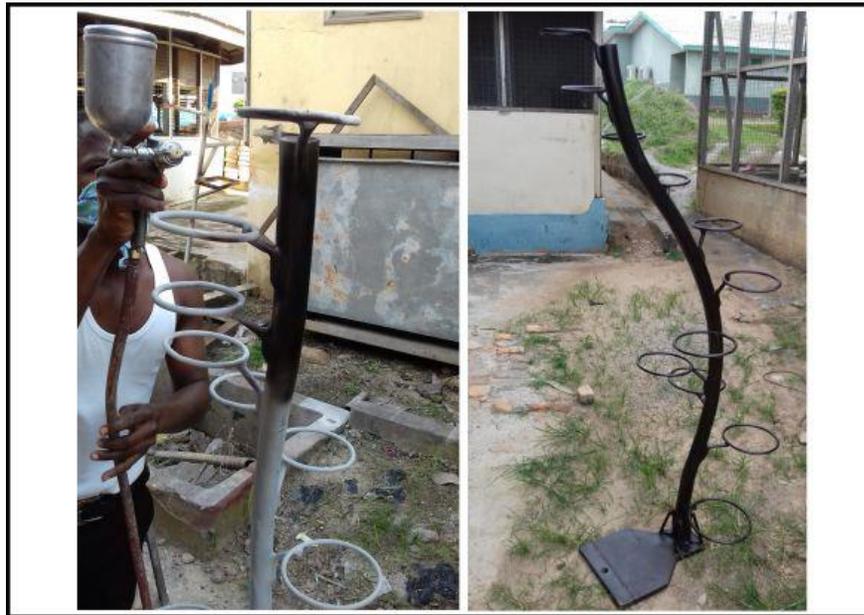


Plate 3.97: Applying the stain

3.10 Installing the fountain

Fountain installation is an act of assembling the various components of the fountain to make the water flow. It involves connecting tube from the submersible pump to the bowl

and connecting the pump the source of electricity power to supply water to the asanka bowls.

The working processes

- The bowls were placed at their designated positions on the metal rings. A tube measuring 7.5ft was connected from the pump tube-outlet through the support to the foot of the top asanka bowl.
- The pump was put in the asanka bowl at the foot of the support and was filled with water to the brim. The water began to cascade from one bowl to another after the pump had been connected to a source of electricity power to pump the water through the tube.



Plate 3.98: Installing the fountain



Plate 3.99: The final executed fountain

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF RESULTS /FINDINGS

4.1 Results for Objective one

- Objective one involved the study of the asanka bowl. This is to enable the researcher understand the form, its features and influence.

This objective led the researcher to engage local potters, pottery/asanka bowl sellers and users. Aside the acquisition of knowledge on asanka bowl, the researcher uncovered the diminishing state of the bowl and most of the pottery centers. From the four pottery centers, the asanka bowls were similar in form, features and weight. This shows the cultural and utilitarian influence of this product in the southern part of Ghana. It was discovered that, asanka bowl is a traditional artefact with distinct form, embedded with indigenous touch or technology that ought to be preserved.

Figure 1 presents the three parts of asanka bowl. Firstly, concentric circles/lines- these are shallow ridges created in the asanka bowl. Technically, the reason for making the ridges shallow is to prevent substances or vegetables from being trapped in between them when grinding with the pestle. They are made using the pin tool during throwing/modeling and turning. Its conventional purpose is to support the wooden pestle grind substances and vegetables. The second part is the mouth, conventionally; it serves as a blockade or prevents spillage of substances. Thirdly, the foot is the base that supports the body of the asanka bowl.

The researcher identified that the amount of clay left at the foot is relatively thicker than the body or walls of the bowl. This is done so that it can withstand the pressure of the wooden pestle. Traditionally, these distinct features make asanka bowls outstanding amidst numerous bowls displayed. Furthermore, compare to ceramic bowls, locally made asanka bowls are very heavy.

These features equipped the researcher to react to the idea developments and designs that will make the bowls be recognized by indigenes despite their new functionalities or usages. It is a quest or means to create representational model for social relation. According to Art World, art enables people to define their worlds, express themselves, and show their beliefs and values. Making, using and learning from artworks are fundamental to human social life, imagination and sensory engagement. Through art, ideas take physical and tangible form and become available for new forms of seeing, understanding and writing.

4.2 Results for objective two

- Design a modified asanka bowl to develop a wall mural and a fountain concepts. The acceptable forms, features and influence guided this.

Design, according to Strate School of Design is the process of envisioning and planning the creation of objects. These objects serve as solutions to address challenges or problems in the society. Due to this, users of the product/object must be considered, so that it can solve or meet their needs and expectations. Designs, most often, are raw materials that must undergo series of developments to meet the standard requirement acceptable for

execution. That is, they (designs) are subjected to idea developments to be refined and finally used.

Studying the asanka bowl and responses from interviewees persuaded the researcher to design and modify the asanka bowls for fountain and wall mural. The choice for these two artefacts are due to their influence in our society. As outdoor artefacts, they become magnetic point of attraction to viewers.

4.2.1 Asanka bowls for wall mural

To communicate the core value of the study and for aesthetic experience to materialize objectively and not to digress from the subject matter the forms are developed not to lose resemblance from their conventional forms. This however, is an essential approach to achieving art appropriation.



Plate 4.1: the modified asanka bowl showing the foot and center lockers

As shown in the design of the modified asanka bowl. The two center holes known as center-holders support the fixing of the logos securely in the bowls. The side holes

known as foot-lockers also aided the mounting of the bowls unto the wooden board supported with nails.

The mural concept

Using the asanka bowls, the mural concept was then developed. From the design below, the KNUST logo and its bowl appear bigger than the rest. The six colleges also surround it. This arrangement is significant to demonstrate its headship. The support is divided into two sections, brick and plain section. This was done to provide two contrasting backgrounds for the plaque and the asanka bowls- making them stand out. The logos are also centered



Figure 4.1: 2D rendition of the mural concept

4.2.2 Asanka bowls for fountains

Firstly, the asanka bowl design for the fountain was only given spouts with no extensive changes. This was to ensure that its conventional form is seen in the newly modified form and viewers can easily identify it as ‘asanka bowl’ irrespective of its new usage.

Secondly, researching on Ghanaian locally made fountains with spouts the researcher identified that, most fountains have one spout attached to them. Hence, dichotomizing what already exists, inspiring creativity and making the asanka bowl look outstanding from other fountain water receptacles, it was given two spouts. The spouts were attached close to the other on the same level. This was critically observed and executed because any wrong positioning of the spouts will affect the flow of water. That is, the water will not flow through them or only one of the spouts may discharge the water. The spouts are also of the same length and thickness to facilitate the flow of water into each bowl without splash or spillage.



Plate 4.2: the spouts at a fixed levelled position

Moreover, asanka bowls cannot function alone as fountain, so support was designed to hold them and facilitate the flow of the water. The concept of the support being derived

from a dried leafless oak tree was very symbolic due to the falling state of our pottery industry. Synonymously, our fallen pottery industry can be likened to the dying oak tree.

From the illustration below, it can be seen that, descending from the top of the support the bowls proportionally increase in sizes to the base. This was a means to replicate the asanka bowls in plate 1. However, according to the data the researcher gathered from the field, most people do not know that asanka bowls range to smaller sizes. Therefore, this concept is a relevant approach to display to the public the different sizes of the asanka bowls. It is also a means to create contrast and break the monotony if one particular size of bowls had been used.



Figure 4.2: 3D rendition of the fountain

4.3 Results for objective three

Using the modified asanka bowls, execute a wall mural and a fountain with enhanced aesthetic features.

4.3.1 Wall Mural

The wall mural was the first artefact to be made. It involved making the asanka bowls according to their dimensions. At the leather hard state the bowls were given the center-lockers and the foot-lockers. It was allowed to dry and then fired. The bowls were seven in number just as the logos. The seven logos were also made and fired. The logos are made of key elements that represents their colleges. Painting of the logos required uninterrupted attention and care because of the small nature of the elements. At this stage, the logos were fixed into the asanka bowls using the connectors and epoxy glue.

The researcher observed that, the logos may not center properly if the epoxy glue dries before adjusting the logo. Therefore, to avoid imbalance, immediately after applying the epoxy in the center lockers to insert the logos, check for perfect balance and hold it firmly with both hands till the epoxy dries. In doing so, the logo flashes on the mouth of the bowl.

The wooden board is the support to hold the asanka bowls (inside the bowls are the logos) and 'WELCOME TO KNUST' plaque. For this reason, wood with good tensile strength was used, so it can withstand the pressure from the objects to be mounted on it and to stand the test of time. Fascinating texture also enhanced the background of the mural.



Plate 4.3: The final finished mural

From the final work above, the brick section is shaded showing traces of the wood grains beneath the shades. It is done to show two distinctive backgrounds for the plaque and the bowls. However, the reason for not spraying the bowls with auto base clear was because of the glossy treatment given to the wooden background and the logo. The bowls in their raw untreated nature serve as intermediary to control the glossiness of the mural. The effect of this was evidential when the mural was mounted.

More so, in order to achieve harmonious blend of logos, colour dominance in each of the six logos were reviewed and placed opposite each other. It can be seen that, College of Humanities and Social Sciences matches with College of Sciences- having blue and red dominating in both logos. College of Engineering and College of Agriculture and Natural

Resources match- having white and yellow dominating in both logos. Lastly College of Art and Built Environment matches with College of Health Sciences- having red and white dominating in both logos.

The stained background given to 'WELCOME TO KNUST' plaque, made the inscription legible. The fasteners (nails) at the foot lockers gave the bowls strong support on the board without wavering. Because the fasteners are not permanently fixed, the mural can disassembled, transported and reassembled at the different location. Making it a mobile mural. The glossy finish of the support exposed the beautiful natural grains of the wood which enhanced the beauty of the entire mural.

4.3.2 Fountain.

Making the fountain preceded with developing the asanka bowls with the spouts attached to them. This is very important because the base of the bowls will determine the ring sizes (extensions of metal rod on which the bowls sit) and the surety of the bowls to fit well in the metal rings without affecting the spouts. The dimensions and sizes of the spouts also changed due to the different sizes of the bowl. The bowls are twelve in number, from the smallest to the biggest size with each bowl glazed accordingly. The glazing does not allow easy penetration of water that could soak the bowls.

The bowls, however, cannot serve as a fountain on their own, therefore, metal support made of galvanized pipe, rods (extensions) and low carbon steel (base metal on which the pipe stands) were fabricated. The support holds the twelve asanka bowls to ensure the flow of water from one bowl to the other.

Due to the pressure that will be exerted by the bowl and the water, the pipe was braced at the base with rods to ensure it withstands the pressure from the bowl and water. Fixing the extensions followed. Each extension was fixed at a calculated interval of 6.5inches and 5.5inches respectively. The first five bowls from the top of the pipe were given 5.5 inches intervals and the rest of the bowls followed with 6.5 inches. The final outlook after welding and grinding the support showed asanka bowls in a spiral formation around the support.

The dark brownish stain given to the support was to enhance its appeal and withstand dirt since the fountain has been designed for indoors and outdoors purposes.



Plate 4.4: Arranged asanka bowls on the support

- Testing the flow of the water

The test is very imperative in order to correct any spillage or leakages before finally spraying the work. The spillage will occur as result of wrong positioning of the spouts and the extensions. However, the test proved how technically aligned the rings and bowls are arranged for perfect cascading water flow. It was also noticed that, the sound of the water falling into each of the bowls produced different soothing and therapeutic sounds. This is as a result of the differences in the heights of the waterfalls, the thickness of the bowls and the amount of water contained in the bowls.

The self-contained fountain does not waste water because the water re-circulates. The only water lost is through evaporation, which can be beneficial in humidifying the air. Periodically, you simply replenish the water that has evaporated. Never let the pump run dry or it could be ruined. Moreso, the water will overflow if the pressure of the pump is not lowly regulated. Always use distilled or clean water.



Plate 4.5: Testing the flow of the water



Plate 4.6: The final executed fountain

4.3.2.1 Health benefits of using fountain

Aside the touch of beauty fountains create in the surroundings, their health benefits to human beings cannot be overlooked. Therefore, to enjoy the use of fountain is not only to experience the splendor it lavishes in an environment rather the health benefits associated with it usages. Below are some of the health benefits associated with the use of fountain.

- Indoor water fountains are fantastic for the skin, keeping the skin moisture 'filled' and supple, an added benefit for people with dry skin. Good for prevention of skin rashes and flakiness
- The humidifying effect of water fountains moistens the atmosphere and is good in that it increases the elasticity of the respiratory walls and passages making breathing become healthier and easier.
- The waterfall feature is known to be therapeutic and thus beneficial negative ions which are minuscule electrically charged particles that help tremendously in keeping us alert but in a relaxed mode.
- The calming and soothing sound that emanates from water falling slowly helps focus the mind on pleasant thought; it is like listening to the distant sounds of a mountain's waterfalls, but this time flowing in an interior space.
- The quiet flowing sounds and ripples are stress and tension relieving. It is great to come home, after a hard and stressful day's work, to a tranquil interior. The soothing sight of flowing water, the falling sounds and the clear sparkling waterfalls will calm raw nerves, and inspire a relaxing mood and atmosphere.

Recommending it for hospitals, administrative buildings, banks, schools, homes or living rooms, hotels etc, it can really become a prodigious source of therapy. Moreover, the use of

the asanka bowl fountain in the above mentioned places is a channel of challenging the curiosity of the users on the possibility of diversifying the usages of the asanka bowl and promoting our traditional pottery wares in an unexpected and unwelcomed environment.

CHAPTER 5

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1. Overview

The project presented the current falling state of our indigenous pottery wares. Using the asanka bowl as a case study, the researcher delved into how one can diversify and explore other usages of asanka bowls apart from its conventional uses. Objectives to salvage this pottery were outlined, measures to achieving the set objectives were sequentially followed coupled with some challenges due to the brittle nature of clay products.

5.2 Summary

Ghanaian pottery comprises asanka bowl, akatekyewaa (small darkened pot) and cooler. Apart from the asanka bowl, which is still in use though it is fading out gradually, “akatekyewa” and “cooler” have drastically faded out. An industry, which was a lucrative venture for the local people, is dying. The fall of the usages of these potteries have adversely affected the socio-economic life of these craftsmen and women. The youths are not interested in learning the craft because they cannot foresee any better future with it. The effect of this will lead to the burying of our potteries and their heritage. Howbeit, from the researcher’s findings, diversification can be one of the means to restore these potteries since technology is rendering most of our potteries unimportant and irrelevant.

However, it must be notice that, it is the forms and features of our traditional pottery that makes them unique. Hence, these features must be considered critically so that the original forms are not lost in the process of redesigning and modification. Modification as an idea development process entails creativity and originality. Therefore, being creative

and original in designing new products using our pottery will inspire and break the traditional perception in the usage of Ghanaian pottery.

The execution of these design products are very challenging. However, to master and overcome the challenge of modification is a prove that the diversification is achievable. Executing the mural and the fountain was very challenging but the researcher's knowledge base of the other materials was key factor that aided in successful completion of the project. Therefore, for every potter to be successful in this diversification process there must be the willingness to know and explore the integration of pottery and other materials. Since society is becoming complex and dynamic, we must endeavor to be dynamic and meet the contemporary needs of pottery users.

5.3 Conclusion

Presentation of the research findings prove that, putting asanka bowl to different uses is very possible hence the need to diversify and explore with the other traditional potteries beyond their traditional usages. The researcher is of the view that, our pottery wares can survive this contemporary technological era if their usage are diversified. Changing their conventional usages is not a means to completely change the forms beyond recognition. However, the diversification is an approach to uphold the legacy and tell the story of each pottery in a special way.

There are varying range of products like wall hanging, coffee table, flower vase, etc that the researcher could have used to tell the story of asanka bowls. However, the choice of selecting wall mural and fountain was because of the influential nature of these artefacts.

These are outdoor artefacts that will attract viewers so that a realistic aesthetic experience is achieved.

5.4 Recommendation

The researcher recommends that:

- Local potters should diversify and explore the usages of our potteries (asanka bowl, cooler and akatekyewa) beyond their utilitarian purposes.
- The diversification of these pottery forms should meet contemporary lifestyle or demands of buyers or users.
- The researcher aims at collaborating with Kumasi Cultural Center, Ministry of culture and tourism to organize workshop programs for local potters at the various listed pottery centers to enlighten them on how they can creatively make pottery wares (asanka bowl, cooler and akatekyewa) beyond their utilitarian purposes.

REFERENCES

- About Contemporary Art (Education at the Getty)., from
http://www.getty.edu/education/teachers/classroom_resources/curricula/contemporary_art/background1.html. Retrieved August 18, 2018
- Adutwum, R. O. (2013). The Growth and Poverty Reduction Strategy- GPRS II (2006 – 2009).
<http://www.ndpc.gov.gh/GPRS/The%20Architects%20by%20DR%20ADUTWUM>.
Retrieved June 1, 2017, from.pdf
- Anna Craven (2007). Interpreting Ceramics : issue 10., from
<http://interpretingceramics.com/issue010/articles/03c.htm>. Retrieved March 18, 2018
- Art, philosophy. from <https://www.britannica.com/topic/philosophy-of-art> Retrieved August 15, 2018
- ART21/ 501(c) 3 non-profit organization - Google Search. (n.d.), from
[https://www.google.com.gh/search?q=ART21%2F+501\(c\)+3+non-profit+organization&oq=ART21%2F+501\(c\)+3+non-profit+organization&aqs=chrome..69i57j69i58.980j0j7&sourceid=chrome&ie=UTF-8](https://www.google.com.gh/search?q=ART21%2F+501(c)+3+non-profit+organization&oq=ART21%2F+501(c)+3+non-profit+organization&aqs=chrome..69i57j69i58.980j0j7&sourceid=chrome&ie=UTF-8)
Retrieved July 25, 2018
- Asante, E. A. (2009). A STUDY OF SELECTED INDIGENOUS GHANAIAN WOMEN IN SOME INDIGENOUS VISUAL ARTS, 229. Retrieved April 6, 2017
- Asante, E. A., Adjei, K., & Opoku-Asare, N. A. (2013). The Theoretical and Socio –Cultural Dimensions of Kpando Women’s Pottery, 14. Retrieved June 4, 2016
- Asmah, A. E., Frimpong, C., & Asinyo, B. (2013). Enhancing the Value of Indigenous Pottery Products with, 9.

- <http://ir.knust.edu.gh/bitstream/123456789/7301/1/Asmah%2C%20A.E.pdf>. Retrieved July 1, 2017
- Asmah, A.E.pdf. (2013). Retrieved from <http://ir.knust.edu.gh/bitstream/123456789/7301/1/Asmah%2C%20A.E.pdf>. Retrieved July 1, 2017
- Avugla D.K.E (2011), Factors Influencing Career Choice Among The Senior High School Students In The South Tongu District of Volta Region, Ghana.. from https://nanopdf.com/queue/university-of-education-winneba-department-of_pdf?queue_id=-1&x=1534709659&z=MTI5LjEyMi4xNy4yNDA= Retrieved May 9, 2017
- Baba, M. (2009). Pottery production at Hierakonpolis during the Naqada, 23. Retrieved July 1, 2017
- Batovsky J.R. (1999) Discovery and explorations: man's world of adventure/World Philosophy. Retrieved March 21, 2016
- Bios Urn (2014). Oak Tree: Symbolism, Information and Planting Instructions. (2014, May 15). from <https://urnabios.com/oak-tree-symbolism-planting-instructions-bios-urn/> Retrieved August 20, 2018,
- Carr, K. (2017). History of Pottery - Clay Pottery., from <https://quatr.us/art/history-pottery-clay-pottery.htm>. Retrieved August 18, 2018
- Clay Basics - Clay Times Magazine. (n.d.). from <http://www.claytimes.com/reference-guide/clay-basics.html>. Retrieved July 17, 2018,
- Clay-earthenware.pdf. (2001) from <http://lindaarbuckle.com/handouts/clay-earthenware.pdf>. Retrieved July 1, 2018

Contemporary art :: Learn more :: Discover art :: Art Gallery NSW. 2018, from
<https://www.artgallery.nsw.gov.au/discover-art/learn-more/contemporary-art/> Retrieved
August 19, 2018

Costantini, G. L. (2014). What Was Contemporary Art? by Richard Meyer (review). *Leonardo*,
47(1), 96–98. Retrieved February 1, 2017

Definition of Indigenous from <https://www.merriam-webster.com/dictionary/indigenous>.
Retrieved August 18, 2018,

Definition of pottery from <https://www.merriam-webster.com/dictionary/pottery> Retrieved
August 18, 2018.

DeMarrais, E., & Robb, J. (2013). Art makes society: an introductory visual essay. *World Art*,
3(1), 3–22. <https://doi.org/10.1080/21500894.2013.782334>. Retrieved October 17, 2017

Earthenware | pottery, from <https://www.britannica.com/art/earthenware>.
Retrieved July 17, 2018

Fetterman, D. M. (1998). *Ethnography: Step-by-Step*. SAGE.
Retrieved April 18, 2018

Five Faces of Modernity: Modernism, Avant-garde, Decadence, Kitsch ... - Matei Calinescu -
Google Books. (n.d.), from
https://books.google.com.gh/books?id=bPVYpE04y0AC&printsec=frontcover&source=gs_atb#v=onepage&q&f=false. Retrieved July 25, 2018

Folklore: An Encyclopedia of Beliefs, Customs, Tales, Music, and Art - Google Books. (n.d.).
https://books.google.com.gh/books?id=S7Wfhws3dFAC&printsec=frontcover&source=gs_atb#v=onepage&q&f=false. Retrieved July 25, 2018,

- Gyamfi, V. E. A. (1988). The Integration of Ghanaian traditional pottery and American contemporary ceramics, 39. Retrieved July 16, 2016.
- Hosper, J. (2018). Art, philosophy. from <https://www.britannica.com/topic/philosophy-of-art>
Retrieved August 19, 2018
- International Journal of Advanced Research (2013), Volume 1, Issue 4, 223-227. (2013).
International Journal of Advanced Research, 1(2320), 5. Retrieved August 8, 2017
- Jectey-Nyarko & Yaw Mantey (2010). *The Indigenous Stools of The "Okre" of Akuapem in Ghana* (Thesis). from <http://ir.knust.edu.gh:8080/handle/123456789/285>. Retrieved May 2, 2017
- John Baldessari (2000), specimen (After Dürer), from J. Paul Getty Museum Education Department.
www.getty.edu/education/teachers/classroom_resources/curricula/contemporary_art/downloads/baldessari_specimen.pdf. Retrieved July 20, 2018
- Kamhi, Marder; Toress, Louis (2008). "What about the Other Face of Contemporary Art?" by Kamhi, Michelle Marder; Torres, Louis - Art Education, Vol. 61, Issue 2, March 2008 | Online Research Library: Questia. from <https://www.questia.com/magazine/1P3-1461985951/what-about-the-other-face-of-contemporary-art>. Retrieved August 19, 2018
- Kanupriya (2009). Population Sampling methods.. from <https://www.pitt.edu/~super7/43011-44001/43911.ppt> Retrieved November 14, 2017

- Kenaga, E. E., Whitney, W. K., Hardy, J. L., & Doty, A. E. (1965). Laboratory Tests with Dursban Insecticide. *Journal of Economic Entomology*, 58(6), 1043–1050.
<https://doi.org/10.1093/jee/58.6.1043>. Retrieved September 12, 2017
- Kordic, A. (2005). Mural. The History and The Meaning. from <https://www.widewalls.ch/what-is-a-mural-the-history-and-meaning> Retrieved July 21, 2018,
- Kuzmenko (2013). Appropriation » Inside the Mind of Elizabeth Kuzmenko. from <http://blogs.cornell.edu/art2701esk83/appropriation>, Retrieved August 19, 2018
- Labaree (2016). Research Guides: Organizing Your Social Sciences Research Paper: Types of Research Designs.. from https://scholar.google.com/scholar?cluster=5836562935970810259&hl=en&as_sdt=0,5&scioldt=0,5. Retrieved August 12, 2017
- Leah. (2012). Modern vs Contemporary – What’s The Difference? | Relish Interiors., from <http://blog.relishinteriors.com/modern-vs-contemporary-whats-the-difference/>,
<http://blog.relishinteriors.com/modern-vs-contemporary-whats-the-difference/> Retrieved August 19, 2018.
- LEEDY, P. D., & ORMROD, J. E. (2005). *Practical Research Planning and Design* (5th ed.). New Jersey: Pearson Merrill Prentice Hall. Retrieved May 27, 2016
- Mandiberg, M. (2014). MoMA | Creative Appropriation: The Smallest Move Is Often the Hardest. from https://www.moma.org/learn/moma_learning/blog/creative-appropriation-the-smallest-move-is-often-the-hardest. Retrieved August 19, 2018
- MasterAdminStrate. (2017). What is design? [Text]. Retrieved from <https://www.strate.education/gallery/news/design-definition> August 3, 2018

- McLeod, S. (2014). Sampling Methods | Simply Psychology. from <https://www.simplypsychology.org/sampling.html>. Retrieved August 6, 2018,
- Michelle Marder Kamhi & Louis Torres (2008). What About the Other Face of Contemporary Art? from. www.aristos.org/aris-08/otherface.htm. Retrieved June 20, 2108
- Miller, R. B. (1999). Structure of wood. *Wood Handbook : Wood as an Engineering Material. Madison, WI : USDA Forest Service, Forest Products Laboratory, 1999. General Technical Report FPL ; GTR-113: Pages 2.1-2.4, 113*. Retrieved from <https://www.fs.usda.gov/treearch/pubs/7154>. Retrieved June 1, 2016,
- Moyle, W. (2002). Unstructured interviews: challenges when participants have a major depressive illness. *Journal of Advanced Nursing, 39*(3), 266–273. <https://doi.org/10.1046/j.1365-2648.2002.02273.x>. Retrieved April 1, 2017
- Mr Asumin. Head of pottery center. Cultural Center- Kumasi. Retrieved September 30, 2016
- Null, L. edited. Old oak tree with no leaves on a white background, pencil sketch on..., from <https://www.gettyimages.com/detail/illustration/old-tree-with-no-leaves-royalty-free-illustration/155440481>. Retrieved June 14, 2018
- Nunoo .A. & Jabir. J.M. (2013). An indoor tabletop fountain for integrated rural and industry conference room/theses. Retrieved January 4, 2016
- Patty & Morty (2016). Greek Vase Painting, 29. [postmodern-aesthetic-theories.pdf](https://ohhsarthistoryap.files.wordpress.com/2010/12/postmodern-aesthetic-theories.pdf). (n.d.). from <https://ohhsarthistoryap.files.wordpress.com/2010/12/postmodern-aesthetic-theories.pdf> Retrieved January 8, 2018

Pottery Studio Pictures and Images. (n.d.), from <http://lakesidepottery.com/Pages/Pictures.html>

Retrieved August 18, 2018

Questionnaires. (n.d.), from <https://research-methodology.net/research-methods/survey-method/questionnaires-2/> Retrieved August 6, 2018

Rado, P., & Britain, I. of C. Great. (1988). *An introduction to the technology of pottery*.

Published on behalf of the Institute of Ceramics by Pergamon Press. July 31, 2018.

RWJF - Qualitative Research Guidelines Project | Observation | Observation. (n.d.), from <http://www.qualres.org/HomeObse-3594.html>. Retrieved August 3, 2018

Ryan. V. (2008). African Hyedua. Retrieved from www.technologystudent.com. Retrieved January 4, 2017

Shils, E. (2006). *Tradition*. University of Chicago Press.

Retrieved June 5, 2018

Speight, C.F. & Toki, J. (1999). *Hands in Clay*. New York: McGraw-Hill Company, Inc. The Brainy Dictionary Online Edition (2011). from brainydictionary.com. Retrieved April, 2016,

Speight, F. C. & Toki, I. (2000). *Hands in Clay*. New York: McGraw Hill Companies Inc.

Retrieved February 19, 2018

Sp Lariba. (02:22:42 UTC). *Art and Culture in the Modern and Contemporary Eras*. Education.

Retrieved from <https://www.slideshare.net/eclariba/arts-4-unit-1>. Retrieved November 21, 2015

Streubert H.J. & Carpenter D.R. (1999) *Qualitative Research in Nursing Advancing the Humanistic Imperative*. Lippincott, Philadelphia. from onlinelibrary.wiley.com.

Retrieved May 12, 2018

Tate. (2002). Appropriation – Art Term., from <https://www.tate.org.uk/art/art-terms/a/appropriation>. Retrieved July 25, 2018

Umberto Boccioni (1911), Instrumentalism-Philosophy of Art. from <https://www.moma.org/collection/works/78653>. Retrieved August 2,2018.

viewcontent.pdf. (2015). Retrieved from <https://scholarworks.rit.edu/cgi/viewcontent.cgi?article=5356&context=theses>. Retrieved March 5, 2016

World Art. (2016). from <https://www.tandfonline.com/action/aboutThisJournal?show=aimsScope&journalCode=rwor20>. Retrieved August 3, 2018

APPENDICE

APPENDIX ONE: DIFFERENT MURAL CONCEPTS USING THE ASANKA BOWL



Fig. AP1.1: 2D illustration of mural design depicting an idea of using past presidents of Ghana

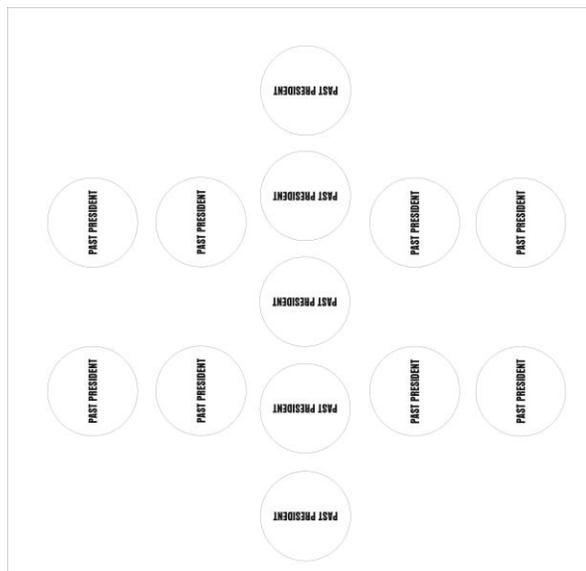


Fig. AP1.2: Mural concept with different arrangements of the 13 past presidents of Ghana

APPENDIX 2: DIFFERENT FOUNTAIN CONCEPTS USING THE ASANKA BOWL



Fig. AP2.1: Fountain with the support at the center of the asanka bowl base and a spout attached to each bowl.



Fig. AP2.2: Fountain with a circular metal base



Fig. AP2.3: Different angle of Fig. AP2.2

APPENDIX 3: ASANKA BOWL CENTER TABLE



Fig. AP3.1: Asanka bowl center table with a covered glass