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Documentation of Some Identified Traditional Pottery Decorative Techniques in Northern Ghana

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Authors' contributions

This work was carried out in collaboration between all authors. Author IY designed the study, performed the collection of data and data analyses, wrote the protocol and wrote the first draft of the manuscript. Authors VEAG and ETA managed the analyses of the study. Author IY managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

Aims: This research was designed to reveal and document some identified traditional pottery decorative techniques in some parts of northern Ghana.

Study Design: For this research, the qualitative research design was adopted.

Place and Duration of Study: the researcher made a field trip to three selected traditional potting centres in northern Ghana. They included Sirigu, Lugshigu and Kukuo, between May 2013 and August 2013.

Methodology: This research was designed to reveal and document some identified indigenous pottery decorative techniques in some parts of northern Ghana. The objectives therefore were: to

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identify and record some traditional pottery decorative techniques in some parts of northern Ghana. The detailed approach to the qualitative research methodology was employed. Interview and observational methods were used as the data collection methods. They were used to ascertain data necessary for recording some identified traditional pottery decorative techniques in northern Ghana. The data were then analysed, and the indications were that the potters make interesting patterns of decorative techniques.

Results: Out of a total of 41 districts (that is, 20 in the northern region, 11 in the upper west region and 10 in the upper east region), three were selected as the representative population. The criteria for inclusion were based on: the geographical location and how it affects the decorative techniques of traditional pottery; the variety in the use of tools, materials and methods and availability of clay as the primary material in the area. Specifically, seven decorative techniques were identified and documented by the researchers at the time of their studies. These included: incision, impression, painting, smoking, modelling, perforation, and macramé.

Conclusion: Evidently, it can be concluded that some of the traditional pottery decorative techniques in northern Ghana has been left undocumented.

Keywords: Documentation; traditional pottery; decorative techniques; Northern Ghana.

1. INTRODUCTION

Not only has clay been shaped by human hands for thousands of years but the objects created by those hands also have shaped the daily lives of the people who used them. In addition to objects crafted to fulfil utilitarian needs, artists have formed clay into pots that communicated each era's most profound beliefs, its strongest communal emotions, aesthetic concerns, and most important spiritual aspirations in some parts of Ghana and the world at large [1,2].

According to [3,4], "traditional pottery has an immense free will in decoration, an advantage with which our traditional potters have not failed to lay their hands on. The plastic stage of the shaped pot presents itself to a selection of controlling decorative techniques such as impression, smoking, blasting, stamping, modelling, incising etc. These create decorative effects which include changes in textures and changes in colours". The leather-hard, dry stage or even the bisque ware with a soft body can be scraped, grooved, and carved with a strong, sharp tool. In addition to this, the surface of a pot gives the traditional potter a free hand in painting before bisque firing. Colour patterns can be obtained by painting with various earthy mineral substances that withstand the heat during firing [5].

Generally speaking, the concept of traditional pottery decorative techniques is rich and varies. The reason is that the surfaces of traditional pottery offer two different working materials (the plastic and the graphic). In these two, a potter has substantial freedom of expression during the application of his/her decorative techniques [3]. They added by saying that, decorative techniques in indigenous pottery forms an essential part of our lives and has been carried on throughout the world since ancient times in their many forms.

What then are decorative techniques in traditional pottery? According to [1] "decorative techniques can be defined in a variety of ways: as the story of humanity, as a glimpse into the wellsprings of creativity, and a challenge to learn the skills that offer a lifetime of joyous experiment and expression in art". [6] Also defined decorative techniques as "an idea that informs, inspire, arouse, awaken, and delight us". Decorative techniques can challenge the artist to think and see in new ways and help each artist to develop a personal sense of beauty and truth [3,7].

Why should the traditional pottery decorative techniques in northern Ghana be documented? This is because, traditional pottery decorative techniques documentation, however, remain at the heart of cultural, traditional pottery centres. These are undocumented and passed along through the generations, mother to daughter, hand to hand; which is making it very difficult to differentiate between the extinct and the existing traditional pottery decorative techniques in northern Ghana [7].

Therefore, the researchers are of the view that, in this era of modernity, technological flare-up and industrial adventure, documenting our traditional pottery activities will do more good than harm to them. This is because it will go a long way to play a supportive role in achieving the salvaging and the promotion of our dying traditional pottery production techniques. There is the need, therefore, to change the concept of traditional pottery activities as simply a way of cultural tradition to that of a profitable commercial and industrial art occupation that is wealth recording. The achievement of these objectives requires a proper documentation that will complement with our traditional potters' philosophies.

2. CONCEPTS AND METHODS

2.1 Concept

This paper aims at identification of some conventional pottery decorative techniques in northern Ghana. This is to create worldwide awareness on the decorative techniques of pottery in northern Ghana. Also, the study was done to contribute to the constructive documentation of these existing traditional pottery decorative techniques in north of Ghana.

2.2 Methods

2.2.1 Research design

For this research, the qualitative research design was adopted. The reason was that the researchers were seeking to understand the decorative techniques of some traditional pottery in northern Ghana through visiting their contexts and recording data personally. The researchers also analyzed what was found, an analysis fashioned by the researchers' own understanding and backgrounds. By and large, the researchers chose to use qualitative research design because the research occurred in natural settings (that is, places where traditional pottery relates to human behaviour and events). As it appears in qualitative research, the researchers were the prime instrument in data collection rather than some lifeless mechanism (such as a questionnaire).

The researchers also realized that the data emerging from the study were descriptive. That is, data were reported in words (primarily the participant's audios or pictures or videos, rather than in numbers). Regarding [8], it was clear to the researchers that this research was on participants' perceptions and experiences, and the way they make sense of their lives with traditional pottery. The attempt was therefore to comprehend not one, but many realities. The researchers were particularly interested in understanding how the process in decorating traditional pottery in northern Ghana occurs. Hence, the use of qualitative research designs.

2.2.2 Library research method

Library research constituted quite an important part of the study. Several libraries were visited a couple of times in pursuit of relevant information to the research. These libraries include the Main Library, Kwame Nkrumah University of Science and Technology at Kumasi, Reference Library at the Department of General Art Studies KNUST in Kumasi, Main Library at Tamale Technical University in Tamale and finally Tamale Regional Library.

All through these research visits, great efforts were made to collect the secondary data even though not much was acquired from literary sources such as books, magazines, journals, thesis and brochures. In sum, about hundred (100) articles from the websites, about seventy (70) books, five (5) Journals, magazines, and brochures were read. However, only a few of these documents spoke directly on indigenous pottery decorative techniques and this information though scanty, was used for some part of the literature reviewed.

2.2.3 Population for the study

For the purpose of this research, the target population includes all indigenous pottery, pottery centers and potters in the three northern regions of Ghana. Out of a total of 41 districts (that is, 20 in the northern region, 11 in the upper west region and 10 in the upper east region), three were selected as the representative population [4].

The criteria for inclusion was based on: the geographical location and how it affects the decorative techniques of traditional pottery; the variety in the use of tools, materials and methods; availability of clay as the main material in the area; nature of domestic activities women particularly engage in; religious practices influencing the decoration of pots; and the variety in the philosophy and culture of the selected groups.

2.2.4 Sampling design

[9] Stated that "a sample consists of the cases (units or elements) that will be examined and are

selected from a defined research population". In this research work, the samples are carefully selected according to the needs of the study, commonly referred to as 'purposive sampling' or 'purposeful selection'. "The cases are specifically selected because they can teach the researchers a lot about the issues that are of importance to the research" [9].

In selecting which case to study, an assortment of potentialities for purposeful sampling was obtainable. The researchers preferred in selecting cases/samplings that show different perspectives on the research work. This is referred to as purposeful maximal sampling [8].

2.2.5 Methods for data collection

In this study, the researchers were the most essential data recording mechanism. This is because, "the role of the researchers as the primary data collection instrument necessitates the identification of personal values and assumptions at the outset of the study" [8,10]. In addition to this, observation and interview were also used as secondary tools for the data collection process.

2.2.6 Sources of data

In this research work, two main sources of data were concurrently employed. These included Primary Data and Secondary Data.

2.2.6.1 Primary Data

Primary data were collected through the use of direct observation and a face-face interview. In doing this, all the selected traditional pottery centers in the three northern regions of Ghana were contacted. Traditional potters and pottery from different levels of the pottery centers were directly observed and interviewed. The researchers chose to use direct observation and face to face interview as their primary source of data collection because they provided a resourceful way of recording data from a huge sample, and was also guite simple to use.

2.2.6.2 Secondary Data

Secondary sources of data related to encyclopedias, catalogues, magazines, textbooks, journals, artifacts, pictures, videos, websites, articles and existing data. The researchers used these sources in acquiring related literature on traditional pottery decorative techniques in northern Ghana.

2.2.7 Data collection

"The topic and method of the study were explained to the traditional potters when they were first approached. No specific kind of information was mentioned as being of particular importance for the study, nor was any information about the study concealed from them. They were assured that the study required them to spend very little extra time, although any additional time or information that they might be willing to volunteer would be more than welcome" [3,11].

The study was conducted in the traditional potter's setting and the data were collected by observation and interview with no attempt to control or influence the potters' process of decoration. The traditional potteries were observed, one by one. Averages of ten to twenty-five kinds of traditional pottery were observed at each traditional potting centre visited [11].

The traditional potters were asked to think aloud but only to the extent that such verbalization would not interfere with their pottery decorative techniques. This verbalization was recorded and transcribed based on the data collection protocol. Traditional potters were questioned during pottery activities based on decorative techniques. Questioning during this observation period was kept to the minimum in order to avoid any possible influence on potter behavior. Most traditional potters, however. initiated conservations about their pottery decorative techniques. Questions during these instances attempted to keep the conservation alive and were meant to be as non-directive as possible [7].

At the end of the observation period, when the first versions of the description of traditional pottery decorative techniques were drafted, the potters were interviewed. The interviews took the form of informal conservation which was the natural thing for the researchers to do after spending a period with an observation guide. The researchers asked many questions to clarify issues that arose during the observation period but could not be asked then. In the interview, potters were also asked about aspects of the traditional pottery decorative techniques that are not accessible to observation [7]. For example, potters were usually asked to describe some of the philosophies behind some traditional pottery decorative techniques. In many instances, potters and end users of traditional pottery were asked why they had chosen a certain decorative technique.

Answers to such questions were not taken at face value; it was not expected that potters, end users and sellers of traditional pottery would remember some specific philosophies (behind indigenous pottery decorative techniques). Some regularity that had been observed was described to the potters and their comments sought. The interviews were transcribed [7].

Another data collection made was casual conservation held in some places such as homes and market sites. This conservation were never systematically recorded nor analyzed. A large variety of issues were discussed in those places and most of them did relate directly to the research. When subjects in relation to the topic were dealt with, the researchers showed curiosity but remain nonjudgmental. These casual talks supported the researchers understanding of the traditional potters, sellers and end users behavior towards the traditional pottery decorative techniques; and finally, in a few instances, it even provided some solid clues on traditional pottery decorative techniques in northern Ghana [7].

"The recorded verbalization of the potters thought processes during the observation made, the transcribed interviews, pictures took, audio/ video recorded at the various traditional pottery centers and markets in northern Ghana were the data collected for analysis to arrived at results for the study" [3,11].

3. RESULTS AND DISCUSSION

It has been clearly stated in introduction that; the researchers will identify and document some of the existing traditional pottery decorative techniques in northern Ghana. As a result, the subject of available materials used for decoration and style of decorative technique will not be considered in its entirety; rather emphasis has been placed on the physical properties of the decorative techniques applied on the traditional pottery. As stated already, the researcher made a field trip to three selected traditional potting centers in northern Ghana. They included Sirigu, Lugshigu and Kukuo.

To cut the whole thing short, the various traditional pottery decorative techniques

gathered by the researchers are clearly and systematically presented below. Plates were added were essential to spell out visual discussions.

3.1 Traditional Pottery Decorative Technique in Sirigu at the Upper East Region

Sirigu is a village located at the Kasina Nankana West District in the Upper East region of Ghana. Members of the society involve themselves in different activities in order to live beyond the breadline. Women acting as the main artisans do work in three diverse craftsmanship; which includes basketry weaving, traditional wall painting, and pottery making. Surprisingly, below studies show that their ways of decorating indigenous pottery come in diverse forms. Almost every pot decorated by the Sirigu traditional potters has a mark of paint prepared from the dried fruits of "zizirah" tree (African acacia) [7,12]. In the most basic form, Plate 1 shows some sample fruits of the "zizirah" that are harvested and dried by the potters.



Plate 1. Dried "zizirah" fruits (African acacia) (Source: Field photograph, 21st May, 2013)

These fruits are then boiled in water in order to get an extract of dark brown pigment. With this pigment, and as the pot is still hot after it has been removed from the firing pit; the traditional potters draw a series of lines in diverse forms with the help of a brush (produced using the millet head). Observation shows that this technique of decoration is usually done on the belly to the rim of the pot. According to [3] this type of decorative technique makes the pottery handy (since it helps to reduce frictional force on the surface of the pot. *Plates 2 and 4* explain the above form of decorative technique.



Plate 2. Painting technique on Plate 3. Painting technique on a Water storage pot





a grain storage pot (Source: Field photographs, 21st May, 2013)

Plate 4. Painting technique on a TZ and Soup bowls

Furthermore, another decorative technique discovered studied by the researcher at the Siriqu pottery center was the smoking method. This was done by burning the red hot pot (after it has been removed from the firing pit) into a flameless and dark heavy smoky slowly burning heap of (cow, goat, donkey or sheep) dung. Alternatively, they also prefer using other combustible materials that produce a heavy cloud of smoke. Generally speaking, depending upon the length of time that the pot spends in the smoke; the micro-pores of the pot are gently covered up by the smoke leading to the formation of a film of soot. In a nutshell, this decorative technique makes the pot impervious to both gas and liquid [7,13]. Plate 5 is an illustration of a decorated pot using the smoking technique.



Plate 5. Smoking technique on a TZ and Soup bowls

(Source: Field photograph, 21st May, 2013)

Perforation is an alternative decorative technique adopted by the Sirigu traditional potters. This type of technique is done by using a pointed wood (with a reasonable length and diameter) or fettle knife with a pointed tip to perforate holes around the pot during its leather hard stage. Basically, this kind of decorative technique allows easy flow of heat and liquid through the pot. Plate 6 is an illustration of some decorated pottery using the perforation technique.



Plate 6. Pots Decorated with the perforation technique (Source: Field photograph, 21st May, 2013)

In addition, the indigenous potters at Sirigu pottery center also use incision as a technique of decorating their pottery. Frankly speaking, this type of decorative technique is done by drawing shallow lines in diverse directions at the leather hard stage of the pot drying process. This line creation is achieved with the help of a sharp pointed object most especially a metal scrap or fettle knife. "Studies show that this variety of decorative technique usually help reduce friction on the exterior and interior surfaces of the pot making it handy to hold or carry on the head and easy to grind some cooking ingredients in it" [3.13] Plate 7 shows an illustration of a pot of its exterior finely incised with lines in a diverse direction; which indicate easy to handle even when the pot is wet. Whiles Plate 8 shows an illustration of pottery which has the incised lines in its interior surface which indicate how effective grinding some cooking ingredients will be when it in use.



Plate 7. Bowl with the shoulder decorated with incision technique



Plate 8. Grinder with its interior decorated with incision technique

(Source: Field photograph, 1st July, 2013)

Additionally, modelling was another decorative technique recorded by the researchers at Sirigu pottery center. This was done by manipulating plastic clay on the surface of a plastic pot in order to create images of their choice with the help of the hand and other indigenous modeling tools. The technique was used to create the knobs of lids for easy lifting using the hand; also, it was used to illustrate images of totems within the community and it was as well used to create a rough texture on some pottery surfaces [3]. Explicitly, Plate 9 shows an illustration of some pots with the modeling technique.



Plate 9. "Bagridugri" (fetish pots) decorated with modeling technique (Source: Field photograph, 1st July, 2013)

As a final point, the researchers observed that macramé was used as a decorative technique within the Sirigu pottery center. It was done by leaving strands of jute ropes after knotting it against the neck of the pot by passing it through some holes created during the leather hard stage of the pot. This decorative technique helps to drive away flying and crawling insects from the pot when air blows [3]. Plate 10 shows an illustration of a traditional pottery decorated with macramé technique.



Plate 10. Multi storage system pot decorated with macramé technique (Source: Field photograph, 1st July, 2013)

In summary, studies made by the researcher indicate that there are about six different types of existing decorative techniques within Sirigu traditional pottery center. These decorative techniques include incision, painting, perforation, modeling, smoking, and macramé.

3.2 Indigenous Pottery Decorative Technique in Kukuo and Lugshigu at the Northern region

Kukuo is a traditional pottery community located in Tamale Metropolitan Assemble (the northern regional capital). Even though, it contains people from a different cultural background with a different occupation, potters within this community have no current trends in their way of decoration. On the other hand, Lugshigu is also a fast developing community located at Kumbungu district not far from Tamale metropolitan within northern region. The people of this particular community involve in a different occupation which makes it difficult for the researchers to identify their main source of income. Though they are having a diverse occupational background, some women specialized in the field of traditional pottery production which has direct links with Kukuo potters at Tamale. Below presentation represents the studies made on their decorative techniques.

From the start, studies made by the researchers show that, potters from both communities employ the impression method of decorating pottery. Basically, they use both odds and ends which give good textural background to a plastic pot. Their way of impression (as a decorative technique) is also done to cover the belly and that of the shoulder level of the pot. According to [3], this type of decorative technique is done to reduce friction when the body of the pot is wet with liquid. Plates 11 and plate 12 respectively shows some illustrations on impression technique of decorating pottery at Kukuo and Lugshigu.

Also, the traditional potters from Kukuo and Lugshigu uniquely employed incision as one of the decorative techniques at their respected potting centers. Like other traditional potters in northern Ghana, they also use any type of tool that will produce a shallow line on the surface of the plastic pot. These tools may range from plastic to metal scraps, seedpod, stones etc. plate 13 illustrates a potter at Kukuo actively applying incision technique on her plastic pot with the help of a plastic tool.

Furthermore, smoking was another decorative technique done among the traditional potters at Kukuo and Lugshigu pottery centers. Generally, this type of technique is done on the interior aspect of the pot after firing. In the company of this technique, they also use the same type of materials with which the potters at Sirigu use (that is, combustible materials that produces thick smoke). They also have the intention of making pottery nonporous after the technique has been applied. Plate 14 shows an illustration of the smoking technique on a fired pot produced by a Lugshigu potters.

Additionally, the traditional potters at Kukuo and Lugshigu surprisingly employ a type of technique with which others from various pottery centers in the northern region also employed when the need arise. Basically, the name of this type decorative technique is called perforation. This can be done by using possibly pointed objects that can be use in perforating reasonable holes through a plastic pot. Plates 15 and 16 illustrate some pots decorated with perforation technique at Kukuo and Lugshigu respectively.

In summary, studies made by the researchers shows that, Kukuo and Lugshigu potters can be recognize by their commonness in decorative techniques. These techniques may include Perforation, Smoking, Incision, and Impression.



Plate 11. Impression technique done on the Plate 12. Im surface of a plastic pot bisqu (Source: Field photograph, 2013)

Plate 12. Impression technique done over bisque fired water carrier pot tograph. 2013)



Plate 13. Incising a plastic pot with a rubber scrap (Source: Field photograph, 2013)



Plate 15. Herbs burning pot decorated with perforation technique



Plate 14. TZ bowls decorated with smoking technique (Source: Field photograph, 2013)

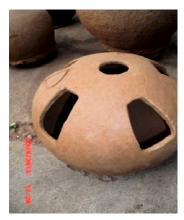


Plate 16. Fowls water trough decorated with perforation technique

(Source: Field photograph, 2013)

3.3 Summary of Results

Findings show that an incision was the major existing decorative techniques practiced by all the potting centers visited at the three districts within northern Ghana.

Also, among the potters at Sirigu, dye obtained from fruits of "Zizirah" (African acacia) is used to paint their desired patterns on the surfaces of their potteries. Even though, all efforts are being made by the traditional potters to prolong the existence of this particular decorative technique; deforestation is leading it into extinction. This is because plants that are use to prepare the indigenous organic paint for this particular technique is being cut off by farmers and home builders.

Additionally, perforation is another type of existing decorative technique practice by all the potters visited in Sirigu, Kukuo and Lugshigu.

Furthermore, modeling is also an existing decorative technique practice by potters in Siriqu. Potters in Kukuo and Lugshigu when asked by the researchers; why they are not applying that decorative technique on their pottery? They said, "It is only done on demand by fetish priest". They added by saying that, "it is only a few potters that apply it on their pottery when the need arise". The reason was that, almost ninety percent of the potters belong to Islamic religion; and Islamic religion forbids figurative modeling technique. This shows that, modeling as a decorative technique will soon grow into extinction.

Not all, another interesting existing decorative technique found was the smoking method practice by potters at Sirigu, Kukuo, and Lugshigu.

Macramé was another existing decorative technique practice among the potters at Sirigu. Findings from Kukuo and Lugshigu potting

centers show that, this decorative technique is not known to them.

Generally, impression was also an existing decorative technique practice by potters in Kukuo and Lugshigu. Though the researchers never came across pottery decorated with impression technique in Sirigu; the potters over there attested that it exists.

Leaving no room for doubt, some seven existing decorative techniques were discovered and documented by the researchers at the three selected potting centers within the three districts in northern Ghana. These included: incision, impression, painting, smoking, modeling, perforation, and macramé.

In reality, some of our traditional pottery at the three northern regions of Ghana when documented for further studies can also bring to light a modern way of decorating them properly as compare to the utilitarian plastic and metal products. This will give it a brighter chance to rub equal shoulders with other modern masterpieces that have enjoyed longer fame and patronage in our own local markets. This documentation will also provide spin-offs and create backward and forward linkages between the traditional and the contemporary utilitarian industry. Finally, since the literature on traditional pottery as an industry and a course of study is very scanty in Ghana, this project report being an embodiment of knowledge will serve as a vital reference material for students, researchers, teachers, potters, government and people who are interested in northern Ghanaian pottery in general.

4. CONCLUSIONS

Evidently, it can be concluded that some of the traditional pottery in northern Ghana has a dying decorative techniques. This is simply because; seven decorative techniques were discovered and documented by the researchers at the time of their studies in the three potting centers at the three districts in northern Ghana. These included: incision, painting, smoking. modeling. impression. blasting, slip trailing, perforation, and macramé. On the flip side of the coin, the researchers for not aet anv evidence could the documentation of the extinct traditional pottery decorative techniques in the selected case study areas.

5. RECOMMENDATIONS

The study made by the researchers show that some associated functions and contexts of traditional pottery in Northern Ghana has been also grown into extinction (due to the higher demand of domestic metallic and plastic utilitarian goods). It is therefore recommended that research should be done on these potteries in other to understand and document their functions and contexts.

Even though, studies have been made on the identification and documentation of the decorative techniques in some traditional potting centres in northern Ghana, the researchers recommend that, this type of study should be conducted in the remaining thirty seven potting centres in northern Ghana.

The researchers recommended that, studies should also be done on the documentation of the forming and firing techniques of traditional pottery in northern Ghana.

Finally, the researcher recommends that, studies should be done on the influence of African aesthetics on traditional pottery in northern Ghana.

ETHICAL APPROVAL

Respondents were informed of the purpose of the study before interviews and observations were made. They were assured of secrecy and were told that any information given was strictly for academic purpose. Assurance of confidentiality was also given to respondents in order to encourage participation.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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