

Ethnographic Study of Mortar and Pestle Production in Tudun Wada, Zaria

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Abstract

This paper is on ethnographic study of mortar and pestle production in Tudun Wada, Zaria, Kaduna State. The paper documented stages of mortar and pestle production, and the implication of pestle and mortar business to the local community. The paper also highlights the challenges facing the craft, which, if not attended to, may lead to its extinction. Oral interviews and participant observation were used in gathering data for the study. The paper concludes that, in a growing economy like that of Zaria, small and medium industries, such as mortar and pestle making should be given the needed attention and support, as it holds great potential for youth employment, and will contribute to the growth of Gross Domestic Product (GDP) of the larger community.

Keywords: Mortar, Pestle, Production, Ethnography, Tudun Wada

Introduction

Mortar and pestle making is an old craft among the Hausa community of Northern Nigeria. According to Encarta dictionary (2019), mortar is defined as hard, heavy bowl designed to hold substances to be ground into small pieces of powder by means of club-shaped tool pestle. Larinde and Ajayi (2015) also define mortar as a cylindrical shaped wood bowl with a hollowed out interior cut out of a stem, while pestle is described as a club-shaped tool of about 2 to 5 metres long tree stem with about 3 to 6 diameter used together with a mortar. All the definitions above emphasize association between mortar and pestle.

Despite the availability of different tree species in the study area, not every tree species is suitable for making mortar and pestle. According to Mal Hassan (pers. comm, 2019) a good knowledge of the environment is required to identify suitable tree species for making mortar and pestle. He opines that tree species for making pestle and mortar are selected based on their strength and durability. Tree species such as Mahogany; *Khayasengalensis* (*Madaci*), (Makarho), Shea; *Vitellariaparadoxa* (*Kadanya*), (Kawo), Locust tree; *Perkiabiglobosa* (*Dorawa*),

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Isobertiniadoka (*Doka*), Large grain guinea corn; *sorghum bicolor* (*Gamji*) and *Terminaliaspp* (*Baushe*) are used for making good looking mortar and pestle. However, (*Kirya*) specie is most preferable because of its strength.

The craft of mortar and pestle has undergone several changes as a result of difficulties involved such as, energy and skills viz a viz social and economic development since time immemorial. On account of its cultural significance, especially to Hausa community of Tudun Wada, Zaria, Nigeria, the craft of mortar and pestle continued to survive side by side with the modern electronic grinding machines; to the extent that new couples take them along to their matrimonial homes.

The goal of this paper is to conduct ethnographic study of mortar and pestle production among the Tudun Wada people of Zaria, Nigeria. Specifically, the study attempts to provide a comprehensive data on the processes of mortar and pestle production. Secondly, the study attempts to examine the symbolic and artistic importance of mortar and pestle in Tudun Wada traditional society.

Statement of Problem

The art and craft of making mortar and pestle is currently facing serious threat by way of extinction due to the availability of alternatives, such as modern blenders and grinders. Modern electronic machines perform the

functions of mortar and pestle with less time and energy. It is observed nowadays that a section of households use mortar and pestles because they cannot afford the modern blenders and grinders. While those who can afford the modern machines, use mortar and pestles when there is power interruption. Therefore, the continued existence and use of mortar and pestle is influenced by magnitude of power supply and affordability of the modern machines. With a stable power supply, more people prefer to use modern machines to save time and achieve better result. As the economic power of citizens improves, there is the likelihood that a far greater percentage of the people will abandon mortar and pestle for modern blenders and grinders. This challenge posed a great threat to the survival of mortar and pestle production in Tudun Wada, Zaria. In order to save the knowledge of the craft from going into extinction, this research therefore, attempts a comprehensive ethnographic study of pestle and mortar production with the aim of proffering ways by which this heritage can be save from going into total extinction. The aim of the ethnographic study is to understand the processes involved in the making of mortar and pestle vis- a- vis their meaning and functions. The objectives of this research are as follows:

- To study different techniques of mortar production;
- To examine the functions of mortar and pestle;
- To identify raw materials and tools associated with mortar and pestle production.
- To examine threats to mortar and pestle production.

Research Methodology

Being a qualitative research of some sort, the researcher is mindful of the methods that help in achieving the set objectives. The following methods were adopted as primary data-gathering techniques: in-depth interview, field observation, Purposive Sampling, Focus Group Discussion; while secondary sources of data were sourced through unpublished theses and academic journals.

In-depth Interview: Interviewing is the process of directing a conversation to collect information , . During the course of this research, formal, informal and semi-formal interview sessions were held in obtaining relevant information. Unstructured question guide was used in asking questions during the production of mortar and pestle.

Purposive Sampling: Purposive sampling is a strategy where participants or variables are selected according to pre-selected criteria relevant to research objectives Purposive sampling is designed to provide information rich cases for in-depth study . Purposive sampling was used in the selection of respondents with in-depth knowledge of the craft, and of the use of end product of the craft. Two craftsmen that inherited the craft were interviewed, and five vendors having been in the business for a long time were also interviewed. Consumers were also not left out as ten people both males and females were interviewed. Tape recorder, field note and videotaping were also used in documenting different sessions of the interview.

Observation: According to , observation is the act of perceiving the activities and interrelationships of people in the field setting. The researcher observed the activities of mortar and pestle making after establishing a form of familiarity with the craftsmen. The observation was targeted at procurement of raw materials, working and re-working of the procured materials, treatment and selling of the product.

Participant observation: Participant observation is a unique method because it combines the researcher's participation in the lives of the people under study while also maintaining a professional distance. The researcher established some sort of familiarity with informants at the point of entry into the community under study. The community members were very comfortable with the researcher among them which helped in gathering valuable information. The researcher used the opportunity to study the craft from an insider perspective with much privilege information. Field note and sensory experience were the basic tools used.

Focus Group Discussion: This method aims to obtain data from a purposely selected group of individuals rather than statistically representative sample from broader population . In the course of this research, focus group discussion was organized with selected group of artisans and community members and different questions pertaining to the craft and use of mortar and pestle were addressed. The researcher records important points raised and related to the production, forming, working, re- working and marketing of mortar and pestle during the conversation. Field note was used to record the points.

Secondary Sources of Data

Desktop sources: Written sources as information that is documented in form of writing enables the study of societies that existed even before writing was introduced (. The use of written sources is to gather information about the area of study and on other aspects such as origin of the people, information about the historical and geographical backgrounds, aspects of the culture of a particular people in a given region or area, cultural practices

among others which are imperative to the research.

Study Area

Tudun Wada, Zaria is located east of the ancient city of Zaria. The area lies at $11^{\circ} 04'58.09\text{N}$ and $70^{\circ} 43'02.03\text{E}$ with an elevation of 646 metres above sea level. The area is predominantly Hausa Fulani settlement by highly cosmopolitan because of the high presence of higher institutions. The area is dotted with Institute of Administration, Kongo Campus, Ahmadu Bello University, Zaria, Ahmadu Bello University Teaching Hospital, Nuhu Bamalli Polytechnic, and Federal College Education (F.C.E Zaria).

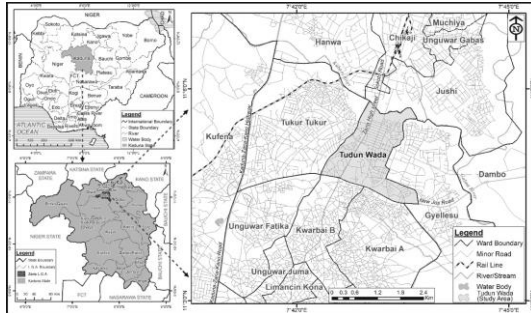


Fig. 1: Administrative map of Tudun Wada, Zaria (Inset: Map of Nigeria and Kaduna State)

Source: Cartographic Unit, Ahmadu Bello University, Zaria as modified from <https://www.openstreetmap.org/Map=6/9.177/8.674>

Findings

Different Species of Trees used for Mortar and Pestle Making

This research has established that the dominant types of tree species used for mortar making in the study area are:

Mahogany; Khaya sengalensis;(Madaci),
(Makarho),

Shea; Vitellaria paradoxa (Kadanya),
(Kawo),

Locust tree; Perkoa biglobosa (Dorawa),

Isobertinia doka (Doka),

Large grain guinea corn cv; sorghum bicolor (Gamji)

Terminalia spp (Baushe)

(Kirya); proposes Africana

Wood species such as (Marke) are only used when the above-mentioned species are not available. Nowadays, these species of trees are only found in Taraba and Benue State. Therefore, the craftsmen of Yan Turame Tudun Wada Zaria get their supply from either of the two states mentioned above. Mortar and Pestle Production Process

There are different stages of mortar and pestle production which are unique to Yan Turame Tudun Wada, Zaria. Each stage requires knowledge and skills to be able to do it with precision (Aminu, Pers.comm, 2019). The stages are as follows:

Procurement of raw materials: Woods are cut down from different species of trees found in Zaria and environs. The forest within and outside Zaria served as a reservoir of tree species suitable for mortar and pestle making. Tree species such as Mahogany; Khaya sengalensis;(Madaci), (Makarho), Shea; Vitellaria paradoxa (Kadanya), (Kawo), Locust tree; Perkoa biglobosa (Dorawa), Isobertinia doka (Doka), Large grain guinea corn cv; sorghum bicolor (Gamji) and Terminalia spp (Baushe) and (Kirya) are prominent amongst them. According to Hassan, (Pers. Comm, 2019), in the past forty years when he was only at the age of fifteen, his father used to travel to Kachiya forest and camp. During the camping, his father, with the help of bush rangers, identified good species of trees and fell them down and cut them into different sizes. The woods are then transported back to Zaria for mortar and pestle making. Sometimes a skeleton of mortar are carved right there in the forest to reduce the weight and make it easy for transportation. According to Hassan, (2019), one of the criteria used in the selection of suitable tree species is hardness and workability. Nowadays, there is deforestation, therefore, cutting trees and accessing the forest has become very difficult for the craftsmen. An alternative way of sourcing raw materials is for some of the craftsmen to

relocate to community close to forest and liaise with some community members who know the terrain and sneak into the forest, fell trees and make rough mortar and pestle and sell to those in the cities for finishing and marketing.



Fig.2: Procured wood

Carving the hollow: The second process is carving the mortar from the procured wood. Axe (gatari) is used to make hollow. The process is carefully executed using a reasonable force that would not break the sides of the wood. The work is done in a standing posture with the artisan using force to chop the middle of the wood intentionally to create a hole. The depth of the hole is not completely achieved in this stage.

Fig.3: Making a hole



Fig. 8: Mortar treated with Top Bond



Different Sizes of Mortar and Pestle

There are five different sizes of mortar and pestle as observed in Yan Turame, Tudun Wada, Zaria.



Fig. 9: Different sizes of mortar

Consumers' Perspectives

The main aim of this section is to interrogate and document the end-users perspectives about mortar and pestle through observation, focus group discussion and interview methods. All the respondents were judgmentally sampled from the Tudun Wada community of Zaria. From observation, mortar and pestle are used as house utensils for pounding or grinding substances mostly by women. According to Anna (pers.comm, 2019), the technique used in identifying good and qualitative mortar from the producers is "when you hit the pestle directly into the mortar, it makes a strong sound as if one hit iron". She further identified (*Kirya*); *proposes Africana* used to be the strongest and most preferred, this was confirmed by the craftsmen. Other respondents re-echoed what Anna explained. Hassana (pers.comm, 2019), also said that even though the mortar is good, nevertheless, they also administer special treatment to prevent it from cracking. Palm-nut oil is used for at least one week on the mortar and pestle.



Fig.10: Buyers checking mortar and pestle for durability



Fig. 11: Transactional Negotiation



Fig. 12: Young girl grinding substances

Conclusion

Mortar and pestle making remains one of the early industries that impacted the social and economic life of both the makers and consumers of the product. The research has revealed a synergy that has a long history of existence between man and his environment. The environment has to a large extent provided man with different species of tree from which man uses his skills and experience in harnessing the environmental resources for his daily needs. The art and craft of making mortar and pestle is currently facing a serious threat of extinction due to several alternative modern inventions in forms of blenders and grinders. Modern electronic machines perform the functions of mortar and pestle with less time and energy.

The methods employed have contributed a lot in data gathering from the first process of procurement of raw materials to the finishing stage. The data revealed how the carvers consciously beautify their product using different tools and techniques for consumer appreciation. From the researcher's observation, mortar making is not just a wood carving but rather a systematic endeavor that requires a lot of energy, skills, and experience. They also revealed that the market target is women who use the product for pounding and grinding substances using different sizes for different needs. Eighty percent of the people interviewed reported variations in the pattern of use for their plural needs. Therefore, the data speaks volumes on the importance of mortar and pestle for daily needs.

The paper concludes by arguing that, in a growing economy like that of Zaria, small and medium scale industries such as that of mortar and pestle making should be given the needed attention and support for their existence as it holds great potential for youth employment and will contribute in the growth of GDP of the larger community. Thus, the research has largely contributed to knowledge by identifying, documenting and studying different artistic elements in mortar and pestle production that were not examined by previous works.

References

- Alshenqeeti, H. (2015). *Interviewing as a Data Collection Method? : A Critical Review Interviewing as a Data Collection Method? : A Critical Review*. January 2014. <https://doi.org/10.5430/elr.v3n1p39>
- Bahn, C. R. and P. (2016). *Archaeology. Theories, Methods, and Practice* (Seventh Edition). Thames and Hudson Inc.
- Emmel, N. (2021). Purposeful Sampling. *Book*. <https://doi.org/https://dx.doi.org/10.4135/9781473913882>
- Fatterman, D. M. (1986). The Ethnographic Evaluate. In *Educational Evaluation: Ethnography in Theory, Practice and Politics*.
- Griffiee, B. D. T. (1997). *Research Tips? : Interview Data Collection*. 36–37.
- Lopez and Whitehead. (2012). Sampling data and data collection in qualitative research. *Book*, 123–140.
- Nyumba, T. O., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). *The use of focus group discussion methodology? : Insights from two decades of application in conservation*. 2018(July 2017), 20–32. <https://doi.org/10.1111/2041-210X.12860>
- Sataloff, R. T., Johns, M. M., & Kost, K. M. (2007). *Doing Ethnographic and Observational Research*.

