ENVIRONMENTAL INFLUENCE ON TRADITIONAL CERAMIC DESIGNS OF THE LUO PEOPLE

by

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A Thesis submitted in part fulfilment for the Degree of Master of Arts in Fine Art in the University of Nairobi

1982
This Thesis is my original work and has not been presented for a degree in any other University.

Catherine N. K. Gombe

The Thesis has been submitted for examination with our approval as University Supervisors.

PROFESSOR G. MALOBA

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1982
ABSTRACT

The study titled: Environmental Influence on the Traditional Ceramic Design of the Luo people, investigated those factors in the Luo environment which are considered to influence the artistic skills, competences, and orientations in the total creation of the clay forms.

The physical and human environment of Luoland are outlined. Their contribution to the creation of Luo ceramic designs are described.

The main hypothesis is that the Luo physical and human environment among other things determine the:

a) availability and choice of raw materials;

b) formal properties;

c) functional characteristic and
d) possibilities for innovations of the Luo traditional ceramic designs.

The present study also addresses itself to some of the shortcomings of previous studies on African arts by first reviewing works on African arts and second, by assessing their contributions and setbacks. The major difference, however, between the works reviewed and the present one is that this is a study of one selected ethnic group rather than several ethnic groups of Kenya. Furthermore, it is not a study embracing all Luo traditional arts but only their ceramic designs.
The methods and procedures used to collect data were:

a) interview;

b) observation;

c) drawing;

d) photography;

e) tests.

Forty-three specimen of Luo traditional ceramic designs were studied, described and drawn from the finished product. The problems arising from these methods and procedures are outlined and the ways employed to simplify them stated.

The main hypothesis was upheld and evidence to support this hypothesis is presented using the data collected on the forty-three specimen of Luo traditional ceramic designs. Diagrams have been included to illustrate some of the arguments. However, the hypothesis stated above has been used only as a basis of discussing the findings and not for vigorous testings based on statistical analysis.

Lastly, some recommendations and measures to be taken in order to improve Luo traditional ceramic designs have been outlined. These recommendations are based on observations such as:

a) while there are genuine Luo ceramic traditional designs, foreign influence has been assimilated. However, there are many sound reasons why preservation and improvement of traditional ceramic designs should be undertaken;
b) there is still room for improving both traditional designs and raw material resources;

c) positive attitude with educational implications should be adopted to integrate both traditional and modern ideas and values.
ACKNOWLEDGEMENT

The research reported in this thesis was partly supported by a grant from Kenyatta University College. I sincerely acknowledge their support.

Many people have individually or collectively contributed in various ways towards the conduct of the research and the completion of the work reported here. I cannot thank them all by name, but I am grateful for their co-operation and unreserved assistance.

I would, however, like to single out the following individuals for the special role:

Professor Gregory P. Maloba, my main supervisor, for his suggestions, criticisms and constant guidance and interest throughout the entire duration of the study. Professor L. Sagaaf for his advice, Professor Erick P. Kibuuka for suggestions on research methodology and Dr. E. Oyugi for advice on the use of the Luo language and Mr. Z. Maleche for his encouragement and guidance to reorganize the study.

I would also like to thank Dr. R. Nyonyintono and Dr. C. Namuddu for their help and encouragement.

Research was conducted among the Luo people of Siaya District, who generously contributed ideas and responded to my enquiries with interest and honesty.

I am grateful to Mrs S. Kyagera for typing the thesis. Finally, I would like to appreciate my children's understanding and love.
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I INTRODUCTION

1. THE PROBLEM AND ITS SETTING.

It is frequently stated that artistic skills, competence, and orientations are influenced by environmental factors, ranging from the natural, cultural, historical, to the socio-economic aspects of man's environment.

The author observes that the above statement, with all its underlying assumptions, has not been systematically established within East Africa in general and Kenya in particular. The result has been a short-coming in the teaching of art and design especially when there is a tendency to look to the outside and alien influences for references, inspiration and raw materials, for the development and advancement of art and design in Kenya and East Africa as a whole.

Within East Africa and Kenya in particular there is a wide variety of artifacts, ranging from shields, spears, stools, headrests, snuff containers, twizers, baskets, gourd vessels, pipes, pots, barkcloths, belts, hair dressing, neck, arm, leg ornaments and many others. Many of these artifacts exhibit the wealth of long-standing and time-tested skills and the availability of the necessary raw materials for their production. It could be observed that the development of the artistic skills and widespread use of the artifacts within various communities in the region show a strong relationship with both the physical and human environment. For instance, most of the physical materials used in the production of various artifacts, seem to be drawn from such varied sources as animal or plant materials and geological formations.

Further it is observed that the use to which most of these artifacts are put, directly relates to the immediate socio-economic and cultural needs of the society. The development of these artistic
skills and use of artifacts also seems to have been carried on or transmitted from generation to generation throughout the communities of the region.

It, therefore, appears that there is sufficient scope for carrying out comparative studies related to the development of artistic skills, application and utilization of products in relation to environmental resources and needs of a given society.

Such a study could significantly facilitate a better understanding of the role and influence of environmental factors in the development of traditional artistic skills, their application and the use of products. This scope of understanding becomes necessary in the transitional process of the advancement of art and design skills from traditional design to modern design applications. This could also significantly enhance opportunities for training a new generation of designers, since it could provide invaluable clues for further investigation and innovation. In this respect the author maintains that this understanding could enhance the integration or adaptation of traditional and modern designs so often advocated and desired by educationists, national organizations and the general public for the healthy development of art.

Little research work has been carried out on the lines indicated above in East Africa and Kenya in particular. No special attempt has been made to trace the relationship of the artistic production of any particular artifacts with the local environmental factors. In the majority of cases, we find widespread collections of individual artifacts which can be found in museums and similar centres with little information as to the design basis and other details of utilization. What we normally find in the museums are cards alongside a given artifact, the only information they contain being the year the object was collected, the ethnic group which created it and name(s) of the material(s) it was made from.
Alternatively, where such a collection is found in published records, a minimum of information on the process of making, utilization or cultural context is provided in general catalogues.

For example, Trowell, M.\(^1\) (who made some contribution) mainly collected a variety of Ugandan artifacts and published a book. However, she did not delve into the details of the relationship of particular objects with the local environmental factors.

The current author, after examining existing sources, was impressed by the collection of traditional artifacts of the people of Kenya. In particular, the clay objects which range from water pots, beer brewing pots, pipes, distilling components to bellows and ritual pots, of the Luo people of Kenya, most of which are found both in the National Museum and the Institute of African Studies (IAS). The author, therefore, wishes to examine the background of the development of the Luo traditional artistic skills in making these clay objects and the uses that they are or were put to. The most significant concern in the study of the making of these Luo clay artifacts, is the need to find out the possible role and influence of the environment of the Luo people in the making and utilization of these objects.

This could form a significant case study that could provide insights into the understanding of the development of traditional artistic skills, their applications and the utilization of the products not only in Kenya but in East Africa as a whole. It could also provide the necessary information, reference and teaching material that is most lacking in this area of art and design.

\(^1\)Trowell, M. *Tribal Crafts of Uganda*, Oxford University Press, 1953.
2. OBJECTIVES OF THE STUDY.

The objectives of this study, therefore, are:

(a) to examine the selected forms of the traditional ceramic designs (clay objects) and their uses in the Luo community;

(b) to examine some of those identifiable factors of the environment which have direct or indirect influence on traditional ceramic design of the Luo society;

(c) to establish the environmental influences in the production of the traditional clay forms in the Luo community.

3. HYPOTHESIS.

Based on the above stated problem it is hypothesised that the Luo's physical as well as human environment among other things have determined:

(a) the availability and choice of the raw materials for production of Luo traditional ceramic designs;

(b) the formal properties of the Luo ceramic design;

(c) the functional characteristics of those designs;

(d) the possibilities for innovation of relevant Luo ceramic designs.

4. SCOPE OF THE STUDY.

The study is mainly based on traditional ceramic forms of the Luo people of Kenya, and will examine selected forms of ceramics. This is only done in so far as the experiences of the Luos of the Siaya District, Nyanza Province is concerned. The study is therefore organized into six chapters as follows:
Chapter I, is a general introduction including statement of the problem, objectives of the study, hypothesis, scope, study area which includes choice of study area, location of study area.

Chapter II, covers mainly the literature review.

Chapter III, outlines the methods and procedures employed to collect the data.

Chapter IV, is a descriptive presentation of findings. It discusses and summarizes the artifacts studied alongside their raw materials and relevant social implications.

Chapter V, is mainly a presentation of the interpretation of the findings given under Chapter IV.

Chapter VI, presents conclusions and recommendations.

5. STUDY AREAS.

a. Choice of study area.

Siaya District, Nyanza Province, was selected as the main study area for the following reasons:

(i) most of the specimens of Luo traditional ceramic designs that the author had prior access to, in the Museum and I.A.S., had been collected from locations of Siaya District such as Ng'iyia, Ukwala, Central Alego, Northern and Southern Ugenya, (see graph 1 on page 6).

(ii) since most of the Luo people of Kenya are settled in Nyanza Province, it was observed from Kenya's Population Census of 1969 that Siaya District accommodated the majority of the Luo people.
This, therefore, pointed to the fact that Siaya District could have the most typical characteristics and habits associated with the Luo people, (see Table 1, Appendix A).

This observation is confirmed by the 1979 census of the area,

(iii) the same argument as stated in (ii) is borne out by collating Map 1 on page 8 which shows the provincial and district boundaries of Nyanza Province, with Map 2 on page 9 which illustrates the population density of Luo ethnic group compared with other groups within Nyanza Province,

(iv) Also from historical texts, it is indicated that the historical settlement of Luo community in Kenya started at a place known as Ramogi Hill in Siaya before spreading to other districts. Ogot, B.A. (1967)² observes, "... the Luo immigrants only occupied the small area around Ramogi Hill which was the focal point. They expanded eastwards and southwards to establish settlements in Alego, Sakwa, Asembo and Uyoma".

It was, therefore, considered that the Luos of Siaya may represent most of the levels of traditions of the Luos.

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Map 1: Provincial and Districtal Boundaries of Nyanza Province

Key:

- Siaya District
- Kisumu District
- Kisch District
- S. Nyanza District

Scale: 1: 3,000,000

Map 2: Density of Luo Ethnic group compared with other groups within Nyanza Province

**KEY:**

Areas of circles are proportional to numbers:

- □ Bantu
- □ Nilotic (in this case Luo)
- □ Nilo-Hamitic

Scale: 1: 3,000,000

KENYA NATIONAL ATLAS/1970
b. Location of Study area

As already stated the study will be carried out in Siaya District, the northern most District of the Luo community, (see map 1 on page 8). The immediate neighbouring communities to the north are mostly Luhyas of Kakamega and Busia Districts. The southern part of Siaya District is within the Lake Victoria Basin.

c. Geographical characteristics of Siaya District

Siaya District forms part of a wider basin of the Lake Victoria which is within Nyanza Province. The Lake Victoria Basin is marked off from the surrounding hills by steep escarpments both in the North and East. These include among others, the Nyando, the Nandi and the Mau escarpments. From the hills, some of the large rivers such as Yala, Nzoia and Sondu, rise and pass through the Lake Basin to empty into Lake Victoria. It is considered therefore that the geographical characteristics of Siaya are representative of the whole of Luoland.

The map 3 shows the hills, the escarpments, the rivers which have been mentioned, the boundaries of Siaya District and Nyanza Province.

d. Physical characteristics of Siaya District

The land area of Siaya District falls between 1000-1500 metres in altitude as opposed to the surrounding highlands where altitude is on the whole above 2000 metres. This marked relief difference between Luo country and the surrounding areas is illustrated in the two cross-sections, A and B shown on page 12.

The region experiences both heavy rainfall of between 700mm and 1500mm, and marked period of drought between October and December, annually.
The map below shows the highlands, the rivers which have been mentioned above, and the boundary of Nyanza Province.

Map 3: Highlands, rivers and boundary of Nyanza Province

**KEY:**
- Lands of altitude 2500 – 4000 metres.
- Lands of altitude 1500 – 2500 metres.
- Lands of altitude 1000 – 1500 metres.
- --- Nyanza Province Boundary.
- Swamps.
- Rivers.

**Scale:** 1:3,000,000

**MAP DRAWN FROM:** KENYA NATIONAL ATLAS/1970.
The marked relief difference between Luo country and the surrounding country is illustrated in the two cross-sections A and B given below.

Figures 1 A) : Typical cross-sections from West to East

![Cross-section from West to East](image)

Figures 1 (B) : Typical cross-section from North to South

![Cross-section from North to South](image)
Some of the rivers from the surrounding highlands already mentioned, passing through the Lake Victoria Basin, meander in the plains and deposit some of their sediments from the highlands, over the land.

e. **Social cultural observations.**

Luo people have been known to observe and practice varied cultural traditional activities. These activities are interwoven in both religious beliefs and social obligatory duties.

Historically, it is believed that the Kenya Luo who are the occupants of the area around Lake Victoria (see map 2) came from Southern Sudan. This migration is believed to have taken place between AD 1499 and AD 1650, and this is in accordance with Ochieng's (1974) observation that:

"... Sometime between AD 1490 and AD 1655 the Luo invasion began. And it really was an invasion. Most of the previous occupants of the lake (Lake Victoria) shores plains were driven out...."\(^1\)

Kenya Luo are believed to be cousins of Langi, Paluo, Alur, Padhola, and Acholi of Uganda. The Luo fall under the nilotic group in classification of the races of Africa.

In their movements and settlements the Luo people were very aggressive and as such bullied their way into settlements, regardless of the original occupants of the areas the Luo invaded. Although most of the original occupants, who were mostly Bantu people, moved to other areas some did not. They (remnants) adopted the Luo language and culture. And on this issue of Bantu ethnic groups adopting the Luo ways of living Ochieng\(^1\) observes that the Bantu families who opted for peaceful co-existence were

---

assimilated with the Nilotic culture having the upper hand.

The Nilotic culture having the upper-hand within Luoland was equally observed during the interviewing of people within the study area when collecting data for this study. One of the major problems observed and which was closely related to the above-mentioned observation, was the difficulty in identifying the non-Luo people. (see section on problems encountered).

Occupation of the Luo People: Luo people who are classified as 'nilotes', are further sub-divided into three categories namely:

(i) the river - lake nilotes.
(ii) the high land nilotes.
(iii) the plain nilotes.

The Luo under discussion, fall into the first category of 'river - lake nilotes'. They liked living near rivers or lakes, and they have been known to practice fishing as one of their major occupation. Besides being fishermen, the Luo are cultivators who grow food stuffs such as millet, cassava sweet potato, maize and they are pastoralists who keep animals like cattle, goats, sheep for milk mainly and meat. Kenya Luo, therefore, are traditionally known as fishermen with mixed farming.

Traditionally, the Kenya Luo live in homesteads which are usually fenced. The drawing overpage illustrates the plan and a rough estimate of the number of people in a typical Luo homestead, although at the moment a lot of changes have taken place due to adoption of modern ways of living.
Figure 2: Plan of Luo homestead
II REVIEW OF LITERATURE

There has been very little comprehensive study so far which has searched, collected, and analyzed data related to a given African traditional arts and the environmental factors which influence:

- the development of artistic skills,
- competence, and
- orientations with regard to artistic creations.

The studies reviewed in this chapter have been largely on 'African Art' under which several ethnic groups of Africa and their works are clamped together. As a result such works have been in the form of generalized personal views and comments rather than observed facts. On this point M. Griaule (1950) asserted:

"... various studies of the art of Negro Africa are almost all characterised by a constant pre-occupation with the avoidance of precise details... Up to the present, we have speculated about Negro Art rather, in the same way as we do about prehistoric art, that is to say, without being in touch with the person who made use of it - (art)"

Most writers unduly favoured sculpture as compared to other arts. Equally lacking, with the exception of M. Trowell's (1953), and K. Andersen's (1977) works, is the availability of published work on East Africa in the field along the lines suggested at the beginning of this chapter.

---

2 Trowell, M., Tribal Crafts in Uganda Oxford University Press, 1953 (London)
This could, possibly be attributed to the reason that most published works on 'African Art' has been mainly written by foreigners. This sentiment has been expressed by Griaule (1950) who stated that 'Negro Art had been distorted by those with too much or too little information which they used as a bludgeon or reduced to subtleties which it did not fundamentally possess'. Another example of this trend in thinking about African Art is that of Armstrong (1970) who asserted that foreigners who write on African Arts, face several disadvantages of which two are particularly noteworthy:

(a) the arts which foreign writers used came from cultures very different from both their own, and that of most of the readers;

(b) the fact that the magnitude of 'African Art' embraces at least 300 distinct ethnic groups of art producers, would present pitfalls in the generalization of the knowledge of it.

Armstrong, (1970), further asserts that one of the ways around such difficulties, mentioned above, has been to survey the field of African arts from west to east, stopping at the eastern border of Congo (now Zaire.) The reason for stopping at the eastern border of Congo has been the assumption that there were no substantial arts east of this line, save a little bit of the Makonde and Zulu works and the rock paintings of the Kalahari.

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These observations, therefore, vaguely explain why there has been very little published work on East African traditional arts as compared to West Africa. This imbalance, might have been contributory to B. Uli's 1960 assertion that it was only the art of West Africa that had made a real impact on Western culture. The review is thus limited because of this historical shortcoming. The justification, however, for reviewing the existing scanty literature on 'African Art' is for the purpose of:

i) revealing some of the gaps left by certain writers when working on African traditional arts;

ii) pointing out some of the crucial expressions of views and comments generalizing on African traditional craftsmanship;

iii) examining some of the objectives for undertaking such studies (in many cases this had not been clearly stated or formulated), methodology, analysis, and conclusions;

iv) discussing some of the contributions and shortcomings of the selected writers.

The review of the study of African arts is therefore grouped into the four categories outline (i – iv). It is concentrating more on East African works than those of other parts of Africa.

The Gaps

Leuzinger, Elsy 1960 in Africa: the Art of Negro People attempted to cover not only the African arts and their associated materials and techniques, but also included the geographical and social set-up of the whole of Africa, all condensed within 200 pages of 15 x 10 cm counting both content and illustrations. The book discusses and covers East Africa's artifacts within eight pages whereas West Africa and Western Sudan which were considered rich in arts are covered in twenty pages illustrations included.

The reason given for the specific titles and pages of text in reviewing Leuzinger's work is not to minimize her great contribution to the documentation of African traditional arts but is:

1) to establish, factually, the argument that some views or statements were too general, in books entitled 'African Art';

2) to illustrate an argument that East African traditional arts and their place within the African art work, has for long been overlooked.

Schmalenbach, (1954) Junod Battiss and Trauz Grossert (1958) Bodrogi, Tibor (1968), mentioning a few, took a similar approach and outlook as that illustrated in the analysis above.


Similarly, several writers on the world art, for example Cheney, Sheldon (1961)\(^1\), E.H. Gombrich (1950)\(^2\) H.W. Janson (1962), do not even include the African Arts.

It is being submitted that the magnitude of African traditional arts, geographical and social aspects could not adequately be condensed within few pages. It is also quite apparent that the general approach was to categorize African arts on the basis of region, rather than on the individual ethnic groups.

It could be concluded that this approach which depicted superficial coverage of the whole of Africa had several shortcomings creating gaps in the knowledge of African arts. These gaps do very little justice to:

(a) the wealth of arts in traditional African societies;
(b) individual art-producing ethnic groups and
(c) those who consult these works for references.

Griaule (1950) supports the foregoing argument when he asserts that 'the documentation of Negro Art would have to be composed not only on minutes about the manufacture and fabrication of certain ritual objects, but also of minutes about the actual rites in which they (arts) were used, with due attention paid to the nuances hidden in every gesture and in every word'.

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ii) Expressions of views and comments

It is equally important to point out some of the views and comments expressed by various persons, regarding the future of traditional African arts within the changing pattern brought about by modernization. Some of these views and comments are so personal and yet general that it is difficult to assess and justify their validity as contributory to the problems of this study. However, it is summed up that these views emphasise the need for this kind of study.

Herbert Read (1951)\(^1\) in the Meaning of Art, referred to African traditional arts as primitive, thus he asserted:

"For the primitive man artistic creation meant an escape from arbitrariness of life. He lived from day to day, and from hand to mouth, in the exact meaning of the phase. There was no permanency in his life, no sense of duration. Even today races in touch with civilization, it is impossible to get a native to understand the meaning of promise".

On the other hand by 1960, Leuzinger expressed concern over the African traditional arts and she observed that African markets were flooded with imported goods of all kinds which were gradually ousting the traditional arts. She asserted that craftsmen had found new patrons who were largely town-dwellers, missionaries, white settlers, and tourists. She concluded that although busy workshops, mass-producing traditional African arts for the 'souvenir' market had sprang up in large towns, the products were of questionable cultural values as the final product was without any cultural roots.

\(^1\)Read, *Meaning of Art*, Faber and Faber Ltd., 1951.
Similarly Uli, Belier (1960) expressed that most writers on African art follow the simple formular that old carvings are good and new ones bad; that Africa produced interesting art as long as the tribal organizations were intact, but that since, the christian missions have undermined the ancient institutions, art has rapidly declined.

The viewpoint taken from above observations was that Africans were discarding the traditional values of items, adapting the use of imported foreign values and goods. Also that the traditionally hand made articles were treated more as souvenirs than functional, beautiful articles.

In the same year 1960, however, Trowell,\textsuperscript{1} in African Design, viewed the trend of traditional arts with hope and concern. She hoped to see the gap between tradition and the changing order bridged. Compared to Leuzinger's view and comments which showed that African traditional handcrafts were on the decline both culturally and functionally within their relevant societies, Trowell expressed concern regarding stagnation but hoped to see these crafts improved by the craftsmen in order to meet the modern trends of demands:

"... In many parts of Africa the old craftsman has not had the imagination to adopt his craft to the needs of a changing order. He may make very serviceable jars for storing grains, but he does not realize that he must now supply lids as the people wish to keep out rats. He may make fine water-jars and cooking-pots, but it does not occur to him that people need food bowls and platters, mugs and cups; jugs and dishes. Beautiful and useful things of this sort should easily be supplied by the African potter, things of far greater beauty and character than plain lifeless machine - made articles imported from abroad".

\textsuperscript{1}Trowell, \textit{African Design}, Faber and Faber, 1960.
Trowell, cautioned enthusiastic teachers not to rush in and try to improve the actual pot-building of old potters. For it was here that the potter's skill showed itself at its highest and wherever there were old established craftsmen, the traditional ways of pot building should be followed or adopted. The concern expressed here was viewed as the writer's anxious wish to see the traditional African craftsmen adopting themselves and their craft to modern needs which were rapidly overtaking the traditional ones.

Twenty years later after Read's (1951) assertion, Jefferson, E. in the Decorative Arts of Africa (1974) viewed the African traditional arts from a different perspective. She observed that in recent years, the world had come to recognize and appreciate the beauty and diversity of the African art form, not only for their historical and cultural significance but also for the continuing aesthetic pleasure they afford. This new awareness, has been applied not only to African but all the hither to art known as 'Festishes' by the Primitive uncivilized peoples of Asia, Red Indians, ...

MacDonell, Athena, a reporter to a local newspaper, the Daily Nation, considered the traditional African ceramic design as an 'ageless piece which qualifies as work of art and does so because of its simplicity and integrity, a fact which has long been recognized by museums and private collectors.

In summary, it could be argued that the expressions and comments reviewed have illustrated a brief cross-section of differing strata of assessing the African traditional arts. It could equally be argued that some of these views and comments expressed would have been very contributory to the current effort of re-assessment if only the writers used the right method of approach. That is, searching and

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giving specific examples in their (writers) evidences to qualify their assertions rather than general comments. It could be argued, further, that these positive and negative opinions need qualification which attributes to the need for systematic investigation into the local traditional arts.

iii) Objectives, methods, analysis and conclusions

Referring to some of the previous studies reviewed, so far, it has been very difficult to discern the objectives of undertaking studies on African arts. Equally haphazard were the methodologies and procedures employed when collecting the related data. Understandably, there have been very few authors who had actually visited the field and studied the African traditional arts (refer to Armstrong's observation page 9 of this chapter).

In East Africa, however, the pioneer work on the traditional crafts market has been that of Trowell, Margaret, Tribal Crafts of Uganda 1953. This book has, therefore, been reviewed under this section because of its:

a) clear objectives;
b) defined methodology;
c) guiding conclusion.

Trowell, studied almost all arts of Uganda's ethnic groups.

After studying and making a list of most of the arts and associated materials found in the Uganda museum, Trowell utilized the annual recruits of the Uganda police coming from practically every tribe in Uganda to assist her.

These recruits assisted Trowell to work through the material cultures, identifying materials already in Uganda museum and noting down those materials yet to be obtained. A check of accuracy was
kept by going over the notes months later with fresh recruits. At the same time, missionaries, headteachers, and chiefs assisted in rechecking and contributing information and materials on tribal basis. Trowell, also visited several parts of Uganda in her collection of information and arts.

Her work of not less than 407 pages with illustrations included, attempted to cover all the Uganda tribal crafts such as gourd vessels, wooden vessels, pottery, pipes, basketry, stools, miscellaneous household objects, clothing and adornment skins and barkcloths, belts and girdles, hairdressing, headdressing and facial decorations (ornament) neck, arm and leg ornament, shields, spears, bows and arrows, swords, dancing weapons, hunting knives, transport, and representation of the visual arts of every ethnic group of Uganda.

iv) Contribution

While Trowell's work is of invaluable contribution to African arts mainly of Uganda, it has to be noted that the work was too broad for detailed studies. In fact Trowell admits that due to pressure of wanting desperately to document all Uganda's cultural arts before they vanished, detailed study of objects such as sound instruments was not carried out and Trowell promised follow-up. It is fortunate that Dr. K. P. Wachsmann brings in his research on Ugandan musical instruments in addition to Trowell's work, of 1953, Tribal Crafts of Uganda. Her work provides a spring-board from which detailed researches into particular East African ethnic groups' artistic creations could be undertaken.

Armstrong's argument that available literature on markets for African traditional arts has been approached in a general manner, supports the observations outlined above. It is partly for this reason the author has chosen not to follow the already explained trend of studying African arts in general but to concentrate on one particular ethnic group - the Luo of Kenya.
Summary and conclusion

At the beginning of this chapter, we stated that there has been very little comprehensive study of African traditional arts especially with regard to how environmental factors influence artistic skills, competence and orientations. No study has searched, collected and analysed such factors in relation to the area understudy within Kenya.

The literature reviewed here, therefore, throws light upon some of the contributions and shortcomings sighted under the relevant subheadings, namely, the gaps; expressions of views and comments; objectives, methods, analysis and conclusions; and contributions. The literature has a bearing on the study because it clearly indicates the current lack of information on aspects of the subject under study.

The main points noted from the literature reviewed, could, therefore, be summed up as follows:

Many differing artifacts of several ethnic groups of Africa in general and East Africa in particular were omitted among the works. This omission was, as observed earlier on, based on generalizations which overlooked some of the ethnic groups of Africa as void of original and interesting artifacts.

Most of the literature reviewed dwelt mainly with West Africa artifacts rather than systematic progressive research throughout Africa, covering each ethnic group or nationality.

It is submitted that none of the works reviewed deals directly with the problem that the present study addresses itself to but it provides those outlined contributions which inspire and call for further investigations.
The viewpoint taken here, therefore, is that the works reviewed so far, call for further specific studies. As such, there is need to think afresh and expose the available traditional arts within their environmental contexts which influence their creation, utilization and innovation on the basis of working on one ethnic group or several groups, on one specific area of design.

This study, therefore, is focussed on one area of artifact design from one ethnic group, the Luos and does not embrace all artifacts of all ethnic groups of Kenya. It also relates the objects understudy to some of the relevant environmental factors within a given study area.
III METHODOLOGY

This section outlines the research methods and procedures employed to collect data for the research problem of this study. The main issues attended to, are, the type of data required for the outlined study objectives, data sources, the sampling procedures and data collecting methods.

However, the following factors were taken into consideration when designing the methods and procedures of this study:

a. In Kenya there were no previous systematically researched studies on environmental influences on traditional ceramic designs on any given ethnic group. Because of that, the researcher was not in a position to evaluate the designs and the methods used by traditional factors.

b. A common problem in all research of this nature is that sometimes the traditional craftsmen or the local people might refuse to co-operate in supplying the information one is looking for. This might hinder the reaching of an acceptable presentation of the problem.

TYPES OF DATA REQUIRED

The outlined study objectives call for the demonstration of how the Luo’s physical and human environment among other things have determined:

a. the formal properties of the Luo ceramic design

b. the availability and choice of the raw materials for the production of Luo traditional ceramic designs

c. the functional characteristic of those designs

d. the possibilities for innovation and development of relevant Luo ceramic designs.

In order to demonstrate the validity of the hypothesized observation above, we examined:
(1) selected forms of the traditional ceramic designs and their uses in the Luo community

(2) some of those identifiable factors of the environment which have direct or indirect influence on the traditional ceramic designs of the Luo society

(3) environmental influences in the production of the traditional clay forms in the Luo community.

Samples drawn from traditional clay objects of the Luo society comprises the variables for the analysis against the relevant environmental influences. In other words, it is expected that the majority of sample forms examined indicate a clear dependency on the environmental factors found in the Luo land and society.

**SOURCES OF DATA**

This section outlines the sources through which the data required for justifying or otherwise the outlined hypothesis was obtained.

The primary data was obtained by both interviewing and observing a cross-section of makers, sellers and users of the Luo traditional clay objects and a group of Luo nationals residing in Nairobi.

Interviewing was conducted by using two prepared questionnaires, and the first, questionnaire 'A' provided the primary data on both physical and human factors which influence the making, utilization and cultural context of each of the sample object. Questionnaire 'B' provided the validity of the functions and local names of the sample clay objects.

Observation: A number of traditional ceramic designs were observed being made, fired, sold and in use as a means of collecting date on:
a. raw materials which were used in the production of the designs;

b. functional implications of the created designs;

c. cultural patterns and practices being observed during the total process of making, selling and using the products;

d. possibilities for innovation of form and structure.

Studying and recording all the Luo traditional clay objects and the related documentary sources from libraries and Institute of African Studies provided the required secondary information for this study. The studying and recording were conducted under the following categories:

**Drawing and photographing:** Luo traditional ceramic objects and other materials studied in museum, Institute of African Studies and area of study were either drawn where time permitted or photographed where time was limited. This was for the purpose of keeping a visual form of every ceramic design studied which eventually were used in interviews, illustrations and comparisons in the study.

When drawing specimen for illustration, a uniform representational scaling was not applied because of the fact that the studied wares had varied sizes. For example had the author opted to use a scale - where 1 cm represented 1 inch, the smallest ware measuring less than 2" high would have been too small for detailed production, while the biggest ware measuring 30" high would have exceeded the paper working space of 13.5 cm x 23.2 cm.

In view of these observations and considering that a comparison of the specimen's sizes was not a major variable, the specimen were drawn on the following scaling categories:
All drawings of specimen which appear within the text are serially numbered as figures. Each figure has three numeral codes, for example, Figure 7: 1906/82/1. The first number (1906) refers to the year of collection; the second number (82) refers to the specimen's number in the sequence of collecting items of a given ethnic group; and the third number (1) refers to the authors numbering order of specimen studied.

The rest of the drawing of specimen which are not used within text but which relate to figures found within the text are arranged in groups where each group's serial number may refer to one or more drawings. Those drawings appear in the Appendix 8.

Tests: Materials such as clays which constitute a major part of the Luo traditional ceramic designs' production, were collected. The samples were taken to the then East African Ceramic Research Institute (Kenya) for tests of clays' composition, firing capacity, and environmental elements which constituted the clay composition. The physical environment influences the composition of clays and the composition influences firing capacity. On the other hand, the testing of firing capacity of the clays was intended for determining the category into which Luo clay designs fell. The two main categories are: earthenware\(^1\) and stoneware\(^2\) clays.

\(^1\) Earthenware clays have a firing capacity which range from 700\(^0\)C to 1110\(^0\)C and if fired beyond that temperature the clays shutter. At these temperature the clays remain porous.

\(^2\) Stoneware clays have a fire capacity of 1200\(^0\)C and upwards. At those temperatures the clays vitrifies and becomes non-porous. It is like a stone.
SAMPLING AND DATA COLLECTING

This section outlines both the sampling and the collecting of data which develops side by side and was conducted in three phases as follows:

Phase I

The most likely place to find basic information was the Kenya National Museum. The Museum was therefore the first source of data used. However, working in the Museum became difficult and impractical when it came to removing the objects on display for the purpose of close observation and drawing. This was when the Museum authority suggested the use of the Institute of African Studies (I.A.S.) which had replica objects as those found in the Museum.

The I.A.S. acts as an educational organisation for cultural developmental studies. It also initiates and directs researches of cultural aspects relating to the development of East Africa. I.A.S. has a wide collection dating from as far back 1900, to the present.

All Luo traditional clay objects available were studied and recorded. It was felt that a wide period could offer an opportunity to examine the problem. Since the clay objects had been collected over a long period, it could facilitate a meaningful examination of the trends in traditional Luo ceramic designs, and the effect of contemporary environmental factors.
The I.A.S. collection, therefore, constituted the actual first step of data collection. The method employed in collecting this data from I.A.S. is outlined as follows:

a) The free-hand sketches of each object
Each object was drawn on an index. The drawings were small and unscaled, but the actual relevant measurements (height, width, circumferences, etc.) of the object, decorations, and attachments, were indicated on the drawing(s) respectively. These measurements were used later for drawing accurate scaled specimens which were employed in field interviews and illustrations for the study and comparison when analysing the data.

b) Recording of information tagged on the object
The written information which was tagged on the object for the I.A.S.'s classification, was recorded on the same card of the drawing of the object. The tagged information, e.g. Luo/UC/1905/1 consisted of:

(i) ethnic group which made the object
(ii) institution which collects the object
(iii) year of collection
(iv) numeration number of the object.

c) Recording of information on cataloguing cards
After drawing all the Luo clay objects and recording the information from the tag as described above, what remained was to record the information on the cataloguing cards. Each cataloguing card had the information under the headings given below:

(a) Object
(b) Serial number (same as that on the tag):
(c) Tribe which made the object:
(d) Date of making:
(e) Vernacular name:
(f) Collected by:
(g) Date of collection:
(h) Cost price:
(i) Where bought from:
(j) Details: - Under this heading, methods of making, tools used, raw material, utility of the finished object, the sex of the craftsman, were briefly outlined.

The write-ups on the cataloguing cards in respect of each of these objects therefore were carefully studied regarding the information which appeared on each. And as such the studied information from each card was respectively recorded on the same index card of the corresponding free-hand drawing. These, the free-hand drawing and the information, were then transferred and recorded on a proper data recording sheet (see Appendix C). On this sheet each specimen was drawn on a scale and the scaling was uniform for all the specimens. The unified scaling was for the purpose of comparing the sizes of the specimens against their varied functional fulfilsments.

Unfortunately several cards, mainly those which were stocked during the period of 1900 to 1960 did not have information under all sub-headings outlined on the previous page.

Not all the information appearing on the cards was of interest to the researcher. The relevant information included:

(a) the names and location of the maker of the object;
(b) resources of raw materials and artistic competence within the environmental framework;
(c) firing temperatures of the clays used;
(d) social obligations in relation to the object
(e) seasons for: collecting clays and other associated raw materials, making, firing and selling the objects during a year;
(f) the innovations and improvements (if any) and probably reasons for such adjustments.

Since the information was collected for different purpose from the aims of this particular study; there were several gaps which needed to be filled.

It was, therefore, necessary to:

1. collect more information regarding those objects whose cards had missing materials;
2. collect other information which was missing from the cards;
3. have a check on the accuracy and validity of the materials and information obtained from I.A.S.

Phase II

Pilot - study

It was felt necessary to confirm or dispute the validity and reliability of the materials and information collected by I.A.S. before using them in the study area. To do this a pilot-study using interviews and discussions with a number of Luos residing in Nairobi, (hereafter referred to as the Nairobi group) was necessary.

The Nairobi group included those Luos who had attained the school certificate level (O Level) and above. School certificate was opted for as the minimum academic standard with the assumption that those below such a level would not have the adequate ability to communicate fluently either in English or Kiswahili. This was considered in the view of the researcher being a non-Luo and the only foreign languages she could use well, being only English and Kiswahili. It was also felt advantageous to draw at least one
sample from each of the three districts which comprise Luo-land. However the majority of the group was from Siaya District. That is six from Siaya, two from Kisumu and two from Nyanza Districts.

This approach was considered adequate enough to facilitate:

a. interviews and discussions without the problem of language communication;
b. a more positive understanding and sympathetic response towards the program than the local suspicious people in the areas of study;
c. quick and less expensive consultation whenever the need arose as the group was within easy reach.

An attempt was made to draw the sample on the lines already expressed. Since most of the Luo contacted within a period of two weeks were mostly from Kisumu and Siaya, the approach previously described was abandoned because it needed more time to get a sample from each district and time was very short.

It was then decided to draw a random sample so long as it included a number from Siaya the selected area for study. (The reasons for selecting Siaya are given under the introduction chapter).

The interviews and discussions with the Nairobi Luo group covered the following:

a. checking through the identification of the shape and form of the specimens against their vernacular names and utilization;
b. pilot-studying the questionnaires;

c. informational background to the problems encountered in the area of study.

a. Checking through the identification...

For (a) stated above the checking was carried out by drawing two questionnaires of which each consisted of three columns sub-headed (i) serial numbers and the unscaled drawing of the specimen, (ii) vernacular names and (iii) usage of the object.

The column of serial numbers reflected all the recording numbers given to the studied specimens, the second column consisted of the vernacular name which corresponded to the serial number respectively and lastly the column for usage reflected the functional utilization of the object of the corresponding vernacular name. (See Appendix D).

Questionnaire B sought information on:-
(i) and (ii) as described on page and then a blank space was left under the sub-heading of usage (iii). A copy of this questionnaire was issued to each sample of half of the Luo Nairobi group to write the usage against every vernacular name of a specimen. Alternatively, questionnaire C consisted the information of (i) and (iii) and a blank space was left under the sub-heading of (ii). A copy of this was given to each interviewee of the remaining half of the Nairobi group to write vernacular name(s) against the appropriate usage.

The results of questionnaires B and C were compared and wherever ambiguity or discrepancy arose it was discussed or referred to the collection of more information from the area of study. This method enabled us to validate the information from I.A.S.
b. Stabilization of the questionnaire to be used in the area of study

For point (b) as stated on the previous page, the questionnaires which were used in the field were first discussed with some of the Nairobi Luo group. This was done for the purpose of stabilizing the questionnaires. Unfortunately the problems of perceiving two dimensional images was overlooked. It was not realized in time, before taking questionnaires to the field, that the degree of perception and interpretation of two dimensional images varied considerably between the elite and the local people in the area of study.

c. Informational background...

Point (c) sought informational background to the problems which might be encountered in the area of study. Ambiguities and discrepancies encountered in the area of study during the collection of data were counter-checked or discussed with the pilot-study group for possible explanations.

Phase III

This third phase of collecting data, constituting the main study, was conducted in Siaya District to gather the missing information as stated above in (a - c).

Siaya District within Nyanza Province was chosen as the sample area for study. It was urged that Siaya District is a typical sample area of the Luo community as observed on page 5 and therefore was an adequate portion of the Luo population to generate sufficient data to represent the Luo society.
As such, Siaya was used as a representative of Luo traditional ceramic designs and the specimens studied in I.A.S. were compared with clay designs found in Siaya. And from the study area sampling and collecting data was as follows:

1. Visiting Siaya Markets: Several markets within Siaya District, namely - Ng’iya, Ukwala, Nyangweso, Siaya, Ndere, Rangala, Ugunja, Saranga, Yenga, Yala and Sega were visited during their market-days. (See Map 4). Although in the northern part of Siaya District, these markets were selected on the basis that being situated on the main road, they draw a high number of both sellers and buyers of Luo traditional clay objects from different locations within Siaya.

Visits were for the purpose of collecting actual ceramic objects and information relevant to the following:

a. the formal properties of the Luo ceramic designs on the market against the I.A.S. representational specimens. This included collating the usages, vernacular names of the objects on the market, to those of I.A.S.;

b. the utilitarian characteristics of the designs against the social demands and physical demands;

c. innovational possibilities against the environmental factors.

An initial familiarization visit was made to two markets namely Ng’iya and Siaya. It was during this visit that the necessity of an interpreter was realized. Originally it had been assumed that Kiswahili could be used.

The researcher was conversant in Kiswahili, and since Kiswahili is the National language of Kenya and the markets were within village towns, it was assumed it would be possible to communicate without much difficulty. With the realization of the difficulties of communication, it was decided, therefore, to acquire an interpreter who
Map 4: Markets Visited in Luoland

Key:

1. Yala
2. Nyangwebo
3. Ngiiya
4. Saya
5. Ndere
6. Rengala
7. Ugunja
8. Saranga
9. Yenga
10. Ukwala
11. Sega

Markets from which new specimens were taken:

Clay samples

Scale: 1:1,000,000

was a Luo, good in both Kiswahili and English. A Luo interpreter was then chosen from the Nairobi group and was to assist in:

a. communicating with the local people in the local language and translating to the researcher in either English or Kiswahili;

b. remembering and writing down correctly vernacular names of ceramic designs studied in the field;

c. interviewing those who were too suspicious of a non-Luo person (see the section of the problems encountered).

While the majority of the local people were pleasant to deal with, a few were very suspicious and cautious on how much information to part with, and which would not implicate them in anyway. They were more alarmed if one wrote. Therefore, noting down anything when talking or interviewing had to be minimized to curb such suspicions.

The collecting of data on the formal properties of the ceramic designs in comparison with those forms studied at I.A.S., was basically a question of recognizing a form which had been studied before from the I.A.S. collection. Fortunately from the exercises of drawing, handling, seeing and discussing some of these forms, the researcher had gained some familiarity for formal properties against usage and vernacular names. This was very advantageous because the designs seen on the market and which had been seen before, were easily recognized and identified. If the form, the vernacular name and the usage tallied with a specimen from I.A.S., then that was ticked on our list of I.A.S. as a representational object. The checking on usages and vernacular names, (questionnaires B and C) were employed for recording.
While the recognition of already studied objects was easy in some cases, for example, serving wares, and the wares for cooking fish and meat, the water wares pose a problem because the designs varied so much in shape and size that the main similarity that remained was the narrow neck and rolled-on incised belly. The narrowness of the neck was considered in relation to the belly of the same ware.

The three wares in figure 1 below illustrate some of the varied shapes and designs of water containers found on the market and the I.A.S. A similar variety is found among smoking pipes (see page 46).

Due to these variations in shape and size of water wares it was decided to collect additional specimens of this category.

At the same time the designs which showed additional attachments for new usages or original usages or both were collected and added to the original specimen list from I.A.S.

Figure 3: Water wares
For example the drawings below show resembling designs with varied bases which were assumed to be additional attachments (illustrations B) but originating from a round base as illustrated in drawing A.

Figure 4: Varied bases of a ware

Since there was no ample time to draw as it was done in the I.A.S., the method of recording the new specimens was photographing. An index card of size 3" x 5" was used as the scaling gauge. The details of decorations, usages, vernacular names were quickly noted on that same index card which at the same time carried the serial number of the respective snap-shot of that specimen.

After the development of the film, the scaled drawings were re-produced in the same procedure as the I.A.S. Unfortunately, there was much guessing or approximating in measurements on the photographed specimen as compared to the I.A.S. specimens which were measured and drawn on the spot and from the actual object.
Demand of each type of design, selling system and selling season were noted. And a substantial number of new interesting specimens was added to the I.A.S. list (1975-77) unfortunately several specimens though well known to the interviewees were not on the market because of the following reasons:-

a. usage prohibited by the Government, for example, the ware for smoking bhang could not be sold publicly;

b. object or the practice banned by the Christian ways of worshipping, for example, the ritual wares of twins, cleansing people, property from evil could no longer be sold openly;

c. object no longer bought because of the adoption of the modern manufactured alternatives, for example, bowls, for serving (tawo) sufurias for cooking, plastic and aluminium cans for water, which have become more fashionable and are durable, have weakened the market for the traditional wares;

d. Wares prohibited by culture to be seen in public and therefore made secretly and on the instructions of a local wise man.

Through persuasion, however, it was possible to get some of the above mentioned objects. For example we got complete components of bhang smoking units with the associated information. These designs, like water wares, were more remarked in decorations, attachments and design of the fire grill which varied from one design to another.
The drawings below illustrate these differences which were observed. The drawings are given on actual sizes.

Figure 5: Bhang smoking wares

A total of forty two sellers was interviewed from the eleven markets visited.

2. Visiting the craftsmen:

During the visits to the markets, it was found that the sellers of the clay objects, fell in the following categories:

a those who were traders usually men, who had bought the objects from the craftsmen and were selling for profit. This category, had the liberty to instruct the craftsman as to what design he (the trader) wanted. For example the man, who was selling
the distling apparatus drawn below, said, he had commissioned the craftsman for a number of that design.

Figure 6: Distilling apparatus

This type of sellers had, therefore, fine, well finished, and varied clay objects. Their objects tended to be relatively more expensive compared to other sellers of other categories to be outlined below:

b) the young girls who were in their teens or early twenties and were selling both fine well finished objects as well as crude ones. That combination roused the researcher's curiosity and it was discovered that these were the young apprentices of the rather aged craftswomen who sent them (the young) to the market to sell. The fine work was therefore, for their masters and the crude work which was relatively very cheap, was of their learning efforts. This category totaled to twenty.

c) the craftsmen who were, from observation, middle aged women. (At this juncture it should be mentioned that it was expressed by a few Luos that traditionally, women make most of the clay works, but men make the pipes for smoking. This category was of eleven women potters and, unfortunately, we did not interview any man potter.
This group had varied methods of selling which were either bartering or money. They bartered in food stuffs. This group beside being interviewed as seller was also used to collect information related to the methods of making the traditional ceramic designs.

The following information was gathered from the crafts women:

i) what raw materials were used in the total creation of the designs;

ii) where these materials were found and why these materials were used;

iii) cross-check on the vernacular names and usages of designs studied from I.A.S.

iv) what cultural taboos were observed throughout the total process, for example, when collecting raw materials, making, firing, and so on;

v) the seasons for collecting raw materials, making, firing and selling, during a year;

vi) craftsman's obligations to the users(society) for the purpose of improving and innovating his designs.

Although several craftsmen were interviewed during the market visits, it was admitted that deductions drawn from the analysis of such information might not be very reliable. Such doubts arose when the time taken to convince the interviewee that we were not police people and the persuasion involved to extract some information, were considered.
Furthermore it was observed, when trying to locate and visit some of the craftsmen with whom it had been prior agreed to see at their place of work, that the directions and names given to us were false. It was, however, appreciated that such interviews conducted particularly by strangers could arouse a lot of suspicion - and mainly if forbidden objects had to be discussed.

These shortcomings had to be considered but at the same time issued like time limit, lack of staff and financial resources had to be accommodated.

With the above mentioned shortcomings in view, it was decided to visit, observe and interview whoever craftsman could be found at work. Three craftswomen were visited at their place of work. One was at about two kilometres from Ng'inya town. Fortunately, she was very co-operative and the researcher was able to gather valuable information related to points i, iii, iv, v. She allowed photographing and demonstrated her working procedures. The second one was found at Simogore and the third was at Kandaria, Asembo Location. Their information tallied.

It was considered appropriate to collect clay samples from the clay deposits which were mentioned. The purpose of the clay samples was for finding:-

a) the elements which constituted the Luo clays, against the physical environment;

b) the firing capacity as to determine whether these clays were, earthenware or stoneware clays.

The visits to the traditional ceramic design users was abandoned because of the problems outlined. Previously it had been agreed to interview about twenty-five homesteads of ware users selected at random from the research area. This number had been chosen because of the limited time and financial factors and the number had been considered adequate to yield a substantial
data within the mentioned constraints. Below is the information which should have been gathered from the users of the traditional Luo ceramic designs:

a) checking the vernacular names and forms of I.A.S. specimens against their utility;
b) types of traditional ceramic designs used in a homestead, taboos of cultural outlook connected with each type;
c) how and why those mentioned types were used;
d) users obligation to the craftsman in connection with improvements.

After interviewing five homesteads, the procedure was dropped. The argument taken when abandoning this part of the laid down procedure was that, craftsmen, besides being sellers and makers, of the traditional ceramic designs which were being investigated were also users of these objects in their homesteads. It was concluded, therefore, that the information in a, b, c and d as stated above had been adequately covered when interviewing the seller and the craftsmen.

MAIN DIFFICULTIES ENCOUNTERED

In summary, the main problems encountered during this research are as follows:

a. Documental recording. At the time of the collection of data for this study, there was no comprehensive study which had searched, collected and analyzed data related to Luo traditional ceramic designs with regard to environmental factors, and those which, influenced the development of artistic skills, competences and orientations. The work which was available on the public market was largely in form of generalized personal views and comments.
Equally lacking, with the exception of Trowell's work (1955) were the clearly defined statements or formulation of objectives for undertaking such writings. With such handicap it was necessary to look for alternative methods of starting off the study.

b. Working in the Kenya National Museum
Nairobi and the Institute of African Studies (I.A.S.)

Since there was no recorded comprehensive study relating to this research, it was decided to look for information from the Kenya National Museum (Nairobi). Unfortunately, although Luo traditional ceramic objects were found, the actual handling of them became difficult. This problem arose when it came to removing the objects on display for the purpose of close observation and drawing. Then the use of I.A.S. was suggested which had a replica collection of objects as those in the museum.

Although the I.A.S. had a satisfactory collection of Luo traditional ceramic designs, the information on the cards was not necessarily geared to this study. The following were some of the shortcomings:

i) some of the cards in respect of some studied specimens were either missing, or misplaced which took a lot of time to search;

ii) the cards of most of the old collections which were collected during the years in 1890s and early 1900s just recorded the serial number of the object, the tribe which made it, and the year of its collection. The information under 'Details' was missing;

iii) there were several discrepancies and incompleteness in the I.A.S. write-ups which required establishment of their validity and reliability in the light of this study;
iv) several senior officers in I.A.S. were new at the time and were just trying to re-organise the whole set up of the catalogueing system of the collections and the write-ups. Because of this, it was difficult to depend on the staff of I.A.S. for accurate information and assistance regarding the write-ups of some of the specimens. As a matter of fact, the staff was then mobilizing field studies to collect the missing information in order to complete the cards and correct discrepancies observed. (On the whole I.A.S. officials themselves needed assistance from researchers who had presumably collected substantial information from their field research.

c. Interpreter

The researcher had assumed there will be co-operation from local Luo people in the field and that they all understood the national language - Kiswahili. During the first familiarization visit to the markets of the study area, it was realized that:

i) a big number of local people either refused deliberately to talk or did not understand Kiswahili;

ii) those who accepted knowing Swahili or English, refused to co-operate when the interview touched on the subject of traditional wares which they did not want to discuss;

iii) attempts to use signs and gestures to bring home or illustrate a point proved useless and very laughable to local people;

iv) there were elements of back biting and warnings amongst the people using the local language which the researcher did not understand and which often resulted in misleading answers, and responses.
It was, therefore, a real necessity to acquire an interpreter.

d. Visiting and talking to local people in the study area

Some of the subjects interviewed in the markets, and homesteads were very suspicious of the interviewer. This attitude demanded long time of persuasion to convince the subjects, otherwise they could not respond at all. It was felt that subjects were afraid of:

i) discussing ritual and sacred wares with a stranger
or
ii) suspicion of incrimination of some kind, or
iii) talking and exposing their traditions to strangers.

It was also felt that some of the traditional wares for example those for smoking bhang, were not for public discussion as bhang, was prohibited by law. These constraints, therefore, caused a lot of unnecessary delays which were not prepared for before the actual field study.

Although being a teacher or belonging to an educational institution helped a bit but with certain individuals, it failed. For example a wife who was very unco-operative while her husband was very co-operative, intercepted her husband by wondering whether the interviewer was not taking papers to study abroad just like another researcher who had promised them big gifts and did not give and just went abroad. The husband being cautioned became reluctant to give any more information.
Some subjects just became tense and tongue-tied whenever the interviewer started writing down what was being said or discussed. Again many subjects were willing to give information so long as their identity was not disclosed and whatever they said was not written down. This was going to cause problems of remembering and lack of accuracy.

Then a small portable tape-recorder, to record the proceedings of the interviews was opted for. Though this proved very helpful as most of the subjects interviewed never suspected of being recorded, it caused some problems. For example where description of a ware was given in gestures. (It would have been appropriate for the interviewer to draw the described ware). Drawing also proved a threat to some of the subjects, interviewed, the interviewer, therefore, had to try to remember the shape and draw it immediately after leaving the subjects (these description of wares occured when the subject was talking about a ware which was not on questionnaire B & C (See Appendix D).

A small number of subjects had difficulties in perceiving and visualizing the two dimensional drawings of questionnaire B & C. At this was a small number, it was considered unnecessary to change the drawings or redesigning the questionnaire.

Subject interviewed talked and answered questions and suggestions in long conversational style. Although this was time consuming and tiring, the subjects felt offended and irritated when cut short. It was realized and understandable that subjects were not used to short precise answers. Within these long conversation, several types of wares could be mentioned at random.

e. Identification of Luo people

The identification of Luo people became very tricky. The study area has some Luyia people who are bantu within the Luoland
for some unknown reasons never wanted to admit their true ethnic group. This was puzzling. Fortunately, the interpreter was able in some cases to tell those who were not Luo.

f. Other problems

This research was not funded and because of this, finance was a very limiting factor. The researcher, therefore, could afford a few.

i) visits to areas of study in the field,

ii) photographing films and tapes for recording; and

iii) analysis of raw materials (clays).

One has to mention the long struggle to register with the University, and research clearance which took the author nearly two years. This study therefore, was carried out under such constricted conditions.

In conclusion, we wish to point out that some difficulties were encountered (as is almost inevitable in studies of this type) in the collection of data. Nevertheless, we feel that inspite of these difficulties, the study as a whole, the information gathered, the analysis made and the conclusions arrived at, provide significant data insight and understanding of traditional ceramic designs of the Luo community of Kenya for further related studies.
IV FINDINGS

This chapter is devoted to a brief descriptive outline of the findings on:

1. physical aspects of Luoland which have been assumed to have availed the relevant materials and conducive temperament for the creation of Luo traditional ceramic designs;

2. human factors which include the Luo's historical movements and migration, beliefs, social cultural tendencies, which might have jointly with (1) or separately influenced the demand and application of the Luo traditional ceramic designs.

It was also considered appropriate when discussing (1) and (2) to summarize the specimen studied alongside their relevant social applications. This approach was chosen for the following reasons:

i) It was assumed that the information covered here would provide a basis for analyzing the findings.

ii) It was also hoped that such an approach would provide and avail all the raw materials in their original form before the actual analysis.

1. PHYSICAL ASPECTS

According to National Atlas of Kenya 1970, Luoland has varied types of soils. The soil found in the area of study (Siaya) is classified as:

'Red to strong brown friable clays with laterite horizon - greyish-brown (10 YR 5/2 medium humic 2-3% carbon 'A' horizon overlies a redish brown (2.5YR 4/4,
to strong brown (7. YR5/6 subangular blocky friable clay, with rounded iron concretions which becomes massive with depth. Derived from volcanic rocks and occur on level land between 1,200-2,000 m Rainfal 750 - 1,100 mm).

For the purpose of clarity the remaining part of this section is divided into two major groups namely:

A) Collection and availability of raw materials for the production of ceramic designs in Luo society

B) The output of the Luo ceramic designs in conjunction with the physical environmental factors.

A) Collection and availability of major raw materials for the production of ceramic designs in Luo society

The raw materials were grouped as follows:

a) Clays which could be found in Luoland;

b) Tools, (these comprise: 'ombasa'; 'Kuga'; 'Kidi'; 'ajua'; stones, grasses, trees....)

Clays:

Before we describe the clays in Luoland, we shall describe clays in general:

Clay arises as a product of geological weathering of rocks especially feldspar. The weathering gives rise to two main groups of clays namely, Kaolins, and montmorillonites. The two differ because of the silica content (SiO$_2$) and bound water. The formula for Kaolins is $\text{Al}_2 \text{Si}_2 \text{O}_5 (\text{OH})_4$ and for montmorillonites is almost $\text{Al}_2 \text{Si}_4 (\text{OH})_2$ but is more complex. Examples of Kaolins are Kaolinite, nacrete, dickite and halloysite and examples of montmorillonites are pyrophyllite, talc.

Kaolins:

Of this group the commonest or most abundant in the world is Kaolinite and it is the most important because it is the
principal constituent of the varied clays known to clay craftsman which are the major raw material for ceramic works. According to Thomas G in Step by Step Guide to Pottery 1973, clay is the one material essential for all ceramic processes. The varied clays in this group could be classified briefly as:

(I) China clay or Kaolin formed through decomposition of granite rocks. It is the purest form of clay and almost non-plastic and pure white but coarse in texture.

(II) Ball clay which is carried from where it was formed to a secondary deposit, is very plastic to work with, and therefore less plastic clays or non-plastic materials have to be added to make it workable. Often, ball clay contains colouring agents.

(III) Red clay is secondary clay like ball clay because it is carried away from where it was formed to another deposit. But red clay has high content impurities such as sand, calcium, iron... which lower its resistance to heat.

(IV) Fire clay is also a secondary clay found under coal seams, having been deposited in swampy forest. It is highly resistant to heat, being Siliceous and free of impurities. It is coarse but plastic when finely ground.

1 Thomas Gwilym: Step by Step Guide to Pottery
Below is a table which gives typical analyses of compositions of various clays for the purpose of comparing, assessing and categorizing the Siaya District clay.

Table 2: Comparative Compositions of Various Clays

<table>
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<tr>
<th></th>
<th>Loss</th>
<th>Silica</th>
<th>Titania</th>
<th>Alumina</th>
<th>Iron</th>
<th>Other Fluxes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Pure clay</td>
<td>13.95</td>
<td>46.1</td>
<td>-</td>
<td>39.3</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>substance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China clay</td>
<td>12.4</td>
<td>46.7</td>
<td>-</td>
<td>38.9</td>
<td>0.6</td>
<td>K2&lt;sub&gt;O&lt;/sub&gt; 0.96</td>
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<tr>
<td>Typical</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>Na2&lt;sub&gt;O&lt;/sub&gt; 0.04</td>
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<td></td>
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<td></td>
<td>MgO 0.02</td>
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<td></td>
<td></td>
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<td>CaO 0.05</td>
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<td></td>
<td></td>
<td></td>
<td>1.07</td>
<td></td>
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<td>Blue Ball clay</td>
<td>9.35</td>
<td>50.5</td>
<td>0.91</td>
<td>33.55</td>
<td>1.48</td>
<td>K2&lt;sub&gt;O&lt;/sub&gt; 2.5</td>
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<td></td>
<td></td>
<td></td>
<td>Na2&lt;sub&gt;O&lt;/sub&gt; 0.3</td>
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<td>MgO 0.65</td>
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<td></td>
<td></td>
<td></td>
<td>3.71</td>
<td>CaO 0.26</td>
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<tr>
<td>Ball clay</td>
<td>8.5</td>
<td>58.7</td>
<td>1.67</td>
<td>26.72</td>
<td>0.75</td>
<td>K2&lt;sub&gt;O&lt;/sub&gt; 2.66</td>
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<tr>
<td>Stoneware</td>
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<td></td>
<td></td>
<td>Na2&lt;sub&gt;O&lt;/sub&gt; 0.44</td>
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<td></td>
<td></td>
<td>MgO 0.41</td>
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<td></td>
<td></td>
<td></td>
<td>3.83</td>
<td>CaO 0.32</td>
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<tr>
<td>Red clay</td>
<td>7.12</td>
<td>59.6</td>
<td>1.28</td>
<td>21.94</td>
<td>6.56</td>
<td>K2&lt;sub&gt;O&lt;/sub&gt; 0.84</td>
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<td>3.07</td>
<td>CaO 0.59</td>
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<td>Aluminous Fire clay</td>
<td>14.1</td>
<td>43.4</td>
<td>3.35</td>
<td>36.89</td>
<td>0.69</td>
<td>K2&lt;sub&gt;O&lt;/sub&gt; 0.50</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Na2&lt;sub&gt;O&lt;/sub&gt; 0.26</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>MgO -</td>
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<td></td>
<td></td>
<td></td>
<td>1.54</td>
<td>CaO 0.78</td>
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<tr>
<td>Siliceous Fire clay</td>
<td>7.31</td>
<td>68.7</td>
<td>1.22</td>
<td>18.67</td>
<td>2.37</td>
<td>K2&lt;sub&gt;O&lt;/sub&gt; 0.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Na2&lt;sub&gt;O&lt;/sub&gt; 0.08</td>
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<td></td>
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<td>MgO 0.33</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>1.60</td>
<td>CaO 0.23</td>
</tr>
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</table>

David Green Understanding Pottery Glazes Faber 1963
(a) Clays which could be found in Luoland: The clays found in Luoland vary both in colour and texture. Unfortunately due to lack of time and finance, only one sample of clay from Nghja/Alego, Siaya District, was analysed for its composition. And for this handicap, one could not confidently indicate that these clays also varied in specific composition. However, the fine plastic clay sample which was analysed by East African Industrial Research Organization had the composition shown below:

Table 3: Composition of the clay sample from Siaya

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica (SiO₂)</td>
<td>56.52</td>
</tr>
<tr>
<td>Alumina (Al₂O₃)</td>
<td>20.02</td>
</tr>
<tr>
<td>Iron (Fe₂O₃)</td>
<td>7.37</td>
</tr>
<tr>
<td>Soda (Na₂O)</td>
<td>0.47</td>
</tr>
<tr>
<td>Potash (K₂O)</td>
<td>0.85</td>
</tr>
<tr>
<td>Titania (TiO₂)</td>
<td>0.37</td>
</tr>
<tr>
<td>Loss on ignition 1000°C</td>
<td>10.75</td>
</tr>
<tr>
<td>Moisture at 110°C</td>
<td>3.65</td>
</tr>
</tbody>
</table>

The clay observed in Siaya District fell into three major clays namely:

- Coarse brittle sandy clays
- Fine plastic clays
- Powdery clays

(i) Sandy brittle clay was found and dug from the lowlands of the river banks where it was rocky. The river meanders through these compositions of land and rocks. The rocks are observed above the surface. The rocks around were believed to be
Map 5: Composition of Rocks in Luoland

Key:
- Quaternary sediments
- Tertiary Volcanics
- Granites
- Lake Victoria
- Luoland boundary

Scale 1: 3,000,000

sedimentary rocks\(^1\) because of the observed distinct strata in the rocks (see plate 14). Also see map 5 which illustrates the composition of rocks in Luoland.

The clay deposit observed was about six kilometres from where the craftswoman being interviewed was staying. According to the interviewees, such clay could be found easily and in case it is not available, sand could be used instead. It is valuable for blending with the fine plastic clay to obtain a workable body.

(ii) Fine plastic clay is found, like the sandy brittle clay, near river banks but in the case of fine clay residues are found where the sedimentary rocks are absent or far deep below the earth. As a result this type of clay remained free from excessive sand deposits. This type of clay, was taken as sample for analysis (see clay analysis on the previous page).

(iii) Powdery clay which is non-plastic and referred to as 'pala', is easily found in several areas of Siaya District and other areas of Luoland. It could be found in different tonal ranges of colours. These colours range from ochre known as 'pala'. It retains its colour when fired.

The craftswoman interviewed asserted that 'pala' is abundant but to get pure clean 'pala' one has to dig deep in earth. Clean, implied red clay without impurities such as vegetation, other colours, or clays. She went on to explain that it was a taboo to say the name 'pala' or tell when one is going to collect the clay. This is because of the belief that 'pala' could disappear when firing or hide when being dug.

---

1 Sedimentary rocks, according to Moore W. G. in Dictionary of Geography, those are rocks which have been deposited as beds often as sediments (i.e. under water), forming one of the three main types of rocks which make up the earth’s crust. They were laid down in distinct layers (Plate 14).
Tools: The basic tools observed in the process of making Luo traditional ceramic wares, were hands. The other tools observed were just additional. Thomas (1973), affirms the above assertion that:

"That tools are an extension of the hands is nowhere more evident than in the making of things in clay. Found object such as pebbles, shells, and animal ribs not only help the hands, but even initiate techniques, ... they (tools) are a great stimulus to imagination and envention both in making and decoration"

The 'Ombasa which is for smoothening, is thick medium size pod of ombasa creeping plant. The plant grows abundantly everywhere in Luoland and it creeps on trees, shrubs, bushes and grasses. When the fruit is fully grown, it dries and curls. It is picked then and the exposed seeds are removed leaving two halves of the pod which are tools for smoothening the ware being made. The process has been discussed under 'Making of Wares' (see plate q).

Kuga is a decorating tool. It is woven or knotted from a special grass which is found around swampy areas and river banks. Plates 15, 16, illustrate the making of 'kuga', finished kuga, and the type of grass for making kuga respectively. Decorating tools could also be improvised from carved piece of wood, small piece of woven rope, fish bones, maize cob. The decoration obtained is known as roulette (see section on decorations).

'Kidi' is a small smooth stone (pebble) which could be found near Lake Victoria shores, banks of River Nzoia, and from piles of sand. 'Kidi' is a gravel stone and it is used as a burnishing tool to polish 'pala' into a ware. (see plate 12). Also see under: Slip - painting - 'Pala'.

1. Gravel is a deposit of rounded stones, usually mixed with finer material such as sand or clay and formed by the action of moving water - by a river or a lake or by sea.
Ajua or Ajuwa is a seed and when full grown and dry, it has a very hard smooth coat or testa 'Ajua' seed could be improvised to burnish 'pala' on a ware instead of using 'kidi'. The crafts woman of Ngiliya observed making Luo ceramic traditional wares used 'ajua' to burnish 'pala' on a ware. It is a seed from a big forest tree known as 'ajuw'.

Grass and trees: Although grass and trees do not fall adequately under tool, it was felt useful to mention them for the essential role they play in accomplishing the production of the Luo traditional ceramic designs. That is firing. Luoland has different types of grasses, trees, shrubs which grow abundantly due to the type of climate. The required materials for firing the clay wares, therefore, are readily available.

Stones should also be mentioned for their role in the making of the Luo traditional ceramic designs. Such roles as grinding 'pala' to its finest (see plate 11) before use in the decoration of wares; laying of foundation for the firing of wares; used in decorations such as burnishing 'pala' on wares.

B) The output of the Luo ceramic designs in conjunction with physical environmental factors

This section outlines the production of traditional Luo ceramic wares. Production will embrace the (a) making, (b) decorations, (c) firing, and (d) glazing, in which the utilization or application of the raw materials available in Luoland in the output of the ceramic designs is traced.

(a) Making of wares is known as 'chu-eyo'. The wares are made anytime of the day and year. But at the same time the making period can be interrupted by seasons for ploughing, planting, and harvesting.
The three craftswomen we observed were from Ng'lya, Kandaria, and from Simogore, Siaya District, respectively. As the methods and materials employed were similar, it was decided to refer to anyone of the three craftswomen.

Clay, which constitutes the major raw material for ware-making, was collected and stored in a hole dug near the house and covered with tree leaves. Water was poured on it frequently to let it age more quickly (and probably, though not mentioned by the interviewee, keep it moist). New clay that is brought straight from the clay deposit cannot be used. The reason for this, as explained by the interviewee, is that wares would break during drying.

Two types of clays are mixed to form a workable consistency. These are:

(i) the fine, smooth clay with no obvious sand particles. It is very plastic and because of this plasticity, it sticks and is very unworkable;

(ii) the sandy, coarse clay with obvious sand particles. It is very brittle and because of this, it breaks easily and cannot stick together.

After the two clays have been mixed or kneaded together using hands, the bottom of the ware is built first. This is done by flattening a piece of clay (see plates 1 and 2) and placing it inside the bottom of an old broken fired ware (see plate 3). This broken ware is known as 'tago' or 'thago'. Big coils of clay, which are rolled between the two palms, are added to the base, building the shape upwards (see plates 4, 5, 6). As the coils are added, the shape is smoothened, pulling outwards and upwards, with a pod of a fruit known as 'ombasa' (see plates 7, 8, 9). Plates 7 and 8 illustrate the use of the pod, and plate 9 shows the
Plate 1: Kneading a piece of clay

Plate 2: Flattening the kneaded piece of clay
Plate 3: Shaping the flattened clay inside the bottom of an old broken fired ware

Plate 4: Rolling clay in both hands to form a big coil
Plate 5: Building the ware upwards by adding clay coils

Plate 6: Adding more coils
Plate 7: Smoothening inside the ware gently while pushing the Ware outwards using 'ombasa'.

Plate 8: Smoothening inside the ware gently while pushing the ware outwards.
Plate 9: 'Ombeza', the smoothening pod (the craftswoman holding a pod)

Plate 10: Rouletted areas on a ware: the smooth two bands are coloured with 'pala'
Plate 11: Grinding 'Pala' between two smooth stones

Plate 12: 'Kidi' special pebble for burnishing pala on wares
Plate [13]: Rocks seen within clay deposit areas

Plate [14]: Strata in the rocks
Plate 15: Making 'Kuga' the rouletting tool

Plate 16: Finished 'Kuga'
Plate 17: Finishing upper of the ware

Plate 18: A pot-like shape made by a wasp
craftswoman holding the pod. Before use, the pod which curls when dry, is soaked in water to straighten it out. The ware being made is smoothened inside and outside. The bottom is smoothened after twenty-four hours (a day) when it is firm enough to be turned upside down.

(b) Decorations appear in three types namely:

(i) rolled-on patterns - roulette;

(ii) slip painting - 'pala';

(iii) incised patterns - dug-out or pressed.

(i) Rouletting decoration is done nearly to all Luo traditional wares with the exception of pipes. It is commonly found round the belly of wares. It seems to help to prevent the slipping of hands during the handling of wares when full. The roulette known as 'kuga' is rolled along the finished semi-dry ware producing evenly roughened surface (see plate 10). The rouletter is rolled with the flat of the fingers and palm.

(ii) Slip-painting - 'pala' is done by grinding the red soil (pala) (see plate 11), mixing it with a little water, then using a finger, the slip is painted or smeared to the areas to be decorated. This is left for some time and then burnished to a shining waxy-looking red surface. This is done with a special small stone 'kidī' (see plate 12). It was noted that besides using a stone, a seed known as 'aguwa/ajua' could be used instead.

'pala' decoration is applied only to those wares which are not for cooking purposes.
(iii) Incision decoration is usually done with either a stick, bone, end of a knife or anything sharp enough to be employed without piercing through the ware.

The types of decorations outlined above could be employed simultaneously to one ware.

(c) Firing, known as 'weng'o', of the dry wares could be done anytime of the year when enough wares are made, but preferably during the dry season. The wares are normally assumed dry after three or four weeks. The craftswomen interviewed, explained that dryness of wares could be detected when the unfired ware turns dull brown in colour.

On the day of the firing, the wares are put out in the sun from 10 a.m. to 2 p.m. and from outside, they are put straight in the firing place. The firing place is dug in the ground and the bottom is covered with stones. The stones are then covered with either dry maize stems or dried reeds known as 'ogada'. The wares are placed on the top and are covered with grass (lum mar yuwe yuwe). There must be enough grass, maize stems, or reeds to provide a thick cover. Finally, a thick layer of sticks is added. The firing process lasts for two to three hours.

(d) Glazing which is applied to cooking wares only, is referred to in this study as the process of splashing a prepared liquid to very hot wares which have just been removed from the firing pit. This is done to curb porosity. This liquid is prepared by boiling the bark of a tree known as 'ober' (albezia coriaria/lamerindus indica) in water. After boiling for a specific time, the bark is removed and the liquid is left to cool. A broom made from small branches of a tree is used to splash the liquid on the hot wares. On cooling, the ware turns a blackish colour. This liquid was assumed to be a kind of resin which with high heat of the wares, melts and fuses and seals the tiny holes of the wares and as such stops the porosity observed in other non-cooking wares such as 'dapiti' for storing drinking water.
2. HUMAN FACTORS

Equally distinct in Luo society are the varied cultural traditional activities which are based either on religious beliefs or on social obligatory duties. The traditional ceramic designs are involved and observed in religious ceremonies and in the daily activities of the Luo people. Some of these activities and the related ceramic designs are outlined briefly below, for the purpose already clearly identified at the beginning of this section.

However, where the specimen illustrating an activity(ies) happen to be more than one, then one specimen will be shown under the relevant text while others (specimen) will appear and be referred to in the appendix, as explained in Chapter III.

For the purpose of this study, the activities and the associated ceramic objects are grouped under four major headings namely:

(a) Religious beliefs and related ceramic designs
(b) Social obligatory duties, and the related traditional wares;
(c) Innovational inclinations
(d) Selling of Luo traditional ceramic wares.

(a) Religious beliefs and related ceramic designs:

The Luo community has different types of wares designed and made to suit and serve varied functions. This variation could be compared with a household of the present modern days where one has varied utensils for varied purposes or functions. For example a teapot and tea cups for serving tea, a coffee pot for serving coffee and so on. However, for the Luo community the variation of the wares was more often linked with superstitions within tradition than a preference.
It was believed that the mixing of the usages of ceramic designs could annoy the gods or the spirits of the deceased ancestors. And this was believed to bring a curse upon the household concerned. Proverbs like 'Aguch rech ok ketie ringo' meaning never use fish pot for meat, are found in the Luo community.

Ancestors were worshipped and offered sacrifice when the people (family or clan) concerned felt they were unhappy and there were obvious warning signs in the form of sickness, death, not having enough harvest, or not netting adequate fish, to warrant a consultation with a wise man. He guided and directed the method and procedures of worshipping and sacrifice to appease the annoyed or offended spirit. The worship is accompanied with sacrifice in the form of slaughtered bulls, sheep, goats or cocks and drinking of native beer.

However, 'Nyasaye' the Luo's Almighty is believed to be the father of all ancestors and has power to control their (ancestors') powers the Luo people believe, therefore men can appeal to 'Nyasaye' for justice, for peace, for rains, for curing incurable diseases.

The limitation to the usage of certain types of a design was assumed to have contributed to the wide variety of the traditional ceramic forms found in the Luo community.
Aguch manyasi/chwako yath; 1975/7/36 is the name given to the ware known as a diver's ware. (see illustration 1975/7/36 below). It stores herbs or medicines mixed with water which are used whenever there is need to cast-off a spell of evil spirits. A creeping plant called 'buombwe' is tied around the ware's neck to make it more potent. The content 'manyasi' is sprinkled on for example: a very unruly adolescent to cast-off bad spirits and turn into a good boy; a rough river or lake to calm it; a new canoe or a fishing net before it is put on waters; a new area where a house is to be built; a new house before occupying it. The occupants of a new house must have little drink of manyasi.

Aguch rut; 1975/4/33 is a sacred ware. (see illustration 1975/4/33). It is not supposed to be seen unless there is a twin ritual. At the moment two conflicting beliefs have been observed. Some of the Luo people interviewed say that this ware 'aguch rut' is used to put in medicine for after-twins-dance which is supposed to cleanse the homestead of a family where twins have been born. Through this
ceremony, the participants aim at casting off all the evil spirits which brought the twins thus ensuring that birth of twins will not recur. One interviewee claimed that he would never marry a woman known to come from a family where twins were born, however much he loved her.

Another side expressed which was contradictory to the above was that whenever a woman had the chance of bearing twins, she was considered lucky, since twins were regarded as a sign of good fortune. The twins were known as 'rude'. The parents take the twins to a witch doctor who keeps this special sacred pot from which the doctor cleanse the twins of any evil spell. Several ceremonial rites are performed. One of them is the 'after-twins-dance' for welcoming the twins in the society because they are rare to have.

On the other hand it was observed from the interviews that this ware 'Aguch Rut' was used by the parents of the twins. The ware has two or more mouths and it has a handle. Customally the babies are not brought out of the house until three days for girls, and four days for boys. And therefore, in the case of twins six days if both twins were seven days if the twins were a boy and a girl, eight days if the twins were boys. During this period, it was believed, the parents were not supposed to urinate outside but in 'aguch rut' and the urine was poured in a special place whenever the pot filled.

Dapii/nyambiru/asumbi: 1938/94/5; 1966/224 & 6/12; 1966/100/10
UC/1970/74/20; 1975/3/32; 1975/8/37 (these figures represent the code serial numbers of the studied water wares).

This is a water ware. Amongst the Luo people water is generally considered sacred and the usage of water is observed in several rites. For example medicines or herbs for purification or
cleansing as explained under 'Aguch Manyasi' must be administered in cold water. The medicine is drunk, poured, bathed or sprinkled to every sick person whose spirit is about to be 'called away'.

It is hospitable to serve cold water to any traveller who has walked a long distance, and to the people in the homestead. Traditionally, therefore, every Luo household should have a special ware designed for storing drinking water only.

This ware is known as 'Nyakemba' in the areas of Simogore Siaya District and 'Nyambiru' or 'asumbi' in other areas of Luo land. Curiously enough, this water pot for drinking is not supposed to carry water from the river. There is another type of dapii which is used for either fetching water from the river during dry seasons or trapping water from a tree during the rain seasons to fill the ware for storing drinking water. The drawing below illustrates one of the designs for storing water.

Figure 9 : 1975/8/37

Size: 1" = 5 cm.
Equally curious, between the two designs in discussion was the difference in decoration. 'Pala' the red slip was used in wider areas to decorate the drinking water pot as opposed to rolled-on or roultled decoration which covered nearly the whole surface of 'dapii' for fetching water. Also noticeable was that wares for drinking water had narrower and more elegant necks as compared to the wares for fetching water.

The most significant aspect about Luo water wares was the narrow neck. It was observed that the narrow neck was functional that it restricted the use of other container to draw water from the pot so that the ware was always tilted to pour the water out. This was for hygenic purposes. It was also observed that it (narrow neck) minimized the risk of water splashing out of the pot during transportation.

Also it was observed that the rate of contaminating the water is reduced by the narrowness of the opening especially when it was not covered. But there is a possibility that non-ceramic materials such as leaves, calabash, were used to provide covers which were easy to make for the narrow mouths that accompanied the narrow necks.

Dak/Dak Markongo 1975/1/30:

This ware was the largest observed in the 43 specimens of Luo traditional design collected and studied. In comparison to its size, if children of about 6 or 7 years old are playing 'hide and seek,' one could hide in it. This ware is used for brewing the native beer. Beer was observed as playing an important multipurpose role among the Luo (see page 83).
Figure 10: 1975/1/30

Size: 1" = 5 cm
Although the beer is brewed in this ware, it is served to people (in this case the elders) and drunk from another special design called 'nyalaro'.

Nyalaro/Tawo/Tao:UN/1971/1417/26 is a serving ware. It serves the Luo native beer. And as shown in the illustration below, the design has a wide mouth, wide neck, belly and a more pointed bottom as compared to "Mbiru" 1975/2/31.

Figure 11: UN/1971/1417/26

The elders, during the worship and sacrifice ceremony, drink 'mbare' beer from this ware which is refilled constantly not allowing the level of beer to go below half of the belly. Long elegant straws (see the drawing under the subheading 'oseke') were used for drinking. The ware is beautifully and delicately decorated with red slip known in Luo language as 'pala'. The ware has its belly roulelled When in use, it rests on an equally beautiful and sophisticated woven ring known as 'nyahiga' which, curiously, is placed not by a woman but a chosen responsible man. Nyahiga' is woven either from papyrus stalk 'togo' or thatching grass
'yueyue'. The ring is woven only by special men of Ukholo/Alego.

'Oseke' (hollow straw)

This is a hollow type of a long stem of plant. This shrub is in the family of creepers and known to Luo people as 'Oseke'. This shrub grows near river banks and the one used is about half an inch diameter and about 40" long. The straw could be shortened according to the size group of elders. Before use, a kind of a net, woven from a creeper known as 'minya' is bound at the end of the straw to be immersed in beer (see diagram below which shows 'Oseke' fitted with the serving net).

Figure 12: Woven part of 'Oseke' known as 'odheso'

The net is for sieving the beer, which usually has millet particles.
Besides serving beer 'Nyalaro' has a resembling design known as 'mbiru or nyambiru' but smaller in size and has slightly a more rounded bottom. 'Mbiru' design is used for transporting beer, either from dak 'mar kongo' to refill 'Nyalaro', or from one homestead to another.

When transporting beer from one homestead to another, the mouth of the filled mbiru is covered and tied securely with a softened banana leaf.

Figure 13: 1975/2/31

Size: 1" = 5 cm
This ware is no longer available on the market but it was used to store urine. During worship and sacrifice, meat was preferred roasted to stewed meat. And as such it is speculated that the meat was or had to be tenderized and flavoured before roasting. It was tenderized and flavoured with the slaughtered animal's urine called thiedho'. The urine was tapped directly from the animal's bladder during slaughtering and it was temporarily stored before use in this ware 'abuju', illustrated below.

This ware was interesting and puzzling to the researcher. Interesting because of the small hole as indicated on the illustration 1969/438/16 and puzzling because of the varied names given by different interviewees. The hole was said to be for the purpose of sprinkling out just enough urine. Pouring through the mouth of the pot tended to pour too much at a time.

Figure 14 : 1969/438/16

Half actual size
b) Social obligation and the related traditional wares:

During marriage, death, and other get-together ceremonies, Luo people prepare a lot of food stuffs for example fish, porridge, meat, milk, 'Nyoyo' (maize mixed with beans), ugali (millet flour mixed with cassava flour) for feeding the people.

Feeding people well is one of the important cultural aspects which is observed in every Luo homestead. As such, women in the hosting homestead prepare a lot of varied foods and those who come to attend the ceremony bring something in form of food as a sign of well-wishing to contribute to the feeding and entertaining of the gathering. The hosting homestead, therefore, has to have enough containers to cope with such preparations and serving the people.

On a smaller scale, the individual Luo homesteads have varied chores which require varied types of wares, for example fetching and storing water, cooking foods, brewing and serving beer, smoking either tobacco or bhang. A break down of the types of Luo traditional ceramic designs which relate to varied social obligations found within the Luo society is given in the following pages. It was considered necessary to categorize the ceramic designs into four major groups for ease of discussion.

The wares are grouped in the following:

i) Narrow mouthed wares
ii) Wide mouthed wares
iii) Pipes
iv) Others

1, 2 The criterion of differentiating the small-mouthed and wide-mouthed was as follows: Those whose mouth were comparatively two times in width smaller than their bellies, were labelled small-mouthed; those whose mouths were either wider than or nearly the same size as their bellies were categorized wide-mouthed.
In case where a ware has already been discussed under 'Religious beliefs and related ceramic designs' it was found convenient to just mention the ware's name and its serial number, and then refer the reader to the relevant section where to find details. However, any information considered significant, relating to that particular ware and not mentioned yet within either sections will be outlined.

(i) Narrow Mouthed Wares:


These are water wares whose differences in functions, shapes and decorations have been outlined and illustrated under religious beliefs. And as such the drawings showing the above mentioned wares will be omitted here but additional observations on functions and innovations will be outlined.

'Nyakaba' which stores and cools drinking water in the homestead has a permanent resting place in the household a gentle depression in the house floor. As observed, this depression stabilizes the bottom of the rounded ware. The place is always damp. Also it was observed that this ware is not treated to curb porosity like other wares to be discussed latter.

Due to porosity, and coupled with a damp cool resting place, evaporation from the porous ware cooled the water below house temperature. This is very important in a homestead where people work long hours in the hot sun and need cool water all the time.

Also, it was observed that the recently made wares, for storing water were designed with fitting covers (see illustration 1975/8/37) as opposed to older ones which were said to be covered with calabashes and had narrower necks (see the drawing 1938/97/5) when compared to recent water designs (see drawings,
for example, UC/1970/74/20 and 1975/3/32 in the appendix).

The drawing illustrates the older type of water ware design.

Figure 15: 1938/97/5

Size: 1" = .5 cm

It was also observed that, in some homesteads, the resting place for "Nyckemba" was built up above the floor of the house. The diagram overpage illustrates a cross-section of a built-up stand for the ware.
This ware is supposed to store animals urine, mainly that of cow trapped during slaughtering. However, the functional usages of the stored urine does not differ from that already outlined under the subheading of 'religious beliefs and related ceramic designs'. It should be added, however, that a number of interviewees stressed that urine was also added to milk to accelerate fermentation and add flavour. What should, at least, be mentioned here is that this ware has a narrow mouth which does not spout out as opposed to water ware. Its mouth ends gently in a way that if continued, it could beautifully meet and close at an angle. Drawing 1969/438/16 shows the design of the ware and the dotted line indicate a continuation of the mouth. (see under 'religious beliefs').
Kasigro/Abidi: UN/1971/488/21: This is a small type of ware and researcher felt that it was appropriate to call it a jar. Its size is within the sizes of big cream jar seen on the market (see the drawing below which is half size the wares actual size).

Figure 17: UN/1971/488/21

Actual size

This jar is used for storing ghee from cows milk. The ghee is mixed with various herbs and it is used for ointing babies' and girls' bodies. The jar observed in I.A.S. smelt of cow's fat.

It is a beautifully decorated jar. The decorations are incised and its bottom which is also decorated, is flatter compared to the bottom of dapii.

Dak Mar kongo:1975/1/30. This ware has already been outlined and illustrated under 'religious' beliefs. This is an enormous ware compared to all designs studied in Luo traditional ceramic designs. Dak mar kongo; like other designs observed was made in varying sizes. An elder's homesteads will acquire a bigger dak mar kongo than an ordinary person's homestead. One observed was holding as much as 6 'debes' of water and a 'debe' is equivalent to 6 gallons.
ii) Wide-mouthed ware

It could be appropriate to mention here that all the wide-mouthed ware in the Luo society are known as tao/tawo, the special names are given to varied shapes and their function. The outlining of the wares, below, reflects the ware's name but where that name was not obtained tao/tawo will be used.

Wer/aguch niendho: 1938/98/4. This is a milking ware and it is believed that before the use of clay, a similar wooden design was being used. Old people interviewed confessed that the wooden one was better because of lightness when milking but it took both a long time to find the right tree known as 'otho' and to make. However, this is a very beautiful ware which shows a high professional finish. It has a strong handle and it is decorated with 'pala' and rouletting. (see illustration below). The rouletting appear on the base and around the neck of the ware.

Figure 18: 1938/98/4
When milking the ware could either be held with one hand or preferably held between the squatting legs while one used two hands to milk. The puzzling part was why the ware does not have a spout for pouring.

The milk is poured in storing gourds (calabashes) with help of funnel calabash.

Ralungu/agulu/aquch: 166/96/8; UN/1971/1416/25; 1976/10/39

This ware is for cooking vegetables. It has a neck with a wide mouth.

Ware 1966/96/8 was smoothly finished all over with neither decorations such as 'pala' painting or incision nor rouletting. Ware UN/1971/1416/25, resemble ware 1966/96/8 but besides its neck, its whole body was rouletted.

However, both wares had two handles each attached opposite both sides of the neck. Illustrations 1966/96/8 and 1971/1416/25 show the differences discussed above. Ware 1966/96/8, which was undecorated was assumed, might have been sold to the collector of I.A.S. before it was finished. It is strange to find a cooking traditional ware in the Luo society, which is not rouletted.

Ware 1976/10/39 is also for cooking vegetables but it has a slightly different design from the others observed i.e. 1966/96/8 and UN/1971/1416/25 which were serving the same purpose. This one has no handles and is more stout with a more protruding mouth when compared to the other two wares. Drawing 1976/10/39 illustrates the 'rarung under discussion.
Figure 19 : UN/1971/1416/25

Figure 20 : 1966/96/8

This ware is one of the important designs in the Luo social set up. It is for cooking fish. There is nothing else to be put or cooked in this ware - it is a taboo. In Luo society, even a child of 3 years knows that 'ohigla' is for cooking fish only.

This ware is, notable for its beautiful shape and the two handle for lifting - these are not mere 'ears' put for only decoration. See drawing UC/1966/99/9 on the previous page.

The neck is smoothly finished, undecorated, and that is where the two handles are attached. The rest of the ware is rouletted.

When cooking fish, a kind of a tray woven from papyrus stalks, known as 'ndhwaro' must be put inside the ware to place under the fish so that the fish does not stick on the bottom. It is unique in a way that the mouth of 'ohigla' does not spout out like most of the ware designs observed so far (with the exception of 'abidi' 1969/438/16).

It was also observed that some small 'ohighla' do not have handles while bigger ones for example those of 14" and above diameter 10" height and 10.5" mouth-width have four handles figure UN/1971/1414/24. The four handles are probably for allowing two people to lift the ware when full of fish.

Dakuon 1968/307/13: This is the ware for preparing sticky pasts ('ugali', mixed millet and cassava flour) known as 'kuon' in the Luo language. It is very similar to 'kabange' 1976/9/38 but 'dakuon' has a wider mouth. It also resembles 'ralungu' 1976/10/39 in shape but 'dakuon' is bigger than 'ralungu'.

However, the same ware could be used for cooking either bananas, sweet potatoes, or a mixture of maize and beans (nyoyo).

Figure 23: 1968/307/13
Haigal/aguch ringo: UN/1974/111B/29. Ware for cooking meat but it could be used for vegetables as well. It is fairly a big ware but various sizes could be found to meet personal preference. This design has two strong handles for lifting and a proper lid which has a handle as well (see UN/1974/111B/29 below). The decoration is incised on the lid and the upper part of the ware. The belly is half smoothened and half rouletted.

Figure 24: UN/1974/111E/29

Size 1" = 1 cm
Hawewe/tao/tawo: UN/1974/104/27; UN/1974/105B/28. These are resembling wares which were collected from Ukwala. They are for cooking small fish known as 'omena'. Those interviewed in other areas of Siaya District did not know such a design for cooking fish. It was, therefore, assumed that Ukwala being near ethnical border (see Map 2) of Luo people and Luhya people, the design, the name, and the function might be more associated with Luhya than Luo.

Figure 25: UN/1974/105B/28

Actual size

Kabange: 1976/9/38: We got conflicting information on 'kabange'. Some interviewees claim that this ware is for cooking 'nyoyo' maize mixed with beans, others that it is for preparing 'nyuka' porridge, and the rest claim that it is for frying millet for preparing local beer. The ware has thick protruding mouth and the belly is rouletted.
However, it is speculated that the ware is not very much in use for frying millet as the recent development of using iron sheets (mabati) is quicker and less fire-wood and time are needed than when a clay ware is used.

Nyalaro/tawo/tao: 1975/2/31: The function of this ware, as outlined under religious beliefs, is for serving Luo native beer. Under social obligations, this ware is used to serve beer either to big gatherings at celebrations, bereavements or small gatherings of clan elders.
Mbiru/Nyambiru: UN/1971/1417/26. Nyambiru is used for transporting beer either from 'mar kongo' to refill 'nyalaro' (see under religious beliefs), or from one homestead to another.

Oswaro/tawo/tao: UC/1969/17/15; UC/1970/736/19. 'Tao or tawo' means a bowl. This type of bowl or similar design was suggested to have two functions namely:

(a) Serving fish

(b) Serving porridge

Figure 27: UC/1969/17/15

Half actual size

However, some interviewees said that this design was for serving fish only. When serving fish, the fish is leant on the side of the ware - UC/1969/17/15. It is used for important guests, for example, mothers-in-law, fathers-in-law, clan elders, ...

The ware is very well decorated with 'pala' painting, incision designs and rouletting. It has a foot for resting firmly.
Tao, UC/1970/73b/19, is believed to be the design for serving porridge. The ware is very wide-mouthed when compared with others (see illustration below and its slants. This design is to allow the porridge to be licked and not drunk like water or tea. It is roulettled all over the outside and just a small clear rim is left around the edge of the mouth.

Tawo/tao : UC/1970/72/18; UN/1971/494/23 a + b. These wares are for serving either food or sauce. They are referred to as tawo/tao and there are no names given to identify them as in the case of 'oswaro'.

The drawings of those wares are shown overpage.

(i) UC/1970/72/18 serving sauce. This ware has a cover which has a knob for lifting when covering or opening the ware:

(ii) UN/1971/494/23 a + b (tape) are said to be for serving food. These two wares i.e. UN/1971/494/23a and UN/1971/494/23b have the same design except that one has a slightly wider mouth than the other. Because of this similarity one base was used to draw the two wares (see illustration UN/1971/494/23 a + b).

Figure 28 : UG/1970/73b/19
Figure 29: UC/1970/72/18

Half actual size

Figure 30: UN/1971/499/23 a & b

Half actual size
(iii) Pipes

Dandawa/Kwesti/Nyallo/Madho nyasore/madho njago/nyalowo: 1906/82/1. This is a pipe and it is one of the oldest collections of the Luo traditional Ceramic Designs. The above listed, are the names given by various interviewees. It is fairly a big pipe when compared with other pipes studied, measuring 4" high and 2.2" diameter (see illustration 1906/82/1). The majority of people interviewed specifically defined the use of this as for bhangi smoking. Older people enjoy smoking bhangi for the following reasons:

(a) to give strength when one has to work for long hours in the shamba
(b) relaxation
(c) as medicine to impotent men
(d) bhangi grew abundantly and therefore it was acquired easily.

'Nyalowo's check-like pattern is incised near the mouth and has a metal tube known in Luo as "odhuru/nganho/ondhuru" (see figure over page) which is used when smoking.

Nyaloo mar nyasore/pupa gi nyaloo: 1977/12/41; 1977/13/42; 1977/14/43

There are other pipes or wares, different in shape from that of nyalowo, which are also used for smoking bhangi. The smoking of bhangi using this design is more sophisticated when compared to the method of 'Nyalowo'. This design comprises three components of which two are clay wares (see illustration on the next page) and the third is a calabash (this is not illustrated).
Figure 31: 1906/62/1

Actual size

Approx. 12" long

Figure 32: 1977/13/42

Actual size
It was impossible to find any interviewee agreeing to have had ever smoked bhangi or who could agree to demonstrate the application of the ware. Although in Kisumu market the design is abundant, it is sold in different parts. As a result if one is not familiar with the complete component one is likely to buy an incomplete set. The ware could be found in varied sizes and decorations but all designs observed had a little handle at the top.

Dandawa/Kwesi : 1906/KAT6/2; 1906/KAT6/3; 1966/88/6; 1966/91/7; UC/1969/14; UN/1971/490/22 : There were six pipe specimens studied. Their social function was for smoking tobacco. The reason for studying all six pipes which served the same purpose was the differing shapes and decoration observed (see drawings on the following two pages).

Equally curious and interesting were the varied names given to or associated with some of these pipes. Below is an outline of the specimen( ) and the name(s) associated:

(a) 1906/KAT6/2; 1966/88/6; UC/1969/14; UN/1971/490/22: These pipes were referred to, by the interviewees, as either dandawa or kwesi

(b) 1906/KAT6/3 was known as either 'dandawa mar Kisungu', or 'kwesi mar kisungu'; the name when translated means 'European pipe' which indicates that this design is foreign among the Luo.

(c) 1966/91/7: Although this design was referred to, by nearly 50% of the interviewees, as 'Nyalowo mar nyasore' just as wares 1977/12/41; 1977/13/42; and 1977/14/43, it was not convincing to the researcher that this was a bhangi smoking pipe. Its shape and size resembled more the tobacco smoking pipes. Because of this doubt, it was
Figure 33: 1906/KAT6/2

Figure 34: 1906/KAT6/3

Figure 35: 1966/88/6

All drawn on actual size
Figure 36: 1966/91/7

Figure 37: UC/1969/14

Figure 38: UN/1971/490/22

All drawn on actual size
considered appropriate to group this pipe under the pipes for smoking tobacco. Tobacco smoking, as observed, used to be very normal in the lives of elderly men and women of the Luo society. One interviewee referred to smoking tobacco like 'taking a cup of coffee'. Smoking used to take place after meals when one was either resting or relaxing.

(iv) Others

Kikombe mar loo/ okombe/ okombe mar modho pi : 1966/156; 1966/158/11:

These were two cups, studied from L.A.S. and which were very similar to the ordinary modern cups or mugs used for tea or coffeee to-day (see drawings over-page). Cup (a) has incised decoration around the middle of the shape and both (a) and (b) are decorated outside and inside with red slip (pala). As observed in pipes '1906/KAT6/3 dandawa mar kisungu', these cups show influence of the European cup design. Curiously enough these types of cups were not seen either in the markets or homesteads visited.

Buk: 1975/6/35: This is a clay shape which was a kind of a hood or a screen used in a smithy when smelting ore. It (the hood), as illustrated in the diagram over-page, acts as a heat barrier or screen between fire and the wooden buk so that the wooden part of the complex is not burnt.

Tawo kod wayaless/ aguch changaa/ wanyaleess - simu 1976/11/40:

This is a multiform ware which is used for distilling "changaa" drink. The ware 1976/11/40 is composed of three different types of wares (see the illustration on page 112). The name 'wayaless', which was translated as telephones, was very difficult to associate either with the shape of the ware or the drink it distils.
Figure 39: 1966/156/ 11
1966/156/

Half actual size

Figure 40: 1975/6/35

Not on scale
All the wares which comprise 'aguch changaa' have been outlined within this section through or under varied obligations, and as such it was considered unnecessary to re-outline individually the components which compose this ware 1976/11/40.

Figure 41: 1976/11/40

Size: 1" = 5 cm.
c) Innovational tendencies:

When starting this research, it was impossible to assess the degree of innovation which could be found in the Luo traditional ceramic designs. After collecting and analysing the specimen of Luo ceramic objects, it was convincing that some kind of improvements had taken place. In this section, therefore, we outline some of the obvious innovational tendencies observed in the objects studied. The original plan of relating this to environmental factors proved more expensive and time-consuming than we had expected. In this section we can only speculate how the observed modifications took place.

It was observed that the Luo traditional ceramic craftperson bothered to improve the craft for the betterment and advancement of her/his skills for the satisfaction of the society's demand. Inevitable, therefore, the craftperson strived to keep with the changes within the society. This point could be well illustrated or observed in the objects studied such as 'Kwesi mar kisungu' 1906/KAT6/3, 'Vikombe' 1966/158/11 and 1966/151/11 which show the influence European designs. It could be argued further that, even the names to the objects discussed above are foreign to Luo language ie 'Kwesi mar kisungu' means smoking pipe for Europeans, and 'Vikombe' which is more of a Swahili word than a Luo word which means cups.

Equally observed, was a tendency of several interviewees' reluctance to discuss certain types of wares, for example medicine wares such as 'aguch manyasi' 1975/7/36, 'aguch rut' 1975/4/33.

This tendency was suggestive of a social innovation arising from the influence of Christian attitudes which regard certain traditional practices and beliefs as anti-Christian or even
Therefore, these attitudes conditioned several Luo people to deny knowledge of those ware associated with unchristianity. And those who remained idolaters were conditioned to keep a low profile and perhaps with a sense of inferiority within a christian innovated society. This point has been discussed at length when discussing studied designs such as 'Agutch manyasi' 1975/7/36 under religious beliefs.

Given the above outlook on medicine wares, and given the sacrilege attached to these wares, they (wares) stood very little chance of innovation within the innovated outlook of a society. Also, it was observed that even if the society was not christianly innovated, the changes on these sacred wares might have been stagnant. This was assumed to be so with an argument that any change on these wares would have been to annoy the spirit concerned and leave the changer or innovator to suffer the spirit's wrath.

Equally notable, was the vast literature indicating that those countries which have come to be described as constituting the third world were undergoing rapid changes. These changes included socio-economic, political and technological transition from traditional to modern. These changes were considered fundamental because they have assumedly, brought about several innovations within the social set up in the Luoland.

Examples of such are: changing from circular thatched houses of walls and floors smoothened with cowdung to angular houses of corrugated-iron roofs and cemented walls and floors; introduction of flat topped cookers instead of traditional three-stoned cooking places; changing from hanging utensils on woven ropes which hang from the roof, to storing things in cupboards. These changes, plus many more, inevitably might have influenced the society in the way of selecting objects to acquire in the same way as they might have influenced the craftsperson to innovate his/her ceramic designs to suit the current changes.
This innovation was observed in either the addition of legs to or flattening of once round bottomed wares for stable resting on either cemented floors or tables (see specimens UC/1969/17/15; UC/1970/736/19; UN/1971/494/23; 1975/4/33).

Furthermore, when analysing and comparing wares for storing water, it was observed that those wares collected in 1930s did not have fitting ceramic covers. Those wares collected in 1970 had covers and their mouths and neck were wider compared to those wares of 1930s. Compare ware 1938/97/5 to ware 1975/8/37.

A craftsperson interviewed confirmed our observation that in the past fitting calabashes were being used to cover wares for storing water because then gourds grew abundantly. At present, she elaborated, gourds were scarce and it was cheaper and easier to make clay covers than looking for fitting gourds. She asserted that besides the scarcity of calabash, the town dwellers prefer ceramic cover to calabash cover.

The drawing below illustrates a calabash covering a ware

Figure 42: A calabash covering a water ware
Water ware 1975/8/37 and UC/1970/72/18 a bowl illustrates the current ceramic covers. Ware UN/1974/111B/29, besides illustrating different type of current covers, also shows an development in the making of handles for lifting the wares.

A point which could not be overlooked was the distortion through time. Luo traditional ceramic designs have been used for generations and the technology have been passed on from old craftsperson to young ones with no written recordings. It could, therefore, be assumed correctly that original explanation, symbols, which might have availed a systematic evaluation of innovational tendencies up to date were missing.

d) Selling of Luo traditional ceramic wares

The art of making clay objects by Luo craftswomen is a skill acquired through personal effort and guidance from those with broader, deeper and longer experience. This skill is enhanced by and availability of the vital raw materials and the possibility of selling the products. The availability of the vital raw materials is attributed to physical environmental factors while the selling of the products is attributed to the demand within a given society or societies.

Varied ceramic designs found in the Luo society were attributed to the following:

(i) varied social obligatories as outlined under 'religious beliefs and social obligations'

(ii) varied sizes of homesteads (families) and varied needs and tastes of individuals
(iii) demand from other groups for example the
Nandi neighbouring the Luoland

(iv) demand from curio shops.

The outside and internal demand of Luo ceramic traditional
wares, created the market and therefore the craftswoman had all
hopes of selling her products. The selling prices varied not only according to the size of the ware but also due to the degree of cultural value related to the function of any given type of traditional ceramic ware. The price scale of a ware, therefore, was very much gauged firstly by its cultural value, secondly by its size and thirdly by its current demand within and without.

The methods of selling within the markets visited are described as flexible and variable. These included:

a) bartering which was the most interesting method of selling the Luo ceramic wares. If a customer wanted a ware, and she/he had no money, the seller of the wares would agree to an exchange under the barter system.

These materials could be anything such as food stuffs, artifacts (spear, knife, basket, etc. etc.) piece of cloth, so long as both parties agreed. Where the size of the ware was the most valued, and exchange was of beans for example, the buyer had to fill the ware in question with beans. Then the buyer will take the ware and the seller the beans. But if the beans were in a greater demand at the time, then the buyer could offer less beans such as half content the were required;

b) a ware given in exchange for a job such as cultivating or harvesting a shamba;

c) a ware given in return for a good deed;

d) selling for money.
Luo traditional ceramic wares have enjoyed a steady and continuous evolution within Luo society without outstanding neighbouring influences. During the study it was observed that the Luo traditional ceramic designs had been selling far and wide within Kenya communities. For example specimen Dacuon/1968/307/13 studied from L.A.S. was collected from Thika market. Thika market is approximately 390 Km from Luoland. Also observed were the traders selling Luo wares in Ruiru market. This market is 364 Km from Luoland. The reason given by a non-Luo buying Luo wares was that Luo wares last longer than the local ware of the location.

It was also speculated that neighbouring ethnic groups such as the Nandi who are bordering Luoland on its north-east, barter the Luo wares in exchange for certain commodities which the Luo people do not make. This speculation though not investigated left a puzzling question whether Kalenjins being nomadics would fancy to acquire such bulky objects such as clay wares. However, it could be more true if referring to those Nandi people who are leading settled domesticated life than those who are moving from one place to another.

Specimen 1975/4/33b is similar to the so many Luo pots sold to tourists in several curio shops or stands within Nairobi, Mombasa, Kisumu. Map 6 shows the Luoland which is assumed to originate the wares under discussion and the distance these wares are sold within the Republic of Kenya.
Map 6: Republic of Kenya showing Nairobi and Mombasa where wares similar to specimen 1975/4/33b are sold to tourists.

KEY:

///// Luo land.

MAP DRAWN NOT ON SCALE.
V INTERPRETATION AND ANALYSIS OF THE FINDINGS

It was hypothesised in this study that the Luo physical and human environment determine the nature of Luo traditional ceramic designs.

The identifiable environmental factors which have had or might have had influence on determining:

a) availability and choice of raw materials;
b) forms or shapes of the artifacts under study;
c) usage and application of the created forms/shapes, and
d) innovations in the Luo ceramic designs have been outlined under 'innovational tendencies.'

It should also be stated, from the start that the relationship between the local artist and environment is so closely interwoven that the two are inseparable. The artist, his skills, competence and innovative spirit are buttressed and nourished by his being in the cultural and social environment which also produces the materials and determines the functional uses of his artifacts. The diagram below illustrates the outlined assertion.

Diagram 2: chain of environmental factors which influence the ceramic designs

<table>
<thead>
<tr>
<th>ENVIRONMENTAL FACTOR</th>
</tr>
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<tr>
<td>Availability and choice of raw materials;</td>
</tr>
<tr>
<td>forms or shapes of the artifacts; usage and application of the created forms/shapes; and innovations in the Luo ceramic designs</td>
</tr>
<tr>
<td>Artistic skills, competences, orientations</td>
</tr>
<tr>
<td>CERAMIC DESIGNS</td>
</tr>
</tbody>
</table>
For the sake of clarity, it was decided to group these environmental factors into two major categories. Each of these categories was then broken into subheadings. These categories are:

a) Physical environmental trends:
geological set up, climate, soils and other minerals, vegetation, rivers, lakes, animals, insects, fish, etc. etc.

b) Human environmental trends:
beliefs and cultural practices, socio-economic, habitat, etc. etc.

(a) PHYSICAL ENVIRONMENTAL TRENDS

Geographical position and structure of the Luoland facilitate the climate, vegetation, soils, flow of the rivers which in turn dictate the type of lifestyle Luo people lead. Consequently this contributes greatly to the beliefs, culture and social functional obligations to which the Luo ceramic designs are put.

Given the climate of Luoland which is both hot and humid, as observed in chapter I, and given the rocks underlying Luoland and the surrounding highlands, it could be, positively, argued that the formation of sands, clays, and other minerals is inevitable.

Those sands, clays, and other minerals formed in the highlands surrounding Luoland are, therefore, transported to the Luo basin by means of rivers and rain floods. At the same time the flat basin facilitates the meandering of the rivers and floods, depositing their contents (sands, clays) and forming swamps in the land instead of flowing directly to Lake Victoria.

The sequence of yearly climatic occurrence enriches Luoland with both the residual and transported sands, clays and other minerals.
Vegetation found in swamps, banks of low meandering rivers, and around lakes, could be analysed as having contributed to the shaping of the diet, habits and occupations undertaken by the Luo people, outlined in Chapter IV under human factors. This analysis and observation was also illustrated and emphasized by the number of specimen against their functions. Basing the argument on graph 2, it could be interpreted further that where a high number of specimen appear, it coincides with those stuffs which are readily available throughout the year. Graph 2 shows the number of specimen against their functional practices. The graph is given below.

Graph 2: showing number of specimen studied against their usages
Furthermore the vegetation provided raw materials for shaping, decorating, firing and glazing ceramic designs. Also, it provided some of the food stuffs on which the ceramic designs had to be used. The ample vegetation of the Luo Basin, therefore, posed challenges to the artistic and creative minds of Luo people. Under such vegetation admittedly different types of living forms such as animals, insects are found. Some of these forms, therefore, were either used in the Luo diet or they cause diseases of which herbs, most probably, had to be prepared in containers for cure.

Insects such as wasps were observed to make houses for their young ones out of clay. These houses have shapes very similar to those water wares made by the Luo craftsmen. Plate 18 illustrates the shape made by a wasp. It was interpretable, therefore, that this might have directly or indirectly contributed to or influenced the mental organization of the potter in ways of utilizing clay into forms similar to that mentioned above.

Lakes, rivers and swamps, appropriate soils, rains and the agreeable temperatures of Luoland encouraged the Luo people to settle and farm. They have mixed farming i.e. growing crops namely sorghum, millet, maize, beans, bananas, sugarcane as well as keeping animals such as cattle, sheep, fowls, goats. It could therefore be interpreted that given such a wide range of foods, it is more likely to have a varied diet, which in turn created a demand on a wide range of cooking and serving utensils.

Diagram 3 illustrates some of those physical environmental factors of Luoland which were interpreted to have contributed directly to the demand of making ceramic designs.
It could further be interpreted that with the availability of sand, clay and other soils, fairly all over the Luo Basin, where the people were settled and were leading a domesticated life, the urge for permanence was of paramount importance i.e. Luo people no longer wanted only short-lived natural forms such as gourds for use but preferred to acquire durable or permanent objects.

The availability of clay, therefore, which was easily shaped, dried and fired to permanency, was an easy alternative to creative minds, to utilize it and create useful durable objects. When wet, clay allows both easy shaping and imprinted decorations i.e. incisioning, rouletting, relief as those observed on Luo traditional clay wares.

It could also be argued or interpreted that owing to the diversity of gourd shapes, and their soft curves, constituted as one of the major influences in the dominant curved shapes of the Luo traditional ceramic designs. Below are some of the gourds’ shapes.

Figure 43 : Some of the varied shapes of gourds
Diagram 3: Some of the physical factors

(b) HUMAN ENVIRONMENTAL FACTORS

Beliefs and cultural aspects, socio-economy, habitat discussed on pages 73 to 112 were interpreted to have been influenced or modulated by the physical factor of Luoland as already expressed under (a). For example, given the swamps, water pools, slow meandering rivers, vegetation, and geographical position, Luoland attracted several types of insects like mosquitos, tsetse flies which caused mysterious diseases. Given, therefore, these mystifying diseases as they were taken to be it could rightly be argued that these mysteries encouraged the belief in superpowers or ancestors, spirits as observed in Chapter IV.

Furthermore, the abundance of fish made Luo people known as fish eaters and as such, coupled with the smell of the fish, encouraged a taboo of never cooking anything else in a ware which cooked fish - 'ohigla' and as such more wares for cooking and serving other things besides fish had to be made. Thus homesteads acquired several ware designs for a varied diet and other varied functions.
The cultural aspect of hospitality among the Luo people might be analysed as an aspect which encouraged big gatherings for different occasions. Therefore, big or several containers were a must. The presence of millet and water encouraged the brewing of beer. This in turn necessitated the making of large wares for brewing beer and smaller ones for serving the gatherings in small groups. It could here be argued further that if it was not the Luo's belief that straws for drinking beer should be shared, there might have been even smaller wares for serving beer to the individuals. On the other hand the availability of hollow sticks, and grass for weaving sieves, see figure 12 might have encouraged the use of straws, which was the easiest method of discarding the millet particles when drinking beer.

The beliefs in water, which encouraged special wares, could be attributed to the hot weather in Luoland. During this season small streams dry up. At the same time people have to work long hours in their shambas either harvesting or preparing for planting season or planting. Working like this, therefore, one becomes hungry and thirsty and would like to return home and find water both for drinking and cooking. In Luo homesteads water has to be kept clean. Cleanliness necessitated the narrow neck wares for keeping water, because of ease to find fitting objects to cover the wares which had water. See page 115.

It could be argued further that for working long hours in the shamba one might have needed an energy reviver for continual strength for those long working hours. The availability of bhangi and tabacco in Luoland, therefore, when smoked in a pipe or the equivalent ware stimulated the smoker. This need as observed above could be argued to have created a demand of pipes or an equivalent ware.

The specimens studied revealed two significant things namely:
(a) imaginative craftsmen made wares according to the needs, demands or requests of the society;

(b) users of these wares commented or advised the craftsman on the possible improvements where necessary.

For example, specimen 1966/156/158/11 'Okombe' a cup illustrates the alien influence of tea cups and as such the craftsman tries to produce those shapes the society has a tendency to buy and use.

Further, specimen 1976/11/40 a 'changa' ware shows a creative organization of what is already available in order to produce an assemblage of wares for totally a different function from the original ware (s). In this case 'changa' seemed an alien drink and as such the brewer had his idea of how brewing had to be done. The craftsman, therefore, had to execute objects according to the brewer's idea. Specimen 1975/4/33 for twin children's rituals, with its flat-bottomed form or with the three attached stands, was interpreted in two ways. One, that when Luo houses changed from mud smeared floors to cemented ones it was impossible to stand on a round bottomed wares on them; craftsman, therefore, innovated a bottom to suit current changes. The second interpretation was associated with the coming of tourist who bought this type of wares as flower vases. And for this, they might have suggested a foot which could comfortably rest on a table, window sill or concrete floor.

From the observation outlined above, it could be argued, therefore, that educational relationship between the craftsman and the user of his wares existed. The diagram overpage is used to illustrate the argument given above.
Diagram 4: Educational Relationship between the craftsmen and the users of ceramic designs

Educates the public through comments on his work.

Advises on the dos and don'ts of wares.

Modifies/improves/...

Expresses

Creates

Pinds raw materials

Techniques

Clay designs

User

BYS+uses

Appreciates

Approves/disapproves

Critizes/Feedback

Special requests for modifications or new designs.
In general, however, it could be said that there are chains of environmental factors influencing directly or indirectly the total involvement of artistic skills, competence, and orientation of the artifacts under study i.e. Luo traditional ceramic designs. The factors, however, are not singled out here as special cases but rather as the very typical ones.

Below is a simplified diagram illustrating a cycle of the chain of factors in environment which directly or indirectly have influence on Luo ceramic designs.

Diagram 5 : Factors' Influence on Luo Ceramic Designs
In summary it could be said that:

Raw materials such as clays, sands, fire wood, decorating tools which are used in the making of the ceramic wares; the raw materials such as foodstuffs, millet for brewing local beer, water, for which the finished ceramic designs are put to use and which at the same time characterize the functional characteristics of the related ceramic design, are available in the Luoland. The total evolution and institutionalization of the raw materials which, as found out, involve several components of the physical environment constituting a major contribution to the total existance of Luo traditional ceramic designs.

Formal properties of the Luo traditional ceramic objects, as observed, depend very much on the total discretion, imagination, of the craftsperson and how he/she utilizes: the raw materials, sources of inspirations, and the demand available within or without his/her environment.

Possibilities for innovations on Luo ceramic designs, as observed, depend so much on the human environmental changes. These are the changes of outlook in society's socio-economic and cultural aspects as a whole. This evolution of changes, whenever it occurs, inevitably warrants the ceramic craftsperson to modify or innovate her/his design(s) to suit the current change of demand.

Given the above summary, it could evidently be concluded that environmental factors found in Luoland, physical and human contribute greatly to the total fulfilment of the Luo traditional ceramic designs which do not exist in isolation from artistic skills, competence and orientation (see diagram 5).
VI CONCLUSIONS AND RECOMMENDATIONS

This study has:

a) demonstrated that the usage of the selected forms of the traditional ceramic designs of the Luo community are influenced by both the physical and human environmental factors;

b) examined some of those identifiable factors of the environment which have direct or indirect influence on the traditional ceramic designs of the Luo society;

c) established some of the environmental influences in the production of the traditional clay form in the Luo community.

This study has also shown that there exist a drive towards genuine appreciation of ceramic artifacts in Luo society. Given the abundance of natural resources, and the cultural attachments, the potential for development in Luoland is high. If at national level, the policy is to encourage self-reliance, it follows that this drive should be exploited in order to render a desirable contribution to the national needs, namely:

(1) Appropriate technology i.e. technological development based upon the local environment, and skills.

(2) Identify raw material resources i.e. (a) identification of local resources of raw material; creating proper utilization channels, and protecting them (raw material resources) in order
to continue to yield and support the growing demand of a given society or that of the nation.

(3) **Cultural identity and preservation.** Support for continual researches in traditional skills, competence, orientations and the associated artifacts for preservation of cultural aspects.

(4) **Industrial Development**, built or supported by local resources for raw materials, skills, competence and socio-economic demand.

(5) **Education** i.e. avail learning references, materials with relevance to home environment, and familiar experiences as a fundamental springboard to the alien technology, raw materials, cultural aspects, industrial developments and learning resources.

Given the above possibilities observed and given the rapid assimilation of the alien ideas, it could be argued that the time has come for these potentials to be guided or directed into meaningful channels such as healthy integration of tradition to modern values. This point could very well be emphasized with Father Lugura's 1970\(^1\) quotation of Cardinal Lavigerie's statement that 'the time would come when Africans would be ready to borrow from European civilization whatever he considered of value to his life in Africa, but to force that moment or to pressure any foreign part of it would result only in chaos'.

However, to put in practice, at the national level, what has been suggested and discussed above, an effective system should be instituted. The Ministries of Basic and Higher Education and all those involved should promote and encourage the following:

\(^1\) Father Lugura A. M. *Ganda Art* 1970. Osada Publications
(a) Learning institutions should teach appreciation and right understanding of traditional artifacts; their application and the related cultural values. This approach should not only be directed to fine art inclined learners but to all regardless of future profession of an individual. It could be argued, this approach would gradually cultivate or instil national cultural appreciation and development.

(b) Encourage studies of the environment, against a given traditional artifact in order to avail the relevant detailed approach to learning and understanding sources of raw materials in one's indigenous environment. It is argued that, this kind of approach to learning, would avail the relevant understanding of varied raw materials and their contribution to the development of a given artifact within a given society. It could be argued further that such understanding would guide a modern local designer when he/she is aware of both the raw material resources and the cultural values of given object to be designed.

This approach will foster in every individual, understanding, appreciation and constructive attitude both toward traditional craftsmen and promising modern artists who endeavour to bridge the widening gap between the traditional and the modern.

The application of this approach to learning will ensure the integration and co-ordination of tradition and modern. This, of course, may take years before it is realized but it is the thesis of this study that this could be accelerated by having research geared in this direction.

Summary: The author does neither claim to have covered all the Luo traditional ceramic designs nor to have touched on every environmental factors; evolved ranging from natural, cultural, historical to socio-economic aspects of the Luo. But she can claim to have provided a springboard into the richness of the Luo
traditional craftsmanship, competences and orientations which are influenced by the physical and human environmental factors of which several have been outlined in this study.
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Table I: Population of the Major Ethnic Group of Districts in Nyanza Province - Kenya

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<th>NYANZA PROVINCE:</th>
<th>Siaya District:</th>
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<tr>
<td></td>
<td>TOTAL</td>
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<tr>
<td>Total</td>
<td>2,122,045</td>
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<tr>
<td>Kenya African</td>
<td>2,106,357</td>
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<tr>
<td>Luyia</td>
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<td>Kisii</td>
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<table>
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<td>Luyia</td>
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</tr>
<tr>
<td>Kisii</td>
<td>1,583</td>
</tr>
<tr>
<td>Luo</td>
<td>363,505</td>
</tr>
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The drawings below give the remaining specimens which were discussed in text of findings but which were not used to illustrate the context.

Figure 44: Wares related to Figure 9: 1975/8/37 (page 81) and Figure 15: 1938/97/5 (page 92)

1966/100/10

Size: 1" = 1cm
UC/1970/74/20

Size: 1" = 5 cm

1975/3/32

Size: 1" = 5 cm
Figure 45: Ware related to Figure 22: UC/1966/99/9 (page 96)

Figure 46: Ware related to Figure 25: UN/1974/105B/28 (page 100)
Figure 47: Wares related to Figure 29: UC/1970/72/18 and Figure 30: UN/1971/494/23 (page 104)

Figure 48: Wares related to Figure 32: 1977/13/42 (page 106)
APPENDIX C

QUESTIONNAIRE FORM TO RECORD SOME PARTICULARS OF SPECIMEN

Name of a potter ................................................ Area ......................

Date of Collection ........................................

Origin of maker .............................................

Date of making ............................ Locality of making ........................

Clay found ........................................................

1. Names of specimen (vernacular, swahili, english) ..........


____________________________
Luo Swahili English

2. Type of shape form (draw) and texture

3. Type of decorations (draw)

4. Significancy about the form - (usage-socio-cultural value/History)

5. Where did the form originate (state)
6. Which rain materials are used? Why? Significances (Probe)

7. Where did the motifs/decoration originate?

8. What is symbolic interpretation of the design (Probe)

9. Tools used in total making of ware:

10. Latest developments (improvements) on the design:

11. Users - past and present:

12. Other information:
QUESTIONNAIRE TO CHECK ON SPECIMENS' VERNACULAR NAMES AND FUNCTIONS. (B & C).

<table>
<thead>
<tr>
<th>SPECIMENS AND SERIAL NUMBERS</th>
<th>VERNACULAR NAMES</th>
<th>FUNCTION</th>
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<tr>
<td>1906/82/1</td>
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<tr>
<td>1906/KAT6/2</td>
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