

**TWIST AND WEAVE APPROACH TO HAND FORMATION OF DECORATIVE
CERAMIC WARES**

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CERTIFICATION

I hereby declare that this submission is my own work towards the award of Master of Fine Art (ceramics) and that, to the best of my knowledge, it contains no material previously published by another, nor material which has been accepted for the award of any other degree of the University, except where due acknowledgment has been made in the text

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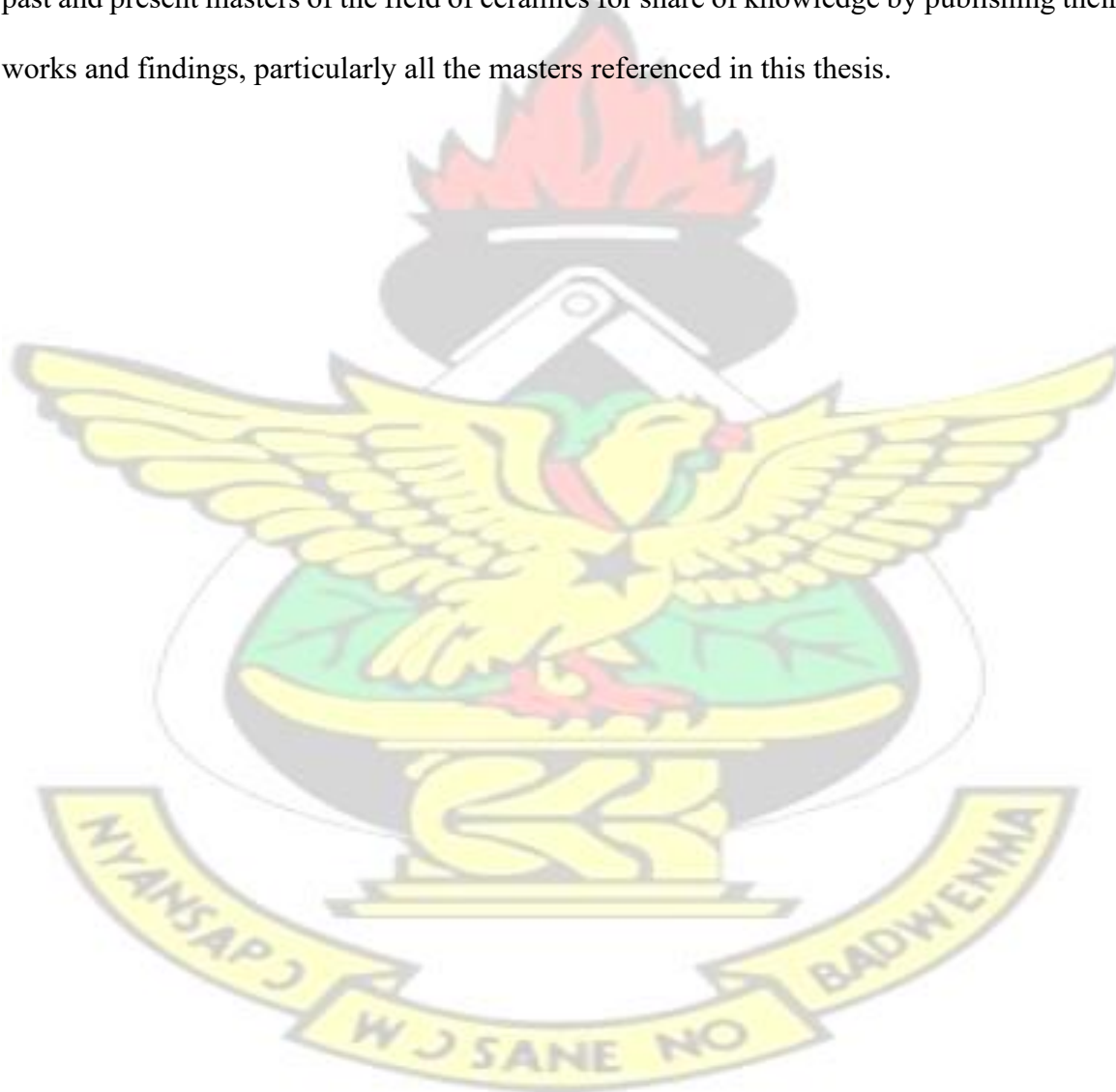
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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Clay is that part of the earth surface which is sticky when wet and hardens up when dried and is irreversible to the sticky state when heat is introduced to it and yet breakable. Norton (1956) said clay is made up of tiny crystals; many of them so small that, it cannot be seen with ordinary microscope. These crystals are composed mainly of minerals called kaolinite ($\text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2 \cdot 2\text{H}_2\text{O}$) whose composition approximates as follows 47 percent silica (SiO_2), 39 percent alumina (Al_2O_3) and 14 percent water (H_2O).

Clay is a secondary product of the earth crust; that is, it results from the decomposition, by the weathering of old rocks of feldspar type. The use of this material in the production of articles is termed as pottery and or ceramics. The Fine arts being concerned with the attainment of beauty, the Arts of conduct is for good looking and the liberal art for its usefulness. Pottery historically considered a true craft as reiterated by Kathrine (2014) was the readily available material to fashion out solid items to contain and store liquid, and must be based on sincerity of construction and the people needs to master the simple truth for which it stands. It is therefore best to take pottery that is entirely made by hand. Having acquired a sensitive torch, the potter is able to express fine thoughts through the medium of clay, for all work starts with a thought and remains a thought expressed; only using the material as a means of expression. Sholomo(2006) says that, among other concerns, art has typically concerned creativity, aesthetic communication, symbols, craft and fine art. In the traditional pottery setting, the products are largely concerned with functionality and

symbolism, where the functional aspect of it concerns itself with household items while the other products such as figurines are for religious purposes. Due to the advent of formal education, bringing about different ideas, reasoning and questioning the tradition, has brought about variation in the production techniques in terms of form and shapes, thereby creating the room for more manipulation of clay.

The pottery industry has a lot of production or fabrication techniques suitable for the various materials available. For instance in the pottery industry with clay as the chief material, two major techniques are readily available to the studio potter namely hand formation and machine formation, under each of these techniques there are several methods to produce with. Among the hand formation techniques which are pinching, coiling and slab making. The application of any one of these pottery forming methods or the combination of two or more methods always result in solid forms, there after the pot surface is decorated in a way, while the machine formation helps in the making of perfect circular or cylindrical forms

In my visitation to exhibitions, galleries, pottery centres and ceramics studios and saw how fellow students[“] and studio practitioners[“] produce their works. I observed that, apart from few sculptural pieces, a lot of the pieces are formed with solid surfaces or appears in solid form with a whole lot of attention given to the surfaces by way of decoration and finishing, either by cuttings, incisions, reliefs and or glazing the surfaces. This has remained as a tradition and conventionally accepted by almost all practitioners. These forms undoubtedly are still useful to the present day generation and the future but as happened in other areas of art, particularly in painting, where a group of painters lead by

Pablo Picasso(1907) pronounced monotony on the line and style of painting at that time, in the late twentieth century and brought about “cubism”, so do I feel and seeks to digress from tradition to bring about forming variation, which I termed as “twistism” in ceramics, whereas the attention would be on how to manipulate the clay by twisting strips of slabs and creating non solid forms out of that as well as weaving coils to produce ceramic wares. This studies shall research in to the area of twisting and weaving, making some inferences to the basketry industry which present a whole lot of weaving variation to fashion out products and designs that can be supported by clay. The makings of pots or cylinders with coils, is a continuous spiralling process with practice over time to produce accurately. As said by Desmond (2011), wrapping clay coils around in a circular motion, piling it on each other to attain a height.

1.2 STATEMENT OF MOTIVATION

The design and construction of huge decorative pots remains circular and spherical in form among ceramic artists in Ghana. In our Ghanaian domestic settings, pots have served as utensils and various purposes including beautification of homes, hospitals, hotels, parks and other lawns of magnificent buildings. However, observation of the aforementioned places reveals that most of the pots used are spherical and circular in form, featured by monotonous shapes and a whole lot of surface attention such as incisions, relief, cuttings and glazing. These ceramic pots have always presented solidness in their form, therefore creating the notion that ceramic art wares are not more than pots and such circular and spherical forms. The art of producing non solid spherical or circular ceramic wares remains

an unexplored area. This phenomenon of producing solid spherical and circular forms therefore creates the opportunity to design and construct decorative ceramic wares through twisting and weaving approach.

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1.3 OBJECTIVES OF THE STUDY

The study has the following objectives:

1. To develop twist and weave design concepts from natural and artificial scenes particularly plants
2. To create ceramics forms with self-decorating surfaces by twisting and weaving concept derived from nature

1.4 STUDIO PRACTICED QUESTIONS

1. In what way(s) can design concepts be developed from natural and artificial scenes particularly plants?
2. What are the possibilities of creating interesting forms either than spherical and circular ones worthy of any aesthetic quality, through twisting and weaving approach?
3. What kind or sort of reinforcement is needed to support the twisted or woven works?

1.5 DELIMITATION (SCOPE OF THE STUDY)

The study is limited to the exploration of twisted and woven forms in nature to produce decorative and monumental pieces for indoor and outdoor uses.

1.6 IMPORTANCE OF THE STUDY

1. It would affirm the fact that clay can be twisted and woven into intricate and interesting patterns.
2. It would contribute to an alternative way of approach to hand building of ceramic wares or add to the known basic hand forming techniques which are pinching, coiling and slab making.

1.7 THE DEFINITIONS OF TECHNICAL TERMS

Twisting: the act of turning the direction of a straight strip of slab to alternate the flat side against the edge

“Twistism”: A term coined by the artist to describe a technique of twisting clay strips to form or build wares, which is the combination of coiling (rolling) and slab making.

Fettling: the removal of excess slip accumulations at the joins, lumps, projections,

Soaking: the act of adding excess water to dry clay with lumps to loosen to able to go through a sieve (mesh)

Pugging: the use of a machine called a pug mill to blend clay into a homogenous mass to suit workable state

Extrusion: when a pug mill is used to draw out indented shapes like tiles, pipes etc. With a die at the exit is termed extrusion

Coiling: the rolling out of clay ropes with the palms on a flat surface

1.8 ORGANIZATION OF THE STUDY

The rest of the study has four chapters. Chapter Two discusses review of related literature which includes both empirical and theoretical reviews. Chapter Three also looks at the material and method, while Chapter Four gives a detailed account of the results and discussion. Summary, conclusions and recommendations are presented in Chapter Five.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2 Overview

In the area of every study, there are contributions to the growth of that particular field, in the area of inventions, discoveries, findings, theories, and counter disproval"s etc. by

subsequence peoples” studies into such areas. In view of this; the artist shall attempt to review some portions of ceramic art literature to contribute his quota.

Due to the vast nature of ceramics, the following areas shall be reviewed which is very much related to the project topic under consideration.

1. Twisting and weaving techniques
2. Art and creativity
3. Concepts and philosophy
4. Contemporary art
5. Production techniques
6. Monumental ceramics

2.1 TWISTING AND WEAVING TECHNIQUES

Twisting is the successive repetitions of turns of a strip of slab coupled with rolling. Coulter(2011) demonstrated that by the use of an extruder with a die at the exit of the extruder to extrude slabs, while the slab exits the die with one hand. He turns the slab in an alternative direction twisting the slab, but Coulter (2001) sees the human body to exhibit a lot of twist in movement and in postures, for instance when one is working, the foot and hands moves in opposite direction, whereby the upper part of the body would twist or turn

to the direction of the foot forward to create a balance. When a person turns the upper part of the body to the side, there is a twist at the waist. The body shows a lot of twisting postures at the various joint which include asymmetrical postures that are not pure side bends. Scott (2009) also demonstrated twisting, by putting together coloured strips of slabs, piled together and turn it round for the colours to go off their straight line, thereby forming twist of coloured strips.

In the area of architecture, Vollers (2001) have designed storey buildings by incorporating twisted columns and twisted metal stair cases to high heights on a small land area.

Weaving is achieved in ceramics by the use of coils, which is simply the in-and-out movement of coils around clay stakes termed as plain weave or basket weave by Tod (2012). The difference between cane basket weave and the clay basket weave is that, cane does not give a single unit joint as in the case of clay. This type of weave, the in-and-out, is predominant with hairstyle plating and commonly called braided weave

2.2 ART AND CREATIVITY

Art is a form of human expression and the reflection of the ideology of the society it comes from or that of the artist and Creativity is thought of as being constructive, productive behaviour that can be seen in action or accomplishment (Viktor and Lambert, 1982). Art therefore is in close communion with the spirit of the people it comes from, it reveals the people life and their feeling with the greatest finesse and richness and the significant reaction to nature and the physical reality. Many a time elevated to the symbolic realm, the understanding of symbols are integrated in the appreciation of sacred and traditional art,

for symbols manifest both truth and beauty, through their teaching and meanings can be sacred. (Burckhardt, 2009)

Art is a skill in making or doing that which is socially used or intended as stimulus and guide to satisfactory aesthetic expression often along with other ends or function, especially in such a way that the perceived stimuli, that is, the meanings they suggest or both are felt as beautiful, pleasant, interesting, emotional moving or otherwise valuable as object of direct experience, in addition to any instrumental value they may have. Also, products of such skill; this includes every product of the arts, socially recognized as having aesthetic function, such as architecture, music etc. whether or not a particular product is considered to be beautiful or otherwise meritorious. Briefly, art is a skill in providing sensory and other stimuli to satisfactory aesthetic experience. It is the tangible representation or the expression of one's imagination. (Sparshott, 2014)

Art is the expression of one's inner feeling through a medium, expression, for Dewey is not for externalizing the internal; it is not strictly pressing out what was present in complete, pre-existed forms, as opined by Levi and Ralph (1991) it is an emotional discharge, that is the discharge of our impulsive behaviour, the act expressing inner agitation which must be clarified through a medium.

This expression of art as conceived by Low (2000) has a metaphysical tinge to the claims that the inner lenses of art must be recognised internally before being expressed for external consumption. This inner recognition is very much like Maslow's peak expression, which

has to be conceived as myths of longing and experience, which are the ingrained of the artistic medium as the communicable expression of the artist in our arsenal of concept.

Creativity is the instinctive will power or the urge to explore, investigate, discover and display ones hidden abilities and ideas, in the translation of these abilities and ideas into tangible object is art. This natural instinct of man plays an important role in the development of creativity. The most important factor which would influence creative development is the prevailing environmental conditions. The environment in which a person finds him or herself to a very large extend would be a factor to the growth of creativity, if the environment is supportive of creativity the individuals creative urge would keep rising and developing but without the support of such an environment this ability would keep declining. According to Viktor and Lambert (1982), we should not be troubled about motivating ourselves for creative behaviour, what we should be aware of what are the psychological and physical restriction that the environment puts in the way of the developing person to exhibit his own natural curiosity and exploring behaviour.

Creativity brings about variations, divergent views, alternative approach, therefore varied solutions to a single problem. According to Morgan (1996) in his book, art into ideas, whether creativity is gifted or must be learnt, says, genius is the talent or natural gift which gives the rule to art, art and creativity have always been closely entwined. For years the art has been the bastions for creativity, and often art experiences and creativity have meant the same thing. However, with the increasing interest in creativity and the great number of research studies in this area. It is becoming quite clear that it is possible to have an art programme not automatically creative in nature. As creativity is becoming of vital concern to many people, we need to understand the process involved in developing the creative

thinking abilities of artist. There is no doubt that this area will be of increasing concern in the future as society turns towards the unknown. Art can play an important part in this field. In fact, it has been suggested by Hoffa (1964) that the intensive experience in the arts should be a basic tool of education to promote it, is of interest to increasing numbers of people in the arts. Society values what Morris (1969) has called man's insatiable curiosity, his inventiveness, his intellectual athleticism. According to Stenhouse (1967) it is pre-eminently the task of art practitioners to induct people into the field and nurture their creativity to preserved and indeed enhanced future practice.

The activity which generates an artistic experience is the activity of consciousness. It rules out the theory of art which places its origin in a sensation or emotions in man's psychical nature. Its origin lies in his nature as a thinking being. It also rules it out from intellect as an origin and makes it something to do concept. These theories may be considered as being protest against the other, for consciousness, it is a level of experience intermediate between the psychic and the intellectual, art can be referred to as either of these levels as a way to say that it is not referable to the other.(Collingwood,1937)

Hauser (1982) in his book, the sociology of art, stated that the production of works of art is depended on a socio-historical process on a number of diverse factors. Which is determined by nature and culture, geography and race, time and place, biology and psychology, economic and social class, none of these assertions in them consistently in the same sense; each acquires its particular meaning according to the context in which it appears with the other factor of development. The constituent parts of an artistic whole work, whether it may be an objective product or a subjective one or experience belongs partly to a class of

natural ,constant or a relatively constant phenomena and partly to the class of cultural, social and historical change of phenomena.

Creativity in a nut shell consists of two factors namely variable and invariable factors, in a process of creative exploration the factors involves are dependent and independent of each other. These factors are more intangible and expressed without words, such as emotions and consciousness. Emotional stress can influence creativity, which could be considered by the level of pain, sadness, grief, anger, love and happiness that the artist experienced during certain periods of time. Creativity can also be affected by personal enthusiasm and interest and Thompson (1994) cites an example in painting as the ability to select the point of interest in a given scene is difficult to the untrained eye, but is enhanced by observation and selective sketch.

The ability to break traditional boundaries in term of ideas, rules, patterns, etc., by deviating from conventionalities and creating meaningful new ideas, forms, methods and interpretations, says the main concept of creativity. It is of great interest for the artists to know that, art should be seen as a subjective expression rather than having connotative agenda, requiring a medium or an object of expression.

2.3 CONCEPT AND PHILOSOPHY

Concept is a suggested or definite meaning behind a subject or an object. The thinking that employs and expand conceptions and notions simply suggest inferences and judgment uses the meaning and this also corrects and widens them. In our various communities, we live

with notions and ideologies held by generations after generations resulting from the belief of the people. The rationale behind this belief and the reverence given to them, in terms of meaning creates a concept, as mention by Sire (2004) that notions held by these communities are strongly opposed by religion, thereby hindering and taking away certain concepts and beauty of the arts. As suggested by Windt (2015) concept is the phenomenology of self-experience in dream and its relation to the experienced world of the artist. Eric and Stephen(1999) also have the option that concept is attained through instance encounter which can either be positive or negative encounter with nature, for instance in admiring the environment or the vegetation, an idea got from that with an explanation to support it as held by the artist is a concept.

In an attempt to realize an idea from the world of imagination to the world of tangibles, to produce an artefact must start with inspiration, in a creative act, there is a force that edges on the artist to create the object with some energy. The motivation to work on a project must be strong enough to come out with the best and desired result. This driving creative force should be seen clearly in the final production. The muse for this artist is climbing plants.

Design concept is an abstract vision that ought to be realised or needs to become tangible. Ans (nerves) have important key to produce a concept which lies in our innate ability to project a mental image into the gaps left by partial information, by brainstorming with holistic methods of analysis and thinking. Some German psychologist like Max, Kurt and Wolfgang established a school of thought that argued, that human being have inborn abilities to organize perceptual information and experiences based on the needs for all humans to make sense their world around them and generated a brief that, the whole is

greater than the sum of its parts. Which has established the notion that each human assembles sensory experience by perceiving them in their entirety rather than disjointed parts, by the gestalt school of thought, (Aspelund, 2006)

In some cultural settings, the origin of their culture and the philosophy behind some traditions came about as a result of what, they conceptualised as certain acts of some sex or gender for that matter, which gave rise to the division of trade among the two genders. For example, the people of *kwoma* in New Guinea, consider males as killers and creators because killing in the battle involves a lot of creativity, has been conceptualised as an exchange of fertility and is also the explanation of the fact that, the military enemy is often represented in myth and other context as an affine, especially a wife on the other hand, this concept of fertility exchange between two independent political groups is marriage.

Creativity is not just about being creative or not, or constructing creatively, but simply thinking of every response as creativeness, particularly providing solutions or alternatives. Design task well prescribed for execution is also an avenue for creativity harness, a prescriptive process that students cannot help but respond to, creatively. In this sense creativity is the natural outcome of committing to a defined process, and crucially the course provides the necessary framework for that commitment. Creativity should be seen as an engine to produce diversity rather than a gift to produce originality. What is important is to teach good techniques, to establish design processes that are easy to understand, for the development of the wider public.

In the design process, creativity is often seen as a characteristic of event occurring as an outcome significantly. This outcome of event in the process, edges one on to make progress step by step, thereby exhibiting a „creative leaps“. Sometimes such an event occurs as a

sudden insight into the artist environment, which the artist or designer immediately recognises it as significant, but often it is only in retrospective.

The artist (or an observer of the design process) is able to identify a point during the design process from which the key concept started to emerge. Retrospective accounts of creative events in design made by the artists themselves may not be wholly reliable. However, some recent descriptive, empirical studies of the creative event have begun to throw more light on this mysterious and often mystified aspect of design. More of these independent studies of creativity in design are necessary in order to develop a better understanding of how creative design occurs. Studying creativity or designing can be problematic because there is no guarantee that creativeness would occur during a design process, and because of the difficulty of identifying a solution idea as creativeness.

In every design projects, creativity can be seen in the end, if not in the apparent form of a distinct creative event and then as the evolution of a unique solution possessing some degree of creativity. In creative process artist can also explicitly manipulate their ideas which helps to provoke more creativity and bring about newness. They employ variety of techniques to ensure this newness, such as searching for technical, behavioural or cultural factors that were not addressed in the design of the current product. The artist then decides what to do and when to do it, on the basis of a personally perceived and constructed design task, which includes the design problem, the design situation and the resources (time) available, as well as the artist own design goals. The creativity of the design is thus influenced by all these factors

Personal creativity (inventions) and historical creativity (existing knowledge) where the latter type represents genuinely unique insights that occurred as the first-ever individual in

history known to have the insight, but the re-occurrence of the idea independently in the minds of different artists suggests that somehow it may be an easy step in originality

Information and available data on the problem or activity may spur similar creative concept and suggest the outcome of a creative event in design. It is not so much a creative leap, from problem to solution as the building of a bridge between the problem space and the solution space by the identification of a key concept. Our observations would confirm that, creative design involves a period of exploration in which problem and solution spaces are evolving and are unstable until (temporarily) fixed by an emergent bridge which identifies a problem and solution put together.

Creativity or creativeness occurs at a moment of having insight of a problem or challenge with solution perceptiveness, at this stage a paired frame of mind is formed. Expert studies and outstanding masters of design suggest that this mind framing ability is crucial for higher levels of performance in creativity, like Aspelund (2006) in his book, design process, said an effective tool for gaining extra insight into the development of concept is by the SCAMPER technique to ascertain the pros and cons of your concept;

S – Substitute

C – Combine

A – Adapt

M – Minimise / Magnify

P – Put to other use

E – Eliminate / Elaborate

R – Reverse / Rearrange

The result of this exercise puts the concept in another perspective for improvement.

Surprise is what keeps an artist or a designer from routine behaviour. The surprising parts of a problem or solution drive the originality streak in a design project.

Evolutionary processes in the natural world is often seen as driven by a reaction to a surprise (change in environment), rather than a gradual changing of a phenotype and genotype in an ever closer approximation to an optimum in the fitness function.

Creativity in the design process can validly be compared to such „bursts of development.

2.4 CONTEMPORARY ART

It all begin in the 1950s when the discourse on modern art in the western world spearheaded by the US art critics, Clement Greenberg and in the 1960s, Michael Fried supported by the Museum of modern art in new york as well as journals like Partism Review, took to modern criticism and exhibited a formalist approach to art which held the integrity of the individual medium of painting and sculpture. (Tourtillot, 2003)

As stated by Tourtillot (2003) that, it is always good to take it faithfully, such as accidents, mistakes, damages as an opportunity provided by the unexpected to alter and play with the forms and explore to result in new forms, styles and techniques, for contemporary means producing what would be interesting, useful and acceptable to the present times. These basic techniques in the production of ceramics which would be relevant in this time and future cannot be under estimated. These known basic techniques of forming objects, which

are pinching, coiling, slab making and throwing used, with the innovations and contributions of individual artist results in contemporary forms, methods and approaches have resulted in the changing trends of the ceramic industry. Throwing on the potter's wheel is made to attain circular forms, but changes can be made to manipulate the form while they still maintain their purposeful form but provide variety and style. The altering of forms should not be done with obvious consciousness primarily to achieve a purpose which would not result in a planned afterthought. Hopper (2000) explains that as soon as one changes the form in any particular direction or movement, the relationship between basic principles such as proportion and balance are affected. It becomes obvious that, mutilated and manipulated thrown wares can be used to create more contemporary designs in the areas of ceramic sculpture and other monumental ceramics.

The development of new techniques, innovations and different approaches to hand formations, as earlier stated, unexpected outcomes or accidents resulting from forming, finishing, firing stages etc. collectively to me are resultant defects, can be the bases on which contemporary advancement can take a leap in the field of the arts. As explained by Phillips (2012) that the surface topography or surface texture results from the packing of grains or clay particles. The microstructure depends on the forming technique used. Some techniques would disperse the individual particles while other forming techniques would agglomerate the individual particles into large granules, these particles arrangements coupled with the ultimate forms and shapes under all kinds of stress and strains would contribute to these resultant defects. In all of these attempts to achieve results, sight should not be lost of the fact that „aesthetics“ is maintained as a hallmark of contemporary times. Uniqueness in terms of style and the appreciation of developing trends in the industry gives

rise to modern approaches. There is the argument as to how the classification of some artefacts be put conveniently to the satisfaction of all. Art critics or the criticism of art at the centre stage of this argument have not yet been able to put to rest, what is and what is not contemporary art. Minissale (2013) says some critics think that contemporary art is what produced „today“ in any part of the world, including „recent“ works of the last thirty years, one reason why the period is imprecise is that a work of art produced a decade ago still seems to be „relevant“ fresh and important, can be referred to as „contemporary“. This is subjective and arbitrary in that, some might have the opinion that only works produced in the last ten years should be considered as

„contemporary“. Latissa, King and Kataoka (2014) disagree that if contemporary would mean art made in the present, then would include everything, experimental art made for it seek would be contemporary then would include locally celebrated exponent of heritage art and craft

There is still the argument by some people as to where to classify some of the modern art works as it should, because of the diversity present in their style but provides a platform that it should not be discarded outright but be allowed for further description and rather be subjected to more criticism to determine it's faith or otherwise. Tourtillott (2009) confirm that many contemporary arts including ceramic sculpture has a wide range of formation and approaches. These have been made possible because of the ceramic sculptors have been inspired by the abstraction of forms and a wider view into nature to capture inspiration.

Although prehistoric artefacts were made for several purposes including domestic, magical and rituals, the producers of these arts as were concerned, remained subjective with unique

undeniable appeals. Criticism has played a key role with the way propagation of the arts should be done and the appreciation of modern art, however, criticisms have made sense and it is no excuse that the interpretations of the arts have been enhanced, despite many artists find it difficult and yet have to explain the philosophical content of their works. Inspiration arise curiosity in the mind and ideas that are generated gives insight into thinking of ways to conceive and produce an art piece. Quinn (2007) explains that, developing concepts for our work is very important and useful. The concept would act as a guiding principle or philosophy behind the work, allowing you to base all your decisions on a single, coherent belief.

Windt (2015) beliefs that contemporary art should be the reflection of current issues of the society because advancement of the society happens through art and their constituents are therefore more interdependent with a healthy economy within a country, as an economy can thus benefit and thrive more from a healthy cultural sector, the parent of tourism, ideally in connection with global networks of local centres of contemporary art. Ernest (2012) states that, a lot happens to the artist, through his immediate environment, including political and economic, as a result the contents of the art may largely be traced to the happenings in the society of the modern artist. Modern art, therefore, is to a good extent, a reflection, depiction or reaction to societal issues by the artist. Du Cros and Jolliffe (2014) narrated how the different eras in the development of arts events are reflections of society and how the artist views these changes and plays a role. For instance, examples drawn from the history of cities branding, museums and events, cities like London, Edinburg, New York, and Paris, spells out history of these cities. Amitabh (2014) is with the view that global exchange of ideas and information are part of life and changes have an essential

character of selectivity and reason, where the visual arts are part of these agenda. Again the arts reaches the society through informed audience who is fond of not only seeing art but also creating discourse, the audience with the responsibility of appreciation and criticism, paves way to consume these arts.

Arnold (2010) says that, some postmodernism conforms partly to contemporary demand, in reality to all of these with conflicting descriptions. It is only what is being conjured up as, thus, it happens simultaneously among other thing, a style, an approach, a trend, rejection a slogan, phenomena and a period. Where we put our money is different, which would be ultimately decided by the critics amongst us and not a genealogist. Hung (2008) is with the opinion that contemporary art does not pertain to what is here and now but refers to an intentional artistic and theoretical constructions that asserts a particular temporality and spatially for itself. This temporal (time) and space (period) assertion can be mapped in terms of the art medium, subject matter ,exhibitions ,calculations and with a trace to the people and the institutions involved in the creation and promotions, which would help to understand the general realm of production, exhibition to define contemporary art.

2.5 MONUMENTAL CERAMICS

The production of early ceramics centred around utilitarian wares, figurines and later with the coming of industries, architectural or structural products like brick and tiles. The production of huge pieces is not popular as in sculpture. In the early Islamic days, their ceramic knowledge tilted towards their places of worship centre (mosques) where these buildings had long erected portions, in monumental style. (Coote and Shelton, 1992). These

building have become architectural monument telling the stories of ceramics of the Islamic world. In the early stages of the Chinese cultures, where figurines were placed in the tombs, to the dead are also referred to monumental ceramics as mentioned by Flynn (2002). In the 18th century, some mural monuments were put on the exterior walls of churches in Ireland and Britain, such monument also appeared on continental churches and mural monument reflects a degree of the social status greater than the overwhelming majority of contemporary memorials. (Mytum, 2004)

2.6 DESIGN PROCESS

Aspelund (2006) liken design process to a romantic relationship. The first stage is inspiration, where an idea is conceived. Anything that excites and interests you and is full of fun and sets in thinking, you contemplate over events and your ideas may follow, taking it everywhere with you. You dare yourself to risk and act with impulse.

Secondly, Identification stage, where the idea becomes an understandable entity with definite parameters. The abstract form of this initial inspiration begins to form recognizable and definite ones. The identity of an idea is formed and acquires a character of its own.

Thirdly, the conceptualization stage, the idea limitations and possibilities becomes obvious, therefore becomes a specific one and hence a concept created with its own characteristics.

Fourthly, exploration and refinement stage, where boundaries and structures are to be established, the implications that exist here is that, when the idea is conceptualised becomes

fixed at this stage. Designers must therefore keep to these boundaries and structures in order for the relation with the concept to continue

Fifth, definition and modelling, at this stage you begin to build on what you have discovered so far. Here is where the experience you have got and with what you have discovered about your idea are used to create a form in the best possible design for the

situation.

Finally, production and communication, attention is now turned to the details involved. At this stage the designer works with decisions made already in terms of communicating the ideas to the outer world. The details dressing of the form can be difficult and require some compromise. If these details are seen as a source of inspiration, makes it easier and interesting to achieve. To achieve this, one should have a design as a total sum of its parts with each detail element contributing to the whole design.

2.7 DESIGNS WITH RESPECT TO SHAPE

The usage of an artefact informs or gives limitation to the size and shape, despite these, limitation there is more room to shape variations. Correct proportioning of an artefact, is one good attribute of design. which is based on the component or parts proportion such as the neck or the top proportion, the middle or midsection proportion, the handles, if any, the foot or the base. The proper distributions or a well-balanced application of these proportions would result in a pleasing and an aesthetically accepted design.

2.7.1 LINEAR PROPORTION

This ratio of proportion compares two figures or extremes to come out with a unit product of optical or mechanical balance. The aesthetic qualities of an artefact is greatly enhanced by its appearance, when the elements of design are applied interactively and well related, for example, this work below with a height of seven (7) feet or 210 centimetres, built in four sections with four columns. Figure 13, entitled the spiral web.

The heights of the four sections:

Base section 72cm

Middle section 53.5cm

Top section 86cm

Head section 30cm

By these divisions and proportions, the height of the head serves as a unit of measurement for the whole piece, because it fits into the piece proportionately, in terms of the height one head is to seven. These ratio relationships, if well organized and distributed gives the eye a feeling of orderliness unconsciously. These relationships may not be mechanically exact but should not be optically obvious with uneven proportions.

2.7.2 AREA PROPORTION

According to Norton (1956) area could simply be laid out with the aid of a knotted cord, area proportions were carefully followed by early Egyptians and the Greeks. The usual

ratios are $1:\sqrt{2}$, $1:\sqrt{3}$, $1:\sqrt{5}$, and $1:1.618$ (the whirling square). These proportions may be readily laid out by starting with a square and rotating it diagonally down to the base. The whirling square is particularly interesting because it is closely associated with growing things. The $1:1.618$ ratio of length to width occurs in the Fibonacci series of numbers 0,1,1,2,3,5,8,13,21,34,55,89,etc. where each number is the sum of the two preceding ones, and any number divided by its predecessor gives approximately 1.618, for example 89 divided by 55 is equal to 1.6181818. This proportion is found in nature with leaves, seeds, etc. A good example is the sunflower head. To divide a line into two parts, so that the ratio of the smaller is to the larger as the larger is to the whole, we find the same ratio of $1:1.618$, called by the Greeks the “golden mean”. This division was not only used by the Greeks but painters also. In dividing a line harmoniously into 3, 4, 5 or more and the greater the divisions the more closely the ratio approaches $1:2$. Many paintings on Greek vases show a height-to-width ratio of $1:\sqrt{2}$. Hambidge did analysis on the structure of many Greek vases, where the unit of design is the root-two ($\sqrt{2}$) rectangle.

CHAPTER THREE

MATERIALS AND METHOD

3 OVERVIEW

In the production of ceramic wares several techniques and methods are available to the Artist to employ, singularly or in combination. The two main categories of ceramic wares

fabrication known are hand formation and wheel formation; there is also the two main arena of production in the field of ceramics namely the studio arena and industrial arena and each of these call for different approach and production techniques. This project work shall put emphasis on the studio arena. In studio ceramics much of the production centres around house hold pieces such as utensils, pots of all kinds, monumental ceramics and some ceramic sculpture, while the industrial arena production, centres around buildings or structural accessories like bricks, tiles, sinks, water closet etc.

This chapter would discuss the methods and processes used in the execution of the project pieces and explanations of the concepts and philosophy behind the creation of the project piece.

3.1 IDEA DEVELOPMENT

Nature as the store of knowledge and the source of man's inspiration for his developmental needs, man discovers what nature has in store. Whether scientist or artist Shlomo (2006) has put forward that, humans are creative species. Whether in science, politics, business, technology or the arts, we depend on our creativity almost as much as anything else to meet the demands of daily life. Ideas are gotten from our everyday activity and interaction with nature. It is necessary for the artist or designer to reinspire himself or herself throughout the process, for inspiration keeps the idea for a design moving. One should be aware of the tendency to get tunnel vision, for instance, if you are a ceramist to produce bowls, do not exclusively seek inspirations from the field of ceramics or clay works but look into other areas like architecture, wood work, painting, music etc. because inspiration can come from anywhere for the project. Shepherd (2011), advance that an idea is a creative expression of

ones imagination through a medium, an idea is a thought conceived in the mind, when one seeks to produce an artefact or a clue as to how to come out with a product. Duncan (2014) wrote that an idea is an outcome of a different approach to a problem. The idea of the artist is coming from the climbing plant. The artist got fascinated at how a string of a plant would attach itself to a tree for support to grow and grows spirally around the tree trunk, for example liana, vines, yam stock etc. Then the question which came to mind was, how can this climbing plant survive without the support of other plant, with several experimentation with clay by forming coils and winding it round a cylinder and forming a meandering shape on the table and allowing them to dry up, just to replicate what was seen in nature, taking a strip of slab and twisting the edges to face different direction which were also allowed to dry vertical. Some of the twisted clay strips were rounded to form circles and the other coils were woven by using three pairs of clay ropes (coils). Afterwards several sketches drawn and some selected to execute the project works.



Figure 1: source of inspiration

Figure 1 above is a tree trunk which inspired me to come out with this twisting and weaving techniques.

The following are selected sketches used to develop the basic unit or the building unit for the project execution.



Figure 2 : Selected Sketches

After several manipulations by twisting, turning and rolling of the strips of clay slabs, a technique evolved, termed by the artist as twisting, then basic units were developed and used for the building as shown by the following figures 3 and 4.



Figure 3: basic unit prototypes



Figure 4: basic unit prototypes

Prototype pieces of the works were made to ascertain the possibility of the clay to survive the twisting and to see how effective joining can be done; after successful proto-type works were done, large pieces were then built

In the execution of these large pieces, a lot of planning and thinking went into the process. First of all was how to build with a concept to give meaning to the works to be produced. After having been inspired by a climbing plant and conceived the idea, realising this idea was the next thing to deal with.

3.2 PRODUCTION

The field of ceramic art has several production techniques but categorized into two broad areas namely industrial or mass production and studio techniques. This project would limit itself to the studio production techniques, basically all the industrial techniques are practices in the studio, when these techniques are machanised or automated to eliminate or reduce human interventions to produce mass numbers within shorter lengths of time then it becomes an industrial technique, which therefore means as and when a studio practiced technique evolves and automated to facilitate mass production there comes an industrial techniques, for this reason one can say that ceramic production technique is any distinct means by which clay can be fashioned or fabricated into products. As stated by Baharlou, Eshan et al (2013) that some ceramic architectural designs can be produced by digital fabrication.

In the studio production, the techniques employed basically are pinching, coiling, slab work and throwing; these techniques are also referred to as hand forming techniques. The formations of studio products are by the hands by employing one of the above techniques.

Pinching is considered as the earliest known and a fundamental forming technique. The use of the fingers to fashion out articles by pressing the clay to a desired shape, as defined by Peterson (2003) states that by indenting the thumb finger into a ball of clay with 2cm base thickness and squeezing the clay between the thumb and other fingers with a firm and even strokes, repeatedly to achieve thin and even walls. Kathy (2000) also defines pinching as a simple manipulation of a fist-size lump of clay by indenting the thumb into the centre and pressing to make thin the clay walls and shaping it desirably.

Coiling is the wrapping of clay ropes around itself, stacking the coils to a height and adding new coils as necessary, (Kathy, 2000). Coiling is the rolling of clay on a flat surface or rubbing clay between the two palms. This hand build technique was largely and greatly displayed by southwest Americans and the pre-historic Jomon of Japan as well as other neighbouring cultures, where patterns were stamped on the joints of coiled built vessels as done on the Anasazi vessels of the south-west Americans. Peterson (2003) added that slabs are either cut or sliced directly from a block of clay or rolled out to the desired thickness and work on, at the soft state or allowed to get stiff depending on the taste of the artist. The technique the artist developed and adapted by the art, which he termed as twisting was borne out of the combination of coiling (rolling) and slab making where as a strip of a slab is twisted and enhance the alternation of the edges of the slab strips

3.3 TOOLS AND EQUIPMENT USED IN CLAY PREPARATION

Shovel or Spade – used in collecting the clay from the pit

Wheel barrow – used in carrying the clay to the bench

Pug mill – used in the breaking and blending clay lumps into homogenous state

3.3.1 PREPARATION OF CLAY

The clay is brought from Nfensi and put into the clay pit and prepared in batches for use. The preparation of the clay starts at the clay pit, where water is supplied to the pit by the connection of water holes (pipe) to a water tap to dampen the clay which has completely dried up. When the clay is damp enough, it is carried and heaped on a bench. The clay on the bench is cut into small sizeable lumps (palm full) and drop into the machine called pug mill to break and blend the clay into homogenous state, this machine has a rotating shaft with tooth projections enclosed by two semi-circular thick metal, sheet taped at one end to exit the clay in bars. After the clay has been extruded as clay bars, they are stored boxes lined with polythene sheets, well covered up in air tight manner to prevent the clay bars from losing their moistness to the atmosphere and subsequently drying up. At this stage clay is ready for use but in a situation where the clay is not plastic enough, it is allowed to stay under the polythene sheet covering for some time assume plasticity termed as ageing.



Figure 5: pug mill



Figure 6: pugged clay

3.3.2 PRODUCTION OF BASIC UNITS OR DESIGN UNITS

Tools used to produce the basic units;

Sack board: it is a wooden board wrap with jute sack

Rolling pin: a cylindrical wooden bar for spreading out clay to form slabs **Guide sticks:** two equal strips of wood on which the rolling pin runs to determine the thickness of the slab.

3.3.3 The slab making procedure;

Step 1: knead the properly to get rid of all possible air pockets

Step 2: put the clay on the sack board and spread it out on the board with your palms

Step 3: put the guide sticks on both sides of the clay which are 15mm thick

Step 4: take the rolling pin and press on the clay to get to the guide sticks, roll outward and inward to spread out the clay in the thickness of the guide sticks

Step 5: with an extra piece of clay, fill up the top and bottom portion which would roll out narrow, roll over the slab again to level out and merge properly these extra bits, there you have a slab

Step 6: marking out of the required size of the slab strips on the slab, which is 5cm wide apart and cutting them

Step 7: after having your strips of slab, now one end of the strip is twisted, rolled out in portion after portion several times to get the whole of the strip twisted, if the intended shape to be produced has curves, then accordingly put the twisted strips into the required curves. These basic units are the building blocks for the construction of any indented design as shown by the following figures.



Figure 7: Basic unit vertical

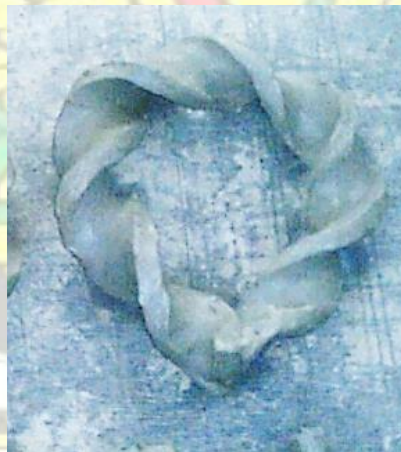


Figure 8: Basic unit rounded

3.4 CONSTRUCTION OF FORMS

To fabricate any desired form out of these twisted strips of slabs, first one has to determine the curvatures of the form as well as the straight lines, most importantly the curvatures. Then get your base at the leather hard stage, now score the edges of the base all round, if the form is a circular one, no external support is needed for the construction but continue to build, mounting like the normal slab building. To start building with the vertical twisted slab strips, you need to give an external support to the very first unit to stay upright to about the fifth one to be able to stay on its own, make sure you score both edges of the units coming into contact. Repeat the process until the whole base is covered round. This procedure is repeated at the next level to a desired height, as shown by the figure 9: below



Figure 9: External support for start

3.4.1 SECTIONS ASSEMBLAGE

It is the order of arrangement of the various components or the constituent parts of a large ceramic piece or a monumental piece to have it appear in its complete form. The situation that accounts for the building of pieces in units or sections varies from artist to artist. Some ceramic wares cannot be produced as a single unit such as a tea pot, murals, tiles and such intricate wares as mentioned by Glenn (2002). The firing facilities available to the artist also accounts for the number of units or sections a piece is to be put into, the functionality of the piece, easy of transportation, ease of installation, available space and height. This idea came about as a result of some French painters who described their collage works as an assemblage of different materials particularly Jean Dubuffet around the 1950s. Vishny,(2009). The production of ceramic wares in units or section can also arise as a result of the inability of commissioned artist to produce in-situ (to produce at the site) compels the artist to produce at more convenient site and transported to site for installation. The limitation created by the size of the kiln available to the artist or the inability of the artist to do firing in-situ irrespective of the height piece constructed. The next option available to the artist is to do the construction in sections.

The popular way to create these sections is to build the full height of the piece intended and then cut the piece into the respective heights at the leather hard stage, and then build an inner short wall, to create a step to guard the mounting section from sliding off position. This method mostly limits the sectionalisation into two sections particularly for vertical rising heights but no limit to horizontal or crawling lengths. To go beyond two sections in vertical heights, the artist employed a technique; he terms as continuous building by placing a sheet of polythene to serve as a separator between the first sections and the

next section for continuous building. First of all a step is crested as shown by the figure 10; below



Figure 10: Joint step

A polythene sheet is placed on the walls of the piece to prevent the next wall from sticking to the previous section underneath, thereafter building continuous. The figure below shows a polythene sheet in place at a sectional joint



Figure 11: Mounted joint

3.5 THE SPIRAL WEB

This piece of work was constructed from curved strips of slabs mention earlier as the basic units or the building blocks. Four curved strips are joined together as shown in figure 12, as the base and starting point of the spiral web



Figure 12: Spiral web base

Fabrication Processes (Spiral web)

1. Several rounded twisted units are formed and allowed to get leather hard
2. With your base as shown by figure 12 above, score the top with your hand fork and apply slip on the base.
3. Score the top of the next four rounded units
4. Place the four rounded units on the base, one on each of the base units.
5. Press down each of the unit to stick and join properly to the base
6. Repeat the process and continue to build to attain your desired height



Figure 13: The Spiral web

The spiral web (2015) hand built, height: seven feet, colour: pink and white

Slip painted finishing, electric fired (1100°C) *produced by Abdul-Rauf Yussif*



Figure 14: sun struggle



Sun struggle (2015), hand built, two piece unit with height, three (3) feet, Bisque fired (1100°C), Colour, Green and yellow, spray finished. *Produced by Abdul –Rauf Yussif*



Figure 15: Sun struggle (monumental version)

Sun struggle (2015), hand built, three piece unit with height, eight (8) feet, fired at 1100°C. *Produced by Abdul –Rauf Yussif*



Figure 16: Life columns

Life Columns (2015), hand built, bisque fired at 1100°C, Height 2 feet, 3in, Coloured red and white, finished in slip paint, produced by *Abdul-Rauf Yussif*



Figure 17: The Arc

The Arc (The curve of life) Constructed with vertical twisted slabs

The Arc (2015), hand built, bisque fired at 1100°C, Rise height 4 feet, span length

8 feet Coloured red and white, finished in slip paint. *Produced by Abdul- Rauf Yussif*

The Arc construction procedure

Step 1: roll out a slabs (tiles)

Step 2: Cut out slabs into rectangular tiles (a number that would fill up the arc line)

Step 3: Allow the tiles to get leather hard

Step 4: With the help of a rope with one end secured or nailed in place, make an improved pair of compasses; create a semi-circle or an arc.

Step 5: Arrange the tiles along the constructed arc to follow suit, correct flow of the tiles would form V-shaped gaps between the tiles as by the figure 18 below



Figure 18: V-shapes formed on the arc line

Step 6: Fill in the gaps between the tiles by measuring and cutting out the required shapes from surplus tiles of the same hardness, in other words cut out slab wedges

Step 7: Join one side of the wedge to the first tile and the subsequent ones, the gaps would be filled.

Step 8: Measure out about one inch border around as painted white in the figure 17.

Step 9: With your building units (twisted strips of slabs) ready, equal to the length of the tiles, score and join the unit the tiles

Step 10: Repeat the last step on the other side and continue to join the units“ alternately for the sides to join, rise and meet at the top to form an arc.



Figure 19: Unit sample tile of the arc



Figure 20: The Arc (twisted oval form)

The Arc (2015), hand built, bisque fired at 1100°C, Rise height 4 feet, span length 8 feet Coloured black, finished in slip paint. *Produced by Abdul- Rauf Yussif*



Figure 21: fettling and dressing on trunk and nest



Figure 22: trunk and nest

Trunk and Nest (2015),thrown and hand built, bisque fired at 1100°C, height 4.5 feet
Coloured black, white and red finished in slip paint. Produced by *Abdul- Rauf Yussif*



Figure 23: The mirage bottle (basket weave)

The mirage bottle (2015), hand built, bisque fired at 1100°C, height 2 feet 2 inches,
Coloured red, finished in slip paint. *Produced by Abdul- Rauf Yussif*



Figure 24: The mirage Bottle (braided weave)

**The mirage bottle (2015), hand built, bisque fired at 1100°C, height 5 feet 11 inches,
Coloured red, finished in slip paint. *Produced by Abdul- Rauf Yussif***

3.6 FINISHING

It is the final dressing an artist or a manufacturer gives to an artefact or a product. This puts the product ready for consumption by way of sales or otherwise. Jewitt (2004) is with the opinion that, finishing is the name preferred on the final details making stages of a products, it does not only prevent the product from stains, damages and other mishaps but also makes it look richer and deeply valued, add luster some personal dimensions to its outlook. Morgolis (1999) says that, the final attention given to a product to complete its make up to make it rich with diverse appeal to the consumer. There are so many finishing techniques employed in ceramics, but put into two major groups, namely glazed products and unglazed ones. The choice of which style to finish a product is the prerogative of the artist but certain functions of the product would call for definite finishing on the product, such as glazing. This project limited itself to the unglazed finishing techniques available such as coloured slips or engobe, stains, manganese touch, painting etc., apart from the above mentioned slips and paint applications on smooth surfaces, surface textures can be created as finishing as demonstrated by Anderson (2011) another form of surface texturing is surface cracking whereby the surface of a thrown pot is subjected to heat to harden it a bit and pushed outward to create cracks. This project is finished in unglazed techniques largely in coloured slips, with few manganese touch and oil painting. Before a successful finish is accomplished, a well and thorough cleaning up and dressing of product surface (fettling) must be achieved first, to have a good finished.

CHAPTER FOUR

PRESENTATION AND DISCUSSIONS OF FINDINGS

4 PRESENTATION OF WORKS

4.1 THE SPIRAL WEB (figure 13)

The spiral web piece is based on the concept of the whirl wind in motion, carrying along with it a piece of a jute fibre rope going round and forming this spiral shape and rising high and high. The piece is in three unit assembled together to attain the high with a star as a crown to terminate the eye of the viewer to be aware no matter how high the whirl wind travels it does not go beyond the stars. It has four erect pillars and each of the four represents the four corners of the world and tells that, whirl wind is not known to only one part or corner of the world.

4.2 SUN STRUGGLE (Figure 14)

This piece has a circular base with upright twisted strips of slabs to the point of two feet, from that point spreads out like a sun flower, each of these twisted strips represents a string of a climbing plant which has crowded around a tree trunk in competition with each other to climb higher to get access to sun light to complete its life process known as photosynthesis. In the human setting too many people would be attracted to a source where their livelihood is depended.

4.3 LIFE COLUMNS (figure 16)

It is a four column piece carrying two circles at the top with projections on each column, embracing the two circles that life is not lived in isolation but in a cycle; each of the four columns embraces the other. The concept and philosophy coming from the rain cycle, where the rain comes to replenish the vegetation and water bodies for the sustenance of life, after that the vegetation and water bodies would lose some of its moistness to the skies by evaporation and the cycle continues.

4.3.1 THE MIRAGE BOTTLE (figure 24)

A bottle is a container generally taken as a storage vessel for liquid stuff. The mere sight of a bottle far ahead of a any person upon approach suggest that, this bottle might contain some liquid stuff. This phenomena manifests itself visibly and clearly to a way farer on foot, on a road, tired and thirsty, sees far ahead of him a reflecting portion of the road like a small pool of water in the middle of the road, so this way farer sees it as actual water ahead to quench his thirst, but upon approach, this supposedly pool of water disappears and is seen again ahead. The recurrence of the sight of the water is a mirage. This mirage happening is the concept and philosophy behind the creation of the bottle in the form of a basket by weaving and twisting, the production of this mirage bottle is to make tangible this phenomena of water mirage encountered by this way farer, so the philosophy behind this mirage bottle is to demonstrate that when a person approaches the mirage bottle from afar would see a silhouette of a bottle and imagines is content to be liquid stuff or a vessel possible of carrying water but upon closer approach sees a bottle in the form of a basket.

4.4 THE ARC (figure 17)

A close look at nature reveals series of lines on display in different forms and directions. As a result, some meanings have been ascribed to the state of appearance of these lines. In the field of geometry, an arc is any part of the circumferences of a circle, in architectural sense, it represents a concave line between two points in a building structure, either as an entrance or an opening or a design on the wall. In the arts every direction of a line has meaning for instance a vertical or straight line signifies strength, horizontal line signifies stability, diagonal line represent insecurity or falling off. An arc in a convex form signifies warmth, like the hen using the wings to cover the chicken under its feet, so is the convex nature of the skies giving warmth to its inhabitants as well as a roof. A simple look at the skies from the shores of the sea and on a plain land, the skies forms an arc with the earth surface. When this line turns concave it becomes a receptacle, for instance the dams, which receives water from the skies, in volumes to store for longer times. The gourd when bisected becomes a three dimensional arc called the calabash, a good receptacle for liquid. When the surface of the earth is level and plain, we enjoy stability, on the other hand, when the land forms convex and rises higher mountains are formed which serves as pecks to hold down the earth from easy landslides.

4.6 DECORATION OF WARES

Both the studio and the traditional potter have been producing their pieces by throwing, slab building, coiling and casting. These forming methods have been used individually and sometimes, combinations of two or more techniques have been used in production.

The potter's wheel which was developed in Mesopotamia centuries back assists the potter in producing vibrant and eloquent pieces. Pot shapes produced using the potter's wheel has a sense of uniqueness in their forms which are predominantly circular forms that portray an image of completeness. The artist did use the throwing technique in producing the upper part the piece *the trunk and nest*. The employed technique (twisting) of production helped to bring out the innovation of the artist, necessitating the quest for critical observation. This however, was revealed through the invitation of people to criticise the work and it was clear when the critics sought to ask questions about the works. Despite that throwing gives circular forms, altering thrown pieces tend to reduce the monotonous appearances by incorporating some sort of deformational twist to the form.

Slabs in pottery can be used in production of intricate and basic forms. Slabs are used in making ceramic sculptures and pots, and they produce solid and circular surfaces. The traditional potter most conveniently and conventionally does pinching and coiling in their production, the studio ceramist mostly constructs his pieces with slabs. As exhibited in this project, the artist combined slab building and coiling technique for the execution of the works. In all, the artist brought out a style of his own in the constructions. A good mastery of the hand building techniques is critical since there are more ways of making forms using the slab building technique. On the other hand, the mirage bottle reveals the use of time and patience. The artist used the basic principle of making slabs and incorporated rolling to bring about creativity.

Coils are formed by rolling clay to form a rope-like strand either in between the palms or on a flat surface to have more lengthy ones. Coils are used by the potter in building small, medium and large size pottery. According to Glenn et al (2002), coil construction is the basic technique for ceramic sculpture, especially in combination with pinching and slab making. Building with coils creates more room as a technique in building ceramic sculptural pieces. However, coil constructions have different working approaches. The intended finishing of an object with coils solely, would help determine the coils thickness the potter would use. Finishing the surface of a coiled work is one of the critical stages that one encounters when forming. Coils can be finished by merging the surface of the coils to look like a slab work, solid and flat surface, and it can also stand out as rings or coils are joined unto one another.

According to Peterson (2003), coils can be extruded too. An extruded bar of clay by extension is equally a coil but for the use of a die as an aid to exit much smaller coils. This is just a way of employing the pug mill to facilitate mass production of coils.

4.7 FINDINGS

I have realised that the technique under consideration (twisting) is a sort of pre-form unit building, in that, one must pre-form the basic units and allowed to get leather hard before building can start, unlike slab or coil building which starts right away with soft clay, to a very large extend the tendency to be forming vertical or upright forms is very high. The formation of these units is tedious because each and every unit must be pre-formed (twisted) irrespective of the size of the pieces particularly large ones likewise, whereas with slab building a large one can be rolled to cover a substantial space. For now the little mechanization that can be employed to reduce tediousness is the slab roller machine to get slabs ready for the cutting of slab strips.

4.8 CHALLENGES

The major problem of this project execution was ware shattering; the piece which suffered the major shattering is the larger version of the sun struggle. This piece was built with irregular contour follow and as a possible cause, the irregular nature, intended to depict a tree trunk, suffered uneven or non-uniform drying and firing shrinkages. The two upper halves, which are hollow, suffered complete shattering while the lower section with a solid base had wide open cracks at the rim. The next hurdle to overcome was at the building or the construction stages were external support were necessary, which must be given to the basic building units before a successful building is achieved, in that, these units are vertical and cannot stay or stand as a single unit independently without external support, until a substantial number of building units joints together. Cleaning up or doing fettling on the

pieces were also not easy because the twisted as well as the woven building units created a whole lot of grooves, corners, intersections etc., as access to these places were difficult, all because no plain surfaces are formed with this building technique to have easy dressing, fettling and finishing. Painting with coloured slips or engobe was as well not easy, because all the grooves visible to the eye must be covered with the paint to avoid the bisque body colour showing elsewhere.



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5 SUMMARY

After a series of experimental trails with the conventionally known forming techniques, namely, pinching, coiling, slab making and throwing, further forming techniques explorations were carried out by way of the combinations of the above mentioned techniques, the artist was able to come out successfully in developing a technique for hand building. The interest of the artist has always been to find an alternative to the conventional style of finishing ceramic wares with plain surfaces. Apart from building with coils which gives a sort of lines or built linear designs by virtue of the roundness of the coils. These lines would have to be enhanced by cleaning up or clearing excess slip at the joins (fettling), notwithstanding this to achieve these lines, further pressing of these coils to solidify the joins, we arrive at the genesis of solid forms or back to it, which, somebody enhanced by coming out with slabs to have even wall thickness and faster way to build. This artist also sought to create a signature for himself in the field of ceramic. In this regard, he has successful combined two technique and developed an alternative hand building technique from the two most widely used building technique, namely coiling and slab making, which he calls twisting (twistism).

5.1 THE SPIRAL WEB

It has a concept coming from the whirl wind during the dry season, as the wind whirls carries away a variety of light objects such as paper, polythene, cloth pieces, ropes etc., sometimes in a very fast motion on a spot, with a careful observation of it , one sees that, these objects flows in a particular direction and rhythm of winding and rising the into the

atmosphere varnishing. This artist sort to depict this natural happening through the medium of clay as his basic raw material, the stars at the top there, represents the skies, a limit or a point beyond which, the whirl wind cannot go, as applicable to all natural occurrences on the surface of the earth.

5.2 THE SUN STRUGGLE

It has the concept gotten from the climbing plant, which seeks support from a close by tree in a cluster of trees depriving it of adequate sun light, as a result of the branches of the tress forming shadow over the climbing plant. In an attempt to access enough sun light to complete its life process. These climbing plants by virtue of their nature attaches itself to the trunk of the tree and grows round it and climbs high up to access the right amount of sun light to survive.

5.3 CONCLUSION

The project looked at the possibility of providing an alternative to the conventional way of building ceramic wares / pieces particularly the solidness in their form; so as to break the monotony of solid forms and present forms with surfaces which have self-decorating appeal. To demonstrate the inherent plastic property of clay can be harnessed to provide the opportunity for the ceramic artist to be more versatile with his / her raw material (clay). In this regard the artist objective to provide an alternative has been successful by twisting and weaving of clay.

5.4 RECOMMENDATIONS

The little way or thing to do to reduce the number of days of fabrication of twisted and woven pieces is to put the basic units on Plaster of Paris (P.O.P) mould to speed up leather hardening. I therefore recommend that a possible way be looked into how to develop a mould to press these units as an intermediate means while a mechanization solution is sort.



REFERENCES

Arnold, D. (2010). *Art history: contemporary perspectives on method* (pp. 1-7). John Wiley & Sons.

Aspelund K (2006) *Design Process*: New York, USA: Fairchild publications Inc. p 15-

25

Baharlou, E., & Menges, A. (2013, September). Generative Agent-Based Design Computation. In *eCAADe 2013: Computation and Performance—Proceedings of the 31st International Conference on Education and research in Computer Aided Architectural Design in Europe, Delft, The Netherlands, September 18-20, 2013*. Faculty of Architecture, Delft University of Technology; eCAADe (Education and research in Computer Aided Architectural Design in Europe). Blackwell. P.138

Burckhardt, T. (2009). *Art of Islam: language and meaning*. World Wisdom, Inc. p 35

Collingwood, R. G. (1955). *The Principles of Art*.(1938). Clarendon.

Collingwood, R. G. (1958). *The principles of art* (Vol. 11). Oxford University Press, USA.

Coollingwood, R. G. (1938). *Principles of Art*: London, Oxford University press. P 273

Coote, J., & Shelton, A. (1992). *Anthropology, art, and aesthetics*. Oxford University Press.

Coulter, D. (2001). *Anatomy of hatha yoga: A manual for students, teachers, and practitioners*. Motilal Banarsidass Publ..p 19-37

Desmond, K. K. (2011). *Ideas about art*. John Wiley & Sons. P.5-25

Dierks, L. (1994). *Creative Clay Jewelry: Extraordinary, Colorful, Fun Designs to Make from Polymer Clay*. Lark Books. P 40

Du Cros , H., & Jolliffe, L. (2014). *The arts and events*. Routledge.

Du Cros, H., & Jolliffe, L. (2014). *The Arts and Events*. Routledge.p 16

Duncan, kelvin (2014) *the ideas book*: London, UK, lid publishing ltd, p 22

Glenn, C. N., Burkett R. (2002). *Ceramics: a potter's handbook*. U.S.A.: Thompson

Learning, Inc., p. 149- 200.

Hajimichael, M. (Ed.). (2015). *Art and Social Justice: The Media Connection*. Cambridge Scholars Publishing. p 91

Hauser, A. (2011). *The sociology of art*. Routledge, Chicago, USA p. 94-98

Hjorth, L., King, N., & Kataoka, M. (2014). *Art in the Asia-Pacific: Intimate Publics* (Vol. 8). Routledge .page 26

Hopper, R. (2000). *Functional Pottery* (2nd edition). U.S.A: Krause Publications, p. 9-12

Hung, W. (2008). *Making History: Wu Hung on Contemporary Art*. China. Timezone 8 Limited. p11-12

Jeremy, C and Anthony,S (1992) *Anthropology, Art and Aesthetics*: London, UK, oxford university press Inc. p 68-90

Jewitt, J. (2004). *Taunton's complete illustrated guide to finishing* (Vol. 70712). Taunton Press.

Jewitt, J. (2004). *Taunton's complete illustrated guide to finishing* (Vol. 70712). Taunton Press. p 2

Jones, A. (Ed.). (2009). *A companion to contemporary art since 1945*. John Wiley & Sons. p 22.

Kathrine, R.S (2014) *knowledge network and craft traditions in the ancient world*: New York, USA, Routledge publications, p 127

Levi, W.R and Ralph, A.S.(1991) *Art Education; A critical Necessity*: USA, Board of trustees of the university of Illinois, p136

Low, D. B. (2000). *Merleau-Ponty's last vision: a proposal for the completion of The visible and the invisible*. Northwestern University Press. p. 13-27

Margolis Eric and Laurence Stephen (1999) *concept: core reading*: London, UK, The

Margolis, E and Laurence, S (1999) *Concept: Core Reading*: London, UK, The MIT press
p 109

Margolis, E., & Laurence, S. (1999). *Concepts: core readings*. Mit Press.

Menges, A. (2012). *Morphospaces of robotic fabrication: from theoretical morphology to design computation and digital fabrication in architecture*. *Robotic Fabrication in Architecture, Art and Design*, 28-47.

Minissale, G. (2013). *The psychology of contemporary art*. Cambridge University Press.

Minissale, G. (2013). *The psychology of contemporary art*. Cambridge University Press.

MIT press page 109

Morgan, R. C. (1996) *Art into ideas: essays on conceptual art*: United States of America: Cambridge University press, p 13 – 20

Mytum, H. C. (2004). *Mortuary monuments and burial grounds of the historic period*. Springer Science & Business Media.

Mytum, H. C. (2004). *Mortuary monuments and burial grounds of the historic period*.

Norton, F. H. (1956). *Ceramics for the artist potter*. Addison-Wesley Publishing.

Norton, F.H (1952) *Ceramics for the artist potter*: London, UK, Oxford University press, p

120

Peterson, B. (2011). *Artistry and Aesthetics: Pottery Beyond Mere Utility*.

<http://pottery.about.com/od/thepottersspace/a/potteryart.htm>

Peterson, S., & Peterson, J. (2003). *The craft and art of clay: a complete potter's handbook*. Laurence King Publishing. p32-34

Phillips, G. (2012). *A concise introduction to ceramics*. Springer Science & Business Media. p65.

Quinn, A. (2007). *Ceramic Design Course: Principles, practice, and techniques: a complete guide for ceramicists*. New York: Barron's Educational Series, Inc., p. 10-20,

Radford, A., Shallcross, M., Van Mierlo, C., Ferretter, L., Sandberg, E., Bentley, N., ... & Twiddy, I. (2014). XIVModern Literature. The Year's Work in English Studies, mau004.

Rebay-Salisbury, K., Brysbaert, A., & Foxhall, L. (2014). *Knowledge Networks and Craft Traditions in the Ancient World: Material Crossovers* (Vol. 13). Routledge.

Scott, Marylin. *Oil Painter's Bible: An Essential Reference for the Practicing Artist*. Chartwell, 2009.

Shepherd, R.N. (2011) *Triumph of an idea*: New York, USA, p 104

Shlomo, G.S. (2006) *Art myth and Deviance*: New castle, UK, Cambridge scholars publishing, p 35

Sire,J,W. (2004) *Naming the elephant*: New York, USA, Cambridge press, p 137 Sparshott, F. E. (2014). *The theory of the arts*. Princeton University Press, New York, USA. p 15

Tod, O. (2012). *The joy of handweaving*. Courier Corporation. P 58

Tourtillott, S. J. (2003). *500 Bowls: Contemporary Explorations of a Timeless Design*. Lark Books.Springer Science & Business Media. p 63

Victor, I. and W. Lambert, W. B. (1982) *Creativity and mental growth*: New York, USA:
Millan Publishing co. Inc. p 15-20

Vishny, M. (2009). *Sculpture. Microsoft Student 2009* [DVD]. Redmond, WA: Microsoft
Corporation.

Vollers, K. (2001). *Twist & build: creating non-orthogonal architecture*. New York,
USA 010 Publishers. p.17

Windt, J. M. (2015). *Dreaming: A conceptual framework for philosophy of mind and
empirical research*. MIT Press.

Windt, J.M.(2015) *Dreaming*: New York, USA, Cambridge University press, p 295

