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of shell-tempered sherds are present on some, but not all, of these sites. I would not interpret this as an intrusion of Mississippian culture. As at Plaquemine and Caddo sites, shell tempering appears to be an addition to an already well-established pattern rather than part of a drastic change. Pottery decorative techniques and styles are within the range of Leland Incised and Keno Trilled. The distinctive Caddo engraved pottery has not yet been found.

Valuable information has come from this initial fieldwork, especially in regard to settlement patterns and conditions of sites. Questions of chronology and interpretation can now be stated and will provide the guidelines for a second phase of research emphasizing site excavation. It should then be possible to establish a chronological sequence of phases and reach some conclusions about cultural-environmental interaction and interregional relationships.

Profiling Techniques In Archaeology

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Introduction

The purpose of this paper is to describe various techniques used in archaeology to record graphically soil strata, features, and in-place artifacts of trench or pit walls. The advantages and disadvantages of these techniques will also be described. Presently, however, I would like to discuss some of the basic tools of the profiler.

Tools

The most important tools of the profiler are, of course pencil and paper. I myself have found a number two pencil best for the job, since its heavy, black marks are easily seen even in the bright sunlight encountered, more often than not, in the field. Profiling often entails recording minute details, therefore distinct markings and drawing are essential to accuracy. Standard rule graph paper seems to be best for recording graphic details. It is available in large rolls and can easily be cut to size to fit the profiler's needs. An excellent drawing board can be made simply by taping a piece of graph paper to a plywood board of a size which can be conveniently handled. In trench profiling the board can be suspended from two sticks of wood placed across the trench. Large gum erasers are handy not only for erasing mistakes but also for removing dust and dirt that constantly and consistently get on the graph paper. A twelve-inch ruler with the English and metric scales is a tool which also should be included in the profiler's basic kit. Another important tool is a metal tape measure which is used to measure the dimensions of whatever is being recorded and its distance from a reference point. A trowel is used to plane the trench or pit wall for easier profiling. Freshly cut walls show features and strata more clearly than walls which have dried out in the sun or have been mottled by rain. For heavier cutting, a small profiling shovel with a straight, flat blade is best. Ice picks or small, pointed

sticks can be used to mark artifacts, features, or strata to which the profiler wishes to pay particular attention. An Army surplus field pack is a convenient carry-all for the smaller profiling tools and small luxury items such as insect repellent, suntan lotion, and a transistor radio.

There are larger tools which are important to the profiler. A long handled shovel and a mattock are needed when the profiler needs to move large amounts of dirt rapidly. A round-point shovel is best for breaking ground and a flat-nose shovel is best for levelling a trench or pit floor. Water sprayed from a large, refillable, pump spray can often help distinguish different strata and features temporarily for the profiler, especially in strong sunlight. However, I have found it easier and more convenient to shade the area to be profiled. Shading seems as effective as spraying in making distinct those features to be drawn. Also, operating the spray can becomes quite awkward and time consuming.

A grid screen and a horizontal-vertical string system are used as large measuring tools in profiling. The grid screen is constructed in the shape of a rectangle with the use of small and light, but strong, boards. Eyelets are screwed into the inside surfaces of the boards at regular intervals based on the metric scale. Ten centimeters is a common interval used. String is then tied to the eyelets to form a grid screen within the structure. The length and width of the grid screen should be chosen in a size best suited for the intended job.

Once the grid screen is properly set up, it provides a very accurate measuring device; however, the grid screen is difficult to set up properly. The screen is hung from sawhorses placed across the trench or pit. In the case of the trench, the trench surface is usually rough and uneven. The grid screen and the sawhorses have to be moved each time a grid profile is finished. Time-consuming adjustments have to be made again and again

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in order to set the screen properly. Because the whole screen is shifted, it is difficult to place the screen at the same level as the previous one so that the next grid profile will connect accurately with the last. Further, two persons are required to move the grid screen. This causes the periodic interruption of someone's work in order to have his assistance. Another disadvantage of the grid screen is that its size and construction make it clumsy. Also, if the grid screen is not properly constructed, it will not allow accurate measurements. In very deep trenches or pits, however, where the horizontal-vertical string system is too crude to be adequate, the grid screen is a handy item (Fig. 1).



Figure 1. Setting up to profile a trench. Note grid screen on ground beyond sawhorse.

When using the second measuring tool, the horizontal-vertical string system, the horizontal string is set up by fixing one end of the string in the trench or pit wall, usually with an ice pick, and fixing the other end on the same plane, with the use of a line level, at a point farther along the wall. The length of the string can be varied according to need, but it is best to keep it at a length which will not allow it to sag in the middle and thus impair accuracy. The vertical string is attached by an ice pick to the wall at a measured distance above the horizontal string. The lower end of the vertical string is attached to a plumb bob which will indicate where the lower end of the string should be affixed to the wall.

The horizontal-vertical string system is a simple but accurate tool of measure if used properly. It is easy to set up and can be set up quickly. It is shifted simply by removing one end of the string, rotating it to the opposite side of the stationary end, and fixing it again in the wall on the same horizontal plane by use of the line level. The vertical string is then removed and reset in its new place in relation to the new position of the horizontal string. In shallow pits or trenches or in confined spaces, this system is much more convenient than

the large, clumsy grid screen. The horizontal-vertical string system is also faster to set up and can be varied in length and depth to fit the needs of the profiler. The fixed construction of the grid screen is less flexible in operation.

In view of the advantages and disadvantages of the grid screen and the horizontal-vertical string system, the logical and obvious answer is to use both methods, applying each to the situations in which it is more convenient. If, however, one wished to use only one, I would recommend the horizontal-vertical string system. It is simpler and quicker to set up. I found it was just as accurate, in some cases even more so, as the grid screen. Of course, every profiler has his own likes and dislikes and should try, if time permits, several profiling methods before settling on any particular one.

Profiling Techniques

Now, let's take a look at profiling techniques. There are three general parts to profiling: pre-profiling, the profiling itself, and post-profiling. In pre-profiling, the profiler, of course, gathers the equipment he needs. It is helpful to go through the trench or pit and inspect the wall that is to be profiled. This gives a view of what will be encountered during profiling. This procedure also indicates what equipment will be needed during the profiling. Considering soil color and texture differences beforehand will help form more accurate profiling descriptions.

After an inspection of the area to be profiled, the profiler should pick out a point along the profile wall which will serve as a reference point. This point should be selected to fit the needs and desires of the profiler. Ideally, it should be located somewhere near the trench datum stake so that datum level can be included on the profile sheet as a further reference line. Planting the datum stake by transit survey should be a pre-profiling procedure.

The reference point the profiler chooses will be the point of reference for the grid screen, horizontal-vertical string system, or whatever profiling measuring device is being used. As a right-handed person, I have found it easier to begin profiling from left to right across the trench or pit wall.

Before the profiling device is set up, the portion of the wall to be profiled should be freshly cut to provide an even, smooth, and moist wall. Soil colors and textures are harder to distinguish in a dried-out or mottled wall. For this reason, it is important not to prepare too much of the wall at one time. Sunlight will dry out a wall quickly and rain will instantly mottle and deface the wall surface.

After the wall is prepared and profiling device is set up, profiling itself consists simply of measuring strata and features and recording them graphically on paper. Because trench profiling is concerned mainly with recording strata and features, the recording of in-place

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artifacts is optional. Recording every artifact is unrealistic if the artifactual content of the wall is dense.

After strata and features have been recorded, the profiler should describe the soils as to color and texture and also should record, on the profile, his interpretation of each feature. Description of soils and interpretation of features will allow for further interpretations of the wall from which soil, radiocarbon, and paleo-magnetic samples can be taken.

When profiling is completed, the profiler should again inspect the trench or pit wall to make sure he has left nothing out of the profile. He should then record on the profile any further comments or thoughts he might have. He should always initial each profile sheet so that those who are studying the profiles later will know whom to consult should a problem in interpretation arise. The profile should be dated and should include the site designation and the trench or pit designation. A scale on the profile is always included along with an arrow indicating north.

When two or more profilers are to work in different pits or trenches on the same site at the same time, they should go together to a freshly cut wall and try to reach agreement in their descriptions of the same types and colors of soil and interpretation of features. If possible, their nomenclature should be coordinated so that different profile sheets can be accurately compared. Color

and texture charts for soils can be used but are often inconvenient because they are time-consuming to use. Ideally, the profilers should have some background in geology or earth science.

Using two persons working together as a profile team has its advantages. One person records while the other measures strata and features. Two persons together usually see more than one person alone; therefore, it is less likely that something will be left out of the profile. However, in confined spaces two persons get in each other's way. Also, there may be some disagreement in description and interpretation. One person can profile just as accurately and quickly as two persons if his efforts are concentrated!

Conclusion

This paper is intended to be a general description of profiling techniques. The profiling techniques described in this paper are but a few of many. It is not intended to lay down hard and fast rules for profiling procedures; each individual profiler should choose methods best suited to his own needs and likes. It is my personal belief that various techniques should be tried before a profiler chooses any particular ones. Such action will improve profiling accuracy and so lend more accuracy to the interpretation of the data. This, in turn, will make the profiling meaningful.

Art And Culture Among The Ashanti of Ghana

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FOREWORD

This case study in cultural anthropology was designed to test an hypothesis presented by Morton Levine (New York University, and a fellow classmate at Harvard) relative to the interpretation of art forms among pre-literate people as an expression of cultural orientations, values, and how a people see themselves relating to lifeways. Levine was involved at the time with a similar study of the plastic arts and mythological expressions among the aborigines of Australia.

In this approach to cultural understanding we utilized some of the concepts and models presented by Sigmund Freud (Psychopathology of Everyday Life and Moses and Monotheism) and Franz Boas (Primitive Art), as well as Western European traditional and contemporary art forms Realism (Millet), Naturalism (Daumier), Impres-

sionism (Manet), Expressionism (Raoult), Abstraction (Klee), Fantasy (Miro), Surrealism (Dali) and especially Analytic Abstraction dealing with Cubism influenced by African sculpture and art objects.

We operate on the premise that when an understanding of ways of life very different from one's own is gained through an analysis of all phases of expression by a people, abstractions and generalizations about social behavior, social structure, cultural values, subsistence techniques, and other universal categories of human social behavior become meaningful.

A difficult problem confronting us in 1965 was how and when to indicate signs of change in traditional Ashanti cultural expressions. For the most part we are describing the Ashanti from 1953-1964 (W. R. Bascom and Paul Gebauer, Handbook of West African Art,