A PRELIMINARY ARCHAEOLOGICAL AND ETHNOGRAPHIC
ANALYSIS OF SABO CERAMICS

by

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ABSTRACT

MICHAEL W. CORKRAN. A Preliminary Archaeological and Ethnographic Analysis of Sabo Ceramics (Under the direction of DONALD L. BROCKINGTON).

This is a description and analysis of ceramics from four sites in an area of southeast Liberia presently occupied by the Sabo. It presents the first thorough description of local ceramic wares. The archaeological data are combined with ethnographic information, demonstrating the complementary nature of the two approaches. The analysis serves to verify the accuracy of Sabo oral histories and suggests a relationship between the latter group and the Jrau, a coastal people.
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PREFACE

The archaeological materials for this study were collected and provided by F.D. McEvoy. For this and for the time that he made available to me for discussion of the ceramics and the peoples who made them, I am very grateful. The maps are also taken from McEvoy's work. Credit is due to my wife for all of the illustrations. To the members of my thesis committee, who were always prepared to advise, I wish to express my appreciation.
CHAPTER I

INTRODUCTION

This is a study of ceramic artifacts collected from the surfaces of habitation sites in an area which to date is unknown archaeologically. There are three objectives: first, to provide a sound initial description of the ceramics to serve as a reference point for future work in the area; second, to compare this collection with ceramics from outside the immediate area; and third, to integrate this description and analysis with available ethnographic information from the area's present inhabitants.

The material was collected by F.D. McEvoy, now at the University of North Carolina at Chapel Hill, during 1967, while he was conducting ethnographic research among the Sabo of southeast Liberia. With the aid of Sabo informants, McEvoy located and recorded for the first time a substantial number of archaeological sites within the area. From a few of these he made surface collections; the artifacts consisted entirely of ceramics, with the exception of a small number of slag pieces (from iron smelting).

Limited archaeological surveys had been conducted, primarily in central and northern Liberia, by J.H. Atherton (1969) and K.G. Orr (1971). At the time of this writing, C. Gabel, of Boston University, is conducting a survey expedition in Liberia. Neither the extent of the survey nor its geographical coverage is known. Virtually nothing is yet known of correlations between areas. Ethnographic sources for southeast
Liberia date mostly from the late nineteenth and early twentieth centuries. These are travelogues rather than genuine ethnographies. It is often impossible to tell what area of the country is being referred to, because of variant names and spellings of towns, physiographic features and peoples. In the final analysis, practically none of the travel accounts covers the southeast, because of its relative inaccessibility and difficult travel conditions within.

The present study is based on ceramics from four of the sites recorded by McEvoy. Although published ethnographic information specific to this area is virtually unavailable, McEvoy was able to gain from informants some ideas regarding the probable cultural affiliations of the sites. Thus the affiliation of two sites is reasonably well established; that of the other two is subject to some question. The chronological sequence of two, and perhaps three, of the sites relative to each other is known. The total number of sherds collected is 233.

Given this background, the study came to focus on three primary objectives. As a logical first step, the ceramics had to be described. For the small, unknown collection in hand, some sort of typological framework had to be devised. As a corollary to the description, a seriation analysis would be attempted. Since at least a few beginning site surveys had been conducted elsewhere in Liberia, the southeastern ceramics could be compared to those from other areas. It was hoped that the comparison might be extended to neighboring areas outside Liberia in West Africa as well. Finally, there was a unique opportunity to compare the results of the seriation and analysis of artifacts with information about the sites from Sabo oral histories. The synthesis of archaeological and ethnographic data would form the foundation for more reliable and
meaningful results than could be supported by either single source.

The methodology to be employed presented some problems, since the total collection was very small, and there were no established typologies available for the area. The scheme of classification used here is based on that proposed by R.E. Smith and modified by D.L. Brockington (Brockington, in press). Changes have been introduced here to accommodate the small sample. The typology is hierarchical and is premised on the idea that:

the divisions of ware, type and variety are based on what are considered different levels of culturally dictated choices.

Ware: A ware is considered to be a ceramic division in which the paste, firing and inclusions are the same or quite similar. Occurrence of trace minerals in a paste is not considered pertinent unless there is a demonstrable functional aspect to their presence. These attributes represent a series of basic choices that were made by the potters. Some of the choices relate to availability of raw materials. The ware definition, then, is based on fundamental similarities which may be strongly influenced by non-cultural conditions (Brockington: 35).

The term variety, as used by the present author, is a merging of type and variety as defined by Brockington. It is based on surface color, surface finish (including decoration) and vessel form. Thus "cultural values are more closely involved than with the ware division, and a type is therefore a useful device for detecting presence or absence of those values" (Brockington: 36).

Colors are described with reference to the Munsell Soil Color Chart. Hardness values are based on the Moh scale, but were determined by means of the following, simpler criteria:

<table>
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<tr>
<th>Mohs' scale</th>
<th>1. scratch with fingernail</th>
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<td>1.0-2.5</td>
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A potential sample bias relative to the Coarse Red ware should also be mentioned. McElvoy reports that at site SA-10, where all the
Burnished red plain variety occurs, the red colored sherds were collected from a single, restricted area. He further postulated that the majority of these could have come from the same vessel. Many of the sherds have been fitted together, and it appears that the Burnished red plain variety is represented by two (at the most, three) vessels. Therefore, this variety, which accounts for one fourth of the total collection, may be too narrowly defined. The same applies to both Banded red and Yellowish red plain, each attested by only two sherds.
CHAPTER II

THE SITES

An analysis of the total cultural affiliations of present day Sabo is beyond the scope of this paper, nor do the data available as yet permit it. A brief discussion of Sabo beliefs regarding their origin and migrations is presented, since it is an integral part of the ethnographic-archaeological approach being taken. The Sabo currently live in hinterland southeast Liberia, but according to their oral histories, once lived far to the north. This ancestral homeland may be in the Ivory Coast. The Sabo ancestors are said to have left their place in the north during a period of war and conflict. They first lived among a people referred to as the Glaro, but many generations ago had already reached their present territory, which they name Saobli. Upon arrival in Saobli, the Sabo moved into recently deserted "towns," which are reputed to have been occupied by the present day Sasstown Kru (Jrau) peoples. Up to this point all the Sabo had continued to live together; now comes a period of conflict, increase in Sabo numbers and division into smaller groups. Apparently four such groups were formed, each of which is today represented by a Sabo village. Prior to settling in their modern sites, each of these groups is said to have occupied a series of sites, at least some of which had been previously occupied by other peoples (McElvoy, 1971a; 1971b).

The four sites with which this study is concerned are designated:
Li-6-SA-10, Li-6-SA-13, Li-6-SA-16 and Li-6-SA-17. For a discussion of the system of nomenclature, the reader may turn to McEvoy (1971b).

Site SA-13 has no Sabo name; it is said by informants to pre-date Sabo occupation of the area and is attributed by them to the Jrau. SA-16 is known locally as Weadru and is claimed to be the first town built by the Sabo after their migration into this area from the north. SA-10, or old Wufuke, is a recent Sabo site, dating from the nineteenth century. SA-17 is not a Sabo site; it may have been occupied by the Palipo, but this is conjecture. Nothing is known of the temporal placement of Tate_dru (SA-17), which yielded very sparse surface remains. McEvoy's Sabo informants live in new Wufuke, which traces its origins through SA-16 and SA-10.

It is difficult to give exact locations of sites in such a little traveled area, but the following general directions may be of some use. SA-13 is located about 3-4 miles northwest of modern Wufuke, on a low hill adjacent to the motor track. It is presently part of a Sabo farmstead. SA-16 is a hill-top site about 1.6 miles east-northeast of present day Wufuke, about half a mile from the motor track to Jike. On the crest of the first high hill to the west-southwest of Wufuke lies old Wufuke, or SA-10. It is about one half to three quarters of a mile from the modern town, on Sabo tribal land. The existence of this site is well known to the Sabo. SA-17 is also east-northeast of Wufuke, about 2 miles, just east of the motor track to Jike, on Sabo tribal land.
CHAPTER III
CERAMIC WARE DESCRIPTIONS

Ware: Coarse Red

Paste: The paste is coarse and poorly prepared for working, frequently showing distinct parallel layering of clay particles within the core. Cores are mostly dark, ranging from reddish brown to gray and black, and are little oxidized. The deep black color of some cores may be due to the use of a highly carbonaceous clay. Surface colors range from yellowish red to red and reddish brown.

Inclusions: There are abundant pieces of crushed quartz. The size of the inclusions ranges up to a diameter of about 5 mm., with the mean diameter being between 1-2 mm. Since the edges are uniformly sharp, and the paste has not been extensively prepared, the inclusions must have been added intentionally.

Hardness: 2.5-3.5 on Mohs' scale.

Thickness: The range is from 4-16 mm., with a mean between 8-12 mm.

Finish: Surface colors are usually lighter than the cores, except where extensive blackening has occurred. Most exterior surfaces are smooth and burnished, and all may have been finished in this way originally. The badly weathered condition of some of the material has removed any traces of burnishing that might have been present.
Ware: Coarse Red (continued)

Finish: (continued)

Interior surface finish shows two techniques, one which left the surface pitted and striated; the other produced a burnished finish. The rough finish is more common.

Decoration: Only five sherds are decorated. Techniques include dentate stamping, excising and cord marking.

Forms: Several large vessels are represented, at least one of which is a shouldered type. Smaller forms are probably present, but cannot be identified with certainty.

Frequency: 91 sherds.

Occurrence: Sites SA-10 (63), SA-13 (15), SA-16 (13).

Comments: The basic paste characteristics and the inclusions remain constant through the chronological sequence and among different sites. The presence of darker color in nearly all sherd cores suggests uniform firing technique as well. Considering the size of the sample and its possible bias, there are a few uncertainties which must be dealt with. These relate to color, surface finish, decoration and vessel form. Color has been treated as a varietal determinant. It is possible that differences in color are due to accidents in firing or to local variations in paste and, therefore, may not be culturally significant. Presence or absence of burnishing on the interior vessel surface has also been used as a criterion for separating varieties. The case is the same for the use of decoration. If the basic
Ware: Coarse Red (continued)

Comments: (continued)

ware description is in fact based on a few vessels, the above criteria may not be valid as used here. Very little can be said with regard to form. Only one vessel could be reconstructed with any certainty. Consequently it has not been possible to correlate form with other attributes.

Variety: Burnished red plain (Plates I, II)

Paste: Surface color ranges from 2.5YR5/8 to 2.5YR5/6 red; the core is always darker, from 5YR5/3 reddish brown through dark reddish brown to gray and very dark gray. Some of the sherds have been oxidized only on the surface.

Inclusions: Same.

Hardness: Same.

Thickness: Same. The range spans the thickest to the thinnest example of the ware.

Finish: Exterior surfaces are burnished but grainy; interiors show grooves, striations and large pits left by the finishing tool.

Decoration: None.

Forms: The principal form is a rather large slightly shouldered vessel, with an opening about 22-24 cm. in diameter and a
Ware: Coarse Red (continued)

Variety: Burnished red plain (continued)

Forms: (continued)

somewhat rounded base. The rim, which is broad and mostly flat, flares out at almost a 90 degree angle from the vessel wall. One rim sherd appears to be simply a smaller version of the above. Other vessel forms may be represented.

Frequency: 59 sherds.

Occurrence: Site SA-10.

Comments: The interior surfaces look as though they might have been finished while in a leather hard state by a fairly unyielding tool. It is quite possible that all but a few sherds of this variety are parts of a very few vessels. This would account for the extreme homogeneity of the group.

Variety: Yellowish red plain

Paste: This is essentially the same as in Burnished red plain; however, the surface color here is 5YR5/6 yellowish red. The paste is very poorly worked, showing parallel layering of clay particles.

Inclusions: Same.

Hardness: Same.

Thickness: Same.
Ware: Coarse Red (continued)

Variety: Yellowish red plain (continued)

Finish: Both interior and exterior surfaces are burnished.

Decoration: None.

Forms: The size of one body sherd indicates a large vessel.

Frequency: Two sherds.

Occurrence: Site SA-16.

Comments: The large sherd shows marked color contrast in cross-section; the outer surface is clear yellowish red to a depth of about 0.5 mm. The core is black, and the inner surface is brown.

Variety: Banded red (Plate I)

Paste: Same as Burnished red plain; surface color is 2.5YR4/6 red.

Inclusions: Same.

Hardness: Same.

Thickness: Same.

Finish: Both the exterior and interior surfaces are burnished, but the latter is more porous.
Ware: Coarse Red (continued)

Variety: Banded red (continued)

Decoration: The decorative motifs occur on bands around the vessel. In one case the band is raised above the vessel surface. On the raised band (about 25 mm. wide), four rows of sub-hemispherical excisions create two raised, wavy lines, separated by a narrow, raised straight line. The band is bordered above and below by a single row of cord impression.

Forms: Not known.

Frequency: Two sherds.

Occurrence: Site SA-10.

Comments: The variety is distinguished primarily by the presence of decoration, and to a lesser degree by the interior wall finish. Since it is attested by only two sherds, however, it is possible that less than the entire vessel interior was burnished and that this trait is not valid for distinguishing varieties.

Variety: Uncertain (Plate I)

After defining the above varieties of Coarse Red ware, a group of sherds remained, which on the basis of their paste, firing, inclusions and color range, show definite affinities to that ware. All of these are badly weathered, making it impossible in most cases to see how the original surfaces were treated.
Ware: Coarse Red (continued)

Variety: Uncertain (continued)

The color range at the surface runs from 5YR5/6 yellowish red to 2.5YR3/6 dark red.

Three sherds are decorated. One rim has four rows of dentate impressions around the outer edge, and a line of notched incisions along the top of the edge. The other two are body sherds. One decorative technique produced a line of small impressions, and another, a series of fairly broad, round impressions. The distribution of this group is: Site SA-10 (2), SA-13(15), SA-16 (11). Frequency is 28 sherds.

The sherds at the yellowish red end of the color range may be closely related to the Yellowish red plain variety discussed above; in addition to some similarity in color, a few sherds have well smoothed, burnished interior surfaces. Those in the more reddish end of the spectrum are strongly suggestive of Burnished red plain, if allowances are made for deterioration and color change through weathering. It must be emphasized that these are not two distinct groups within the unclassified material; there is a gradation of color from one end of the range to the other. It is, therefore, possible that all of the unclassified sherds could fit into the varieties of Coarse Red already defined.
Ware: **Powdery Orange** (Plates III, IV)

Paste: The paste has a very grainy, powdery texture. Cores are frequently, but not always darker than the surface; when darker, they tend to be gray, with an occasional black one. Observable surface colors range from 5YR5/8 yellowish red to 7.5YR6/8 reddish yellow and 10YR6/3 pale brown.

Inclusions: Abundant quantities of crushed quartz are present. Although occasional pieces are as large as 8-9 mm. in diameter, the mean is about 1-3 mm. Edges of inclusions are sharp, implying their intentional mixing with the paste.

Hardness: Mostly 1.0-2.5 on Mohs' scale; a few are in the 2.5-3.5 range.

Thickness: The range is from 4-25 mm.; the mean lies between 7-10 mm.

Finish: In most cases no trace of the original surface finish remains, due to weathering. Where the surfaces are better preserved, they are very porous, grainy and powdery; a few interior surfaces show traces of possible burnishing.

Decoration: The following types of decoration occur:

1. Roughly parallel incised lines, placed horizontally around the vessel. This resembles what Atherton has referred to as channelled ware (1969).

2. Diagonal, possibly criss-cross, incised lines, beginning just below the rim.

3. Diagonally placed dentate designs occur on the tops of the rims.
Ware: **Powdery Orange** (continued)

Decoration: (continued)

discussed in (1) and (2), above.

4. A double row of *punctates*, apparently running horizontally a-round the vessel.

5. An intricate pattern consisting of at least seven parallel bands of rounded impressions. The bands alternate between shallow and deep impressions.

6. Two pairs of parallel incised lines, with light hachured or herring bone incisions. The latter occur both within and outside of a field defined by the paired, parallel lines.

Forms: Very little can be said about vessel form because of the small size of the sherds. However, two types of rims are distinguishable. The first includes a poorly defined rim, which results from rounding the top of the vessel wall. This occurs on one of the channeled-type sherds and probably represents a fairly straight-walled vessel form. Also included in this type is a slightly more everted, but similarly rounded form. The second type is a clearly defined, everted rim, about 20 mm. wide.

Frequency: 36 sherds.

Occurrence: Sites SA-10 (4), SA-13 (5), SA-16 (9), SA-17 (18).

Comments: Nearly all the **Powdery Orange** sherds are very badly weathered; in some instances only the gray core remains. For this reason, no attempt has been made to subdivide the ware into varieties. The
Ware: **Powdery Orange** (continued)

Comments: (continued)

characteristic grainy texture, for which the ware is named, is itself possibly a result of the weathering process, since pottery with such a soft surface would not be very durable. (Naturally the possibility exists that such a ware was not made for household use). The color range, however, is sufficiently distinctive to suggest differences in paste and/or firing which would justify distinction as a ware.

Ware: **Slipped** (Plate V)

Paste: The paste is not well prepared for working, showing layering of particles through the cross-section of sherds. Surface colors are in the range of 5YR7/6 to 7.5YR7/8 reddish yellow. These colors frequently extend into the core, but there is always some darkening near the interior vessel surface. The darker colors vary from a very light gray to black. Interior surfaces lack the brighter, clearer colors of the outside. The fired product is extremely porous within the core, producing sherds which are very light in weight and easily broken.

Inclusions: Inclusions are numerous and consist of crushed quartz, with a mean diameter of about 1-2 mm. The edges are sharp. The porous paste texture allows the inclusions to be only loosely bound.

Hardness: 2.5-3.5 on Mohs' scale.

Thickness: The range is from 7-20 mm., with a mean between 8-10 mm.
Ware: Slipped (continued)

Finish: The outer surfaces are smooth and have been slipped in some way. This may be either a true slip (or wash) or a self-slip. In a number of cases this finish appears to have been darkened through use. All of the sherds show crazing and flaking of the slip; frequently inclusions at the surface of the vessel were covered only by the slip, which has subsequently flaked off. Inner surfaces are very pitted and uneven, with the exception of one sherd, which seems to have been burnished inside.

Decoration: A single sherd is decorated, with two parallel, cord or rope impressed bands around the vessel; above this is an interlocking pattern which appears to have been impressed with a net.

Forms: The only rim sherd in this ware represents a vessel with a rim diameter of about 22 cm. The rim itself is well defined, everted and about 25 mm wide. The other sherds are all small; the thickness of a few may imply large vessels.

Frequency: Eight sherds.

Occurrence: Sites SA-10 (7), SA-16 (1).

Comments: Seven of the eight sherds representing the Slipped ware are very homogeneous in appearance; the one decorated piece (from SA-16) has a much more completely finished inner surface, having been burnished. A larger collection might define several varieties within the ware, using similar criteria. However, such a small sample cannot be profitably subdivided. The fact that the color of the slipped
Ware: Slipped (continued)

Comments: (continued)
surfaces extends well into the cores could indicate a true slip which easily penetrated a porous matrix. This same evidence, moreover, coupled with the presence of gray zones within all the cores, may very likely indicate that the slip is naturally the same color as the paste. Hence that color appears where oxidation was more complete. Traces of the same color, but greatly muted, show up on the inner surfaces. The ware is also notable in that, while the surfaces of vessels would have been hard and serviceable, the high porosity of the fired paste makes the pottery friable. It is questionable whether it would have been well-suited to household use.

Ware: Common Brown (Plates VI-X)

Paste: This paste tends to be relatively coarse and has not been extensively prepared before firing. Again there is a layering of particles through the cross-section. Surface colors range from black through brown and pale brown and occasionally even to white. While these colors may be observed well into the sherd cores, even the thinnest pieces also have a gray area within. At times, this unoxidized zone is quite black. The fired paste is very porous and fractures easily in most cases. This characteristic, with the presence of unoxidized paste, suggests a carbonaceous clay. Firing time was probably short and temperature low.

Inclusions: These are present in considerable quantity, consisting mostly of crushed, sharp-edged quartz. The mean diameter of
Ware: **Common Brown** (continued)

Inclusions: (continued)

inclusions is about 1.5 mm.; inclusions larger than about 2.5 mm. in diameter are extremely rare.

Hardness: The range is from 2.5-3.5 on Mohs’ scale.

Thickness: This ranges from 3-17 mm., with a mean falling between 6-10 mm.

Finish: Exterior finishes are smooth and burnished, except where they have been decorated. Although some pieces have been extensively weathered, the prevalence of the technique makes it likely that they, too, were originally treated in this way. Some of the smoother surfaces appear crazed; however the uniformity of color on both inner and outer surfaces makes this likely the result of the smoothing technique. The sherds do not look slipped. Interior surfaces are either burnished or left with the pits and striations from the scraping process. Interior surfaces were probably finished when leather hard, with at least a reasonably hard tool.

Decoration: Decoration is relatively frequent, especially on rims. Techniques employed can be divided into five basic varieties:

1. **Cord wrapping:** This includes wrapping/impressing with cords or rope, woven fabric and nets. The fabric impressions show three characteristic weaves. One example has a single band of rope impression bordering the textile pattern. Beyond the band are four fairly wide, shallow troughs, probably made by a dragging implement.
Ware: Common Brown (continued)

Decoration: (continued)

Edging this is a triple band of lunate impressions bordered again by a rope impression. Net impressions occur twice, and both patterns are clearly distinct from one another. Cord or rope impressions occur most commonly on rims; they are applied more or less diagonally across the rounded outer edge. The impressions are in parallel sequence and apparently encircled the rim completely. There may be an incised line running horizontally around the rim, dividing the rope impressions. Other decorative techniques may be applied below the rim. Where rope impressions are used on the vessel body, they may be single or multiple, and the direction of application varies.

2. Dentates: This occurs on the edges of rims, in an interlocking pattern around the vessel wall and in multiple horizontal bands. The latter may actually be roulette impressions.

3. Punctates: Small, round punctations are found forming diagonal lines and also in parallel bands, both placed on the top edge of the rim. A single band of impressions made with a rather thin, flat implement occurs once, just above the shoulder of a vessel.

4. Incising: This technique is rare; it occurs as lines forming something of an "X" pattern, just below the rim, and more elaborately as a herring bone pattern (also beginning just below a rim).

5. Shell edge impressions: These are difficult to identify, and some of the so-called shell impressions may have been made with other implements. The designs appear to have been made by rolling
Decoration: (continued)

the edge of a shell in the paste, producing a serrated line effect. When used on rims, this technique produces the same pattern of parallel diagonal lines as that described for rope impressing (above). Shell edge impressing is also found on body sherds in patterns of interlocking straight lines.

One sherd with an intricate decorative pattern was too badly weathered to determine the technique used. Very likely, a combination of rope and net impressions, or a fabric with an open, elaborate weave was used. Yet another technique appears, which has not been identified. It creates facing pairs of sub-lunate impressions similar to what might be made with the underside of a cowrie shell. The author has experimented with these shells, but has not found any that were small enough to duplicate the impressions found on the Brown ware.

Forms: Several vessel forms have been noted, but only one could be reconstructed in any detail. There is a large, thick-walled vessel with nearly vertical sides and slightly defined rim. The rim is the rounded top of the wall, with punctate decorations. Also represented is an elaborately decorated vessel of constricted form; the walls flare out both above and below. The reconstructed form is a moderate size shouldered vessel, with flat, everted rim. One of these was found about two thirds intact. Characteristic shoulder and flat rim sherds from several others are present as well. These vessels have only a small flat area on the base, which curves gradually up
Ware: Common Brown (continued)

Forms: (continued)

into the lower wall. Rim forms fall into three varieties:

1. Vertical: This occurs only once, on the straight-walled vessel (above). Even here the rim is very slightly everted.

2. Rounded everted: Over half of the rims are in this category; the majority of these is decorated. The outer rim edge is always rounded, but rim width and degree of flattening of the upper surface vary.

3. Flat everted: These may have a single, flattened surface plane, or there may be a second, slightly downward sloping lip. The angle formed between rim and vessel wall may be as great as 90 degrees. The edge is thinned, rather than thick and rounded as above. Only one is decorated.

Frequency: 98 sherds.

Occurrence: Sites SA-10 (32), SA-13 (12), SA-16 (54).

Comments: Individual varieties have not been defined for the Common Brown ware, although two possible criteria for this distinction have been discussed, namely vessel/rim form and decorative technique. The small size of the sherds and lack of information on vessel form make classification on this basis infeasible. Likewise it has not been possible to correlate decoration with a significant group of other attributes. There are no clear groupings within the color range of the ware. The variations discernable are all probably due to such causes as differential weathering, incidental variations in
Ware: Common Brown (continued)

Comments: (continued)

firing, and use. Many sherds are heavily blackened. A few sherds show traces of coil construction, but it is not known how generally this technique was used. Without doubt, a larger collection of this ware could be divided into varieties defined on the basis of culturally significant variables; in the case of the present sample, however, it has been considered more useful to discuss the collection as a whole.

Ware: Uncertain.

Three sherds, which in general color range appear similar to the Common Brown, have been separated from that ware. Two are distinguished by traces of orange over parts of them. In every other respect, both should be considered with the Brown ware. The presence of the orange raises the question of whether firing technique is responsible, and if so, whether it was an intentional application. The other sherd has a gray cast; the exterior surface is burnished, while the interior is extremely rough, uneven and pitted. The paste is porous and very light in weight. Most likely this represents an entirely different paste and ware.
CHAPTER IV
CERAMIC ANALYSIS AND ETHNOGRAPHIC DATA

1. Analysis.

The surface collection from the four sites totals 233 sherds. The distribution by site and ware is shown in Table I. Nearly half of the total belongs to a single site, with one other site accounting for a third of the sample. As a rule, all sherds seen on the sites were collected. (At SA-13, McEvoy found a complete vessel, surrounded by a number of fragments, which the tenant of the land would not allow him to remove).

The distribution of the classified varieties of Coarse Red shows that each variety is confined to a single site. If these are valid groupings, then the unclassified Red sherds probably represent several varieties. A larger sample would undoubtedly suggest more and different criteria for typing the ware.

The frequency of the Brown and Red wares is approximately equal, with the Orange and Slipped wares being much less common. At the earliest Sabo site (SA-16), Brown is definitely in the majority, but has become less frequent than Red at the later Sabo site (SA-10). Sample bias may be operative here, but this cannot be conclusively demonstrated. These two wares are present in nearly equal proportions at SA-13, tentatively the oldest site of the group. Site SA-17 is represented by a single ware (Orange); this ware is in small quantities at the two Sabo sites,
but forms a slightly higher percentage of the materials from SA-13. The Slipped ware occurs only at the Sabo sites.

Decoration is most frequent on the Common Brown ware, occurring on about one third of the sherds. It is least frequent, percentage wise, on the Red ware, occurring on only five of the 91 sherds. For the Orange ware, six of 36 pieces are decorated. The frequency distribution of decoration by site is also significant. More than half of all the decorated sherds are from SA-16, the early Sabo site; and these represent about one third of all the materials from that site. The proportion is nearly equal for SA-13. Site SA-17 has no decorated ceramics in this collection. As would be expected from these data, the greatest variety of decorative techniques is found at the two earliest sites: included are shell, cloth, net and rope impressing; dentates; and channeled-type, herring bone and other types of incising. Incising is not known from SA-13, however. By the period represented at SA-10, excising and a simple punctate have been introduced; but of the older techniques, only rope impressing, dentates and possibly some incising remain. Each of these techniques has by this point been simplified.

Little can be said of vessel form evolution, due to the condition of the material. However, there seems to be a greater variety of forms present at SA-13 and SA-16 than at the late SA-10. This again is what would be predicted from the data already presented. The common form in late Sabo ceramics is a shouldered vessel, with a mostly rounded base and a flattened, everted rim. The Sabo refer to this today as a palm wine pot (McEvoy, personal communication). The large Red ware vessel(s) from SA-10 is probably similar. Other forms might have been in use this late, but have not been identified.
From the earlier sites, SA-13 and SA-16, the shouldered forms are not attested. Several sherds suggest large vessels on the basis of their shape and thickness. One form seems to have been almost straight-walled, with a nearly vertical rim, rounded on top. Also present was an elaborately decorated vessel with a noticeable constriction. The rims from SA-13 and SA-16 are characteristically everted, but do not bend outward from the walls at such a great angle as the later, flat rims. Rim width and thickness vary considerably; some show a distinct tendency toward flattening of the upper surface. All are rounded, and are thicker at the edge than the late rims. Most of the early rims are decorated on the rounded, outer edge, techniques including rope marking, shell edge impressing, incising and dentate marking.

The method of firing seems to have remained nearly constant throughout the period represented here. With few exceptions, cores have an unoxidized zone, which sometimes includes all but the surface. All the paste looks carbonaceous; this would explain the dark cores and porous texture of the fired wares. Firing times would presumably have been too short and temperatures too low, to oxidize the organic matter within the paste. Instead it was carbonized. The open spaces in the paste would have been made by carbon dioxide from the carbonizing process. Thus the variations in degree of core darkening are functions of both paste content, which would be expected to vary somewhat, and of firing, which possibly was not carefully controlled.

Surface color, too, would be affected by variations in firing. To have produced consistently, from the same paste, the different colored wares represented here, however, would have required a degree of firing expertise not consistent with the overall technical quality of the
pottery or with available ethnographic information. Therefore, while a sorting of wares by major color groups should be taken cautiously, it is a useful tool in the early stages of investigation.

In the **Brown** and **Red** wares surface treatment seems to have been confined to two techniques (exclusive of decoration), namely burnishing and scraping. The scraping looks as though it was done with a hard tool that lifted and dragged inclusions. The patterns left by the process suggest that it was applied to a leather hard paste. With the **Brown** ware, there seem to be no criteria by which to predict when inner surfaces would be burnished. There is a good possibility that all the vessels of both wares were originally burnished on the exterior. The **Slipped** ware was almost surely burnished prior to the addition of the final wash. There is less that can be said about the **Orange** ware; it was smoothed, but may or may not have been burnished.

Some mention needs to be made of the blackening so frequently noted. This occurs on both interior and exterior surfaces. Some of it must be due to cooking and other use. However, ethnographic information suggests that it may be partly the result of the application of palm oil (Schwab, 1947). This could certainly "smudge" the surfaces and might also explain some of the darkness in cores. Classification of sherds is sometimes difficult because of the almost complete masking of paste color by this blackening.

In broad outline, then, it can be said that the early ceramics show a greater variety of forms and are much more frequently and elaborately decorated than the later materials. Three of the four wares continue throughout the known sequence. Only the **Slipped** ware is confined exclusively to the Sabo sites; and only one site (SA-17) is represented by
just a single ware.

2. Ethnographic data.

As has been stated, ethnographic data on Liberia are scarce. G. Schwab is one of a very few travelers to venture into the southeast (1947). His descriptions, however, often do not make clear what people or part of the country he is talking about. Although he mentions the Sabo by name, most of his information on ceramics seems to be drawn from central and northern Liberia. Few if any conclusions about Sabo pottery can, therefore, be based on Schwab's accounts. G.H.H. Tate and H.M.G. d'Ollone also visited the southeast, but have not described the material culture of the people in any detail (1942; 1904).

Schwab reports that the preferred clay for pottery making is bluish-white, and that it is found in isolated patches around swamps and streams. He does not say whether any other clay is used. A considerable ritual surrounds the gathering of the clay; its location is kept secret from the men. Women are the exclusive ceramists. According to Schwab, vessels are always made from coils of clay, the coils being annealed with the hand. The outer surfaces are then smoothed with a piece of midrib from the raffia palm, the inside, with a bit of calabash gourd. The final burnishing is done when the paste is leather hard, with a water-worn pebble. Schwab notes that the tools are kept wet and that the area being worked is smeared with palm oil.

The decoration is reportedly also done while the paste is leather hard. Unfortunately, none of Schwab's illustrations resembles Sabo decorations. He does mention the use of woven stamps made of rattan fibre, to create a braided pattern, and of metal bracelets, to make a series of
impressed designs. These may relate to some of the Sabo cord impressed and dentate (or roulette) patterns. After decoration, both inside and outside receive further smoothing with a pebble or some other tool. Vessels are dried directly in the sun, and Schwab records that some groups smear them with palm oil to prevent cracking from too rapid drying.

The dry vessels are placed on a heap of grass or other available quickly burning material, and are covered with the same fuel. The mass of fuel is then allowed to burn; when only embers remain, the vessels are set out to cool. Although he could not verify it, Schwab believed that some sort of liquid was thrown onto the ware while it was still hot.

McEvoy reports that the common clay in southeast Liberia is red, but that he saw only white clay being used for pottery manufacture. Sabo women are the potters, and they also have a ritual surrounding the gathering of clay. McEvoy, however, saw vessels being formed from solid lumps of clay; he does not report the use of coiling. Among the Sabo today, vessels are black when new and are always decorated. Nothing is known ethnographically of the techniques involved here. It is quite interesting that McEvoy never saw a red vessel in use among the Sabo. Nevertheless, upon his request, a red pot was made for him (personal communication).

Orr has attempted to make a representative ethnographic ceramic collection for parts of Liberia (1971). His efforts have been confined mostly to the central and northern parts of the country. He reports numerous examples of black, gray and brown wares, exhibiting varying styles of workmanship. The decorative techniques described on the modern wares include such items as textile impressions, incised lines, dentates and shell impressions. It is unfortunate that the illustrations from Orr's
article are not reproduced well enough to permit comparison with the Sabo ceramic decorations. Orr also comments that he was told by a Loma informant that pottery was always made by women and that it was manufactured from coils. In this case, the coils are beaten on the outside with a flat paddle, while a pebble held inside serves as an anvil.

Schwab and Orr both report a wide variety of extant ceramic forms. A detailed discussion of these is not included here, but a few forms are of particular interest. The shouldered, everted rim form appears widespread through Liberia, although the vessel's other attributes vary. These are in current use as palm oil storage pots among the Sabo and others. Also mentioned is a vessel with a constricted neck, used as a personal water jar; this may resemble the constricted form described from SA-13. Very large, tall water storage jars are used currently by the Sabo, and these may be similar to the straight-walled form from SA-16. Other forms include large pans for cooking rice (these have lids), various jar forms (some with handles), bowls with incurved rims, both convex and flat bottomed bowls, cooking pot stands and others.

In summary, there is reason to believe that some of the Sabo wares were coil constructed. Sabo women apparently prefer the same type of clay as that chosen in other areas of Liberia. Surface finishing techniques would seem to correlate well between areas, too. Vessel form and decorative technique share certain similarities through separate parts of Liberia. In the case of decoration, however, resemblances may often extend only to the use of similar implements, which are almost universally available in West Africa (shells, for example). Schwab's accounts of the use of palm oil and of the method of firing certainly deserve serious consideration, since these could produce a blackened, little oxidized
ware such as that seen among the Sabo. The question of the red colored wares remains open: none of the ethnographic reports even mentions it (except, of course, for McEvoy's personal vessel).
Table I. Frequency of ceramics by sites and wares.

<table>
<thead>
<tr>
<th>Ware</th>
<th>Common Brown</th>
<th>Coarse Red</th>
<th>Powdery Orange</th>
<th>Slipped</th>
<th>Sherds at site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site</td>
<td>98</td>
<td>91</td>
<td>36</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>SA-17</td>
<td>---</td>
<td>---</td>
<td>18</td>
<td>---</td>
<td>18</td>
</tr>
<tr>
<td>SA-10</td>
<td>32</td>
<td>63</td>
<td>4</td>
<td>7</td>
<td>106</td>
</tr>
<tr>
<td>SA-16</td>
<td>54</td>
<td>13</td>
<td>9</td>
<td>1</td>
<td>77</td>
</tr>
<tr>
<td>SA-13</td>
<td>12</td>
<td>15</td>
<td>5</td>
<td>---</td>
<td>32</td>
</tr>
</tbody>
</table>

Frequency of ware
CHAPTER V

COMPARISON OF ETHNOGRAPHIC AND ARCHAEOLOGICAL DATA

The question to be addressed here is: Do the archaeological data corroborate what the Sabo say about their own history? The Sabo state that Weadru (SA-16) was the first village built by them after their arrival in Saoblili, their present homeland. At this time, SA-13 had already been abandoned by its former inhabitants, believed by the Sabo to have been the Jrau. Site SA-13 was never occupied by the Sabo and consequently, they have no name for it.

McEvoy postulates that the Sabo might have begun migrating from across the Cavalla River (i.e. out of the Ivory Coast) as early as A.D. 1290-1450. This date corresponds with a period of expansion of the Mali empire in that area (personal communication, manuscript in preparation). Archaeological survey could be fruitful in testing this hypothesis; Sabo oral histories cannot aid in the absolute dating.

Much later, after the Sabo had split into several groups and had completed numerous changes of village sites, old Wufuke (or Wufiswa) was founded. It is not known when Wufiswa was founded, but the terminal date of its occupation was about 1860. From informants in modern Wufuke, McEvoy learned that their present town had been established about 1885. Prior to that, these Sabo had occupied Tooke (SA-12); it had earlier been occupied by the Jrau, and may have been used by two Sabo lineages at different times. The site was inhabited this time for only about 25 years,
from around 1860-1885. Wufiswa, then, was the town occupied up to the founding of Tooke. Both towns are said to have been burned by raiding parties prior to their being abandoned.

Unfortunately there is no way to fit Tatedru (SA-17) into the scheme at this time, since the Sabo have no information on its habitation. The 18 tiny, badly weathered sherds found on the surface of the site do not provide a firm basis for hypotheses either.

The relationship between the Sabo and the Jrau is not clear. The archaeological facts, however, demonstrate a continuity in ceramic traditions between Weadru (SA-16) and the presumed Jrau site (SA-13). Even considering the limited sample from SA-13, it can be seen that the Brown ware is well developed there. This is certainly the same ware that accounts for the majority of the ceramics from SA-16. The two sites share decorative techniques as well. Nothing has been found through analysis of the ceramics that would indicate which site is earlier.

The Sabo ceramic tradition at SA-16 is much more like the tradition at SA-13 than it is like the later Sabo tradition of SA-10. This conclusion is based on an analysis of rim forms and decoration. The Brown ware which appears at SA-10 is a much simplified version of the earlier traditions. A similar set of relationships seems to be indicated by the Red ware, although this is less certain due to sample size and preservation.

It is probably significant that the ceramics from SA-10 are predominantly plain and undecorated. This is in definite contrast to McEvoy's observations that Sabo pottery is always decorated and to Orr's survey findings as well. The Sabo of modern Wufuke, the descendant of SA-10, no longer manufacture pottery at all, but obtain it from a nearby village.

It is possible that time is the determining variable in the dif-
ferences in style between sites, from SA-13 to SA-10. The ceramics appear to substantiate the Sabo claim that SA-10 is much later than SA-16 and that SA-13 had recently been occupied prior to their arrival. This would account for the larger difference in form and decoration between the two Sabo sites. It does not, however, explain why the early Sabo Brown ware so closely resembles that of a non-Sabo people.

The recent date of SA-10, plus the fact that its existence is common knowledge among the Sabo, make it a good reference point. SA-10 may safely be considered a Sabo site. The Slipped ware was found only here and at SA-16, a fact which adds support to the idea that SA-16 is also Sabo. This still must be taken cautiously, though, due to the scarcity of the ware.

The simplification of ceramic forms by the nineteenth century, at SA-10, is more than likely related to the complete abandonment of the ceramic industry by the Wufuke Sabo. No information is yet available as to when pottery manufacture ceased or as to the factors operative in the change. A fuller investigation of Sabo oral history might shed light both on this question and on the previously discussed relationship between SA-16 and SA-13.

Finally, the Sabo belief that SA-17 has no Sabo affiliations appears to be supported by the ceramics. Only Orange ware was found at SA-17. Although this ware also occurs in small quantities at the other sites, it must be noted that the condition of the sherds from SA-17 renders their assignment to the ware less than certain.
CHAPTER VI
ARCHAEOLOGICAL COMPARISONS

Orr's survey of central and northern Liberia has already been mentioned (1971). He has found numerous black, gray and brown colored wares which possibly relate to the Sabo ceramics. The resemblance could, of course, be purely superficial, resulting from widespread preference for the same type clay. Some decorative techniques and vessel forms are shared between the Sabo and other hinterland groups as well. Orr discovered shouldered vessels very much like the Sabo palm wine pots. In addition, he describes textile and cord impressing, dentates, punctates and incising as decorative motifs. Atherton has described both shell-edge and channeled decorations from Sierra Leone that are virtually identical to those from Sabo sites.

However, it can be seen that, in the case of ceramic decoration, similarities between areas could be due merely to the use of the same implement. Various fibres and shells are probably almost universal throughout West Africa.

Aside from the above surveys, a few sites have been dug along the Liberian coast, mostly by amateurs. The occasional reports from these excavations are lacking in detail and thus inadequate for comparative purposes.

It should also be noted that the red colored ceramics, which are absent from ethnographic descriptions, were found in restricted areas
by Orr. The fact that this type of ware does not regularly co-occur with the more usual brown, black or gray colored wares may make it of some value as a marker in areal comparisons. This hypothesis, of course, awaits testing through more archaeological work.

This survey of the literature has revealed that comparisons over broad areas are of little use at this point. Information on West African archaeology is geographically "spotty" at best; large areas have never been investigated. O. Davies, in a major work on the prehistory of West Africa, from the Paleolithic up to the arrival of Europeans, makes just two statements about Liberia: "Liberia is again swamp and totally unexplored" (1967: 43); and "nothing is known about the prehistory of Liberia" (1967: 214). The case is nearly identical for Sierra Leone and Ivory Coast.

What is needed now is rigorous description of individual sites and local areas. It is on such work that comparative syntheses must be based. More attention to published illustrations as well as both relative and absolute chronology is required.
CHAPTER VII

CONCLUSIONS

The recent ethnographic history of Liberia and of West Africa in general is extremely complex. Even from what has been called the proto-historic period (i.e. the early period of European contact), there are few written records documenting the migrations and cultural affiliations of individual groups. Today it is known in some cases, and suspected in many others, that the present inhabitants of numerous areas are relatively recent arrivals. Fortunately for the anthropologist, many if not all peoples have maintained oral histories. While these may not be based on fixed, absolute dates, relative chronologies can often be reconstructed from such information.

Predictably, the further back in time an oral history extends, the more likely it is to lack or be inaccurate in details. It is at this point that archaeological methods can be of particular usefulness. Using ethnographic information as a guide, the prehistorian can select his sites carefully. The resulting data can then be tested within the framework of ethno-historical sources. Each phase of the investigation thus complements the other.

As regards the present study, the number of sites examined is small; and the sites probably do not represent the ideal sequence for analysis. Nevertheless, the value of a combined ethnographic-archaeological approach is evident. The ceramic analysis has demonstrated that there is a
continuity of tradition between the early and late Sabo habitation sites. All of the same wares are present at both places, but there is a simplification of the industry more recently. The archaeological data indicate a close relationship between Weadru and site SA-13; the ceramics are very similar. Sabo oral histories attribute the latter site to the Jrau, presently dwelling on the Liberian coast. Both the artifacts and the ethnographic information tend to confirm that SA-17 is not a part of the same ceramic tradition as that seen in the other three sites investigated.

Lacking the basis for a sound comparative study, it has nonetheless been shown that Sabo ceramics, present and past, share certain similarities with other West African pottery. Vessel forms, paste color and decorative technique are possibly related through Liberia and into neighboring states. Moreover, elements of even the oldest ceramics studied here seem to be present in wares manufactured today. Decorative techniques and probably vessel form have thus had a continuous development through time. The Sabo material from Wufiswa is possibly somewhat unique, in that its style is greatly simplified. This apparent decline in the ceramic art immediately precedes the loss of the industry altogether among the Wufuke Sabo.

The presence of a red colored ware remains unexplained. Such a ware is not described ethnographically, but obviously has a long history. It was in use as late as the nineteenth century in Wufiswa. That there is still knowledge of red ware manufacture is shown by the fact that McIvoy was able to obtain a red vessel from the Sabo. This ware may ultimately prove to be of value as a marker of some sort.

Thus it can be seen, that in the absence of either the ethnographic or the archaeological data, the conclusions offered here would have
differed in scope and would have been less complete. There is great potential for further work of this kind among the Sabo and others. Using McIvory's field notes and site survey reports, it should be possible to locate nearly every site that the Sabo claim their lineages ever occupied, from SA-16 up to modern Wufuke. Many of these sites probably represent multiple occupations, at least according to oral history. Sabo informants will be invaluable in the interpretation of this type of material. By the careful synthesis of both lines of evidence, a long history of the Sabo and their relationships to other West African groups might be reconstructed.

Another hypothesis to be tested is that the Sabo originally migrated from across the Cavalla River in the Ivory Coast. As previously mentioned, McIvory is studying this possibility, through an application of lexicostatistics. Archaeological data from the Ivory Coast side of the river would form an important adjunct to the linguistic research. It is certainly possible that other groups have migrated into coastal West Africa from this same area. Again, linguistic, ethnographic and archaeological research combined will provide a more complete and reliable interpretation of the prehistory than any of these used singly.

If the cultural history of West Africa is to be worked out and integrated with that of the rest of the continent, the beginnings will have to be made locally. Histories of individual peoples, worked out with the methods described here, will provide the building blocks for the larger sequence.
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Map 2. Sketch map showing approximate locations of archaeological sites (after McIvoy).
Plate I. *Coarse Red* ware. A, variety *Banded red*; B, variety unclassified; C, variety *Burnished red plain*. All illustrations are actual size unless otherwise noted. Level lines on form profiles do not indicate vessel size.
Plate II. Coarse Red ware. Hypothetical vessel form profile, variety Burnished red plain. (Shown one half actual size).
Plate III. Powdery Orange ware. A, channeled-type with dentate rim; B, incised with dentate rim.
Plate IV. Powdery Orange ware. A, impressed; B, punctate; C, incised-hatched.
Plate V. Slipped ware. A, form profile; B, cord-marked.
Plate VI. Common Brown ware form profiles. A, rounded everted; B, vertical.
Plate VII. Common Brown ware form profiles. Flattened everted.
Plate VIII. Common Brown ware. A, fabric impressed; B, rope impressed and incised; C, dentate.
Plate IX. Common Brown ware. A, shouldered form with punctate decoration; B, impressed and cord wrapped; C, shell-edge impressed; D, net/rope impressed; E, technique not known; F, dentate; G, net impressed.
Plate X. Common Brown ware. Palm wine pot and form profile.