Methodological Phases in the Archeological Process

Stanley South

University of South Carolina - Columbia, stansouth@sc.edu

Follow this and additional works at: http://scholarcommons.sc.edu/sciaa_staffpub

Part of the Anthropology Commons

Publication Info

http://www.cas.sc.edu/sciaa/
© 1974 by The South Carolina Institute of Archaeology and Anthropology

This Article is brought to you for free and open access by the Archaeology and Anthropology, South Carolina Institute of at Scholar Commons. It has been accepted for inclusion in Faculty & Staff Publications by an authorized administrator of Scholar Commons. For more information, please contact SCHOLARC@mailbox.sc.edu.
METHODOLOGICAL PHASES IN THE ARCHEOLOGICAL PROCESS

Stanley South

The archeological process can be viewed as eight phases, four of which relate to the collection of data in the field, the excavation phases, and four phases concerned with explication:

EXCAVATION PHASES

1. Site Survey
2. Exploratory Excavation
3. Detailed Excavation
4. Excavation of the One Hundred Yard Square

EXPLICATION PHASES

5. Analysis
6. Synthesis and Interpretation
7. Explanation of the Culture Process Reflected by the Data
8. Explanatory Exhibits on the Site

PHASE 1

The first phase in the examination of an archeological site is the location of sites through surface survey, study of maps and aerial photographs to locate potential sites, and historical documentation.

PHASE 2

The sites located in phase 1 are examined by sinking exploratory squares and trenches to obtain data regarding stratigraphy and superposition, and to locate areas of major concentration of cultural data, postholes, pits, artifacts, etc.

PHASE 3

Once the concentration of cultural material is determined, the spot is chosen for opening a larger exploratory area for more concentrated excavation of a more detailed nature. This area is usually some fifty feet square, or a long trench twenty or thirty feet wide and perhaps a hundred feet long. The approach to excavating this area in more detail is determined to a great extent by the data revealed in the second phase of the project.
The third phase is used particularly where an individual house, camp site, chipping station, mound or ruin requires a more detailed stratigraphic or tightly controlled horizontal recovery of data, such as scatter pattern data, or lenses representing occupation levels. The decision as to what type of data recovery method is used is made by the archeologist based on his evaluation of the data revealed in Phase 1 and Phase 2 of the project. This is a major role of the archeologist, the application of judgment in the choice of methods he uses to extract the most data from the site in the quickest amount of time at a resulting maximum data - minimum cost ratio. Thus Phase 1 and Phase 2 predicate the research design of Phase 3 and the phases to follow in keeping with the overall research design.

Phase 3 is applied where Phase 2 tests revealed stratigraphic zones of cultural material and/or humus zones representing old ground surfaces or stabilized zones and/or occupation zones. If these occupation zones are deep beneath an overlying mantle of soil, it is necessary to remove the overlying soil by machine to make the best use of time and money in obtaining the data these deep deposits have to reveal. In so doing the data from the top occupation zone may be destroyed, but again the archeologist must evaluate the situation and make a judgment as to which data is most valuable. In any case the top cultural zones should never be destroyed by machine until adequate sampling of these zones is carried out under Phase 2 procedures.

Once the overlying mantle of soil is removed to within a few inches of the deeply lying cultural deposits the machine should be removed from the area and the zone approached by use of carefully controlled hand labor. The depth of the machine cut should always be controlled by constant supervision by the archeologist, using the deep trenches cut during Phase 2 as a guiding control.

If the site has several cultural components that are located in the upper soil zone of the site, and if this soil zone is a foot to several feet in depth, with no visible stratigraphy, then the dissection of the deposit by arbitrary levels may be called for until enough data is collected to determine the superposition that may be present. This is a primary purpose of Phase 2, and if answered by the data recovered in Phase 2, the approach to the site in Phase 3 may be entirely different.

If the top soil zone contains virtually a single component, then it hardly makes for the best utilization of resources, human, temporal, financial, and logistic, etc., to utilize a technique designed to reveal stratigraphic separation through superposition analysis. Such an unnecessarily precise and time consuming process sacrifices data such as features in quantity, house patterns, village patterns and relationships obtaining between them that can be acquired by using the procedures outlined in Phase 4. Phase 3 can well be carried out on a site at the same time that Phase 4 techniques are being applied nearby. Phase 3 is the traditional detailed excavation approach to layers, levels and features, and is always used once the features are located through Phase 4 methods of stripping of one-hundred-yard squares to reveal the features.
PHASE 4

If the site is a single component site as revealed by the cultural material recovered in Phase 1 and Phase 2, and this component is located primarily in the plowed soil zone, with features extending into the subsoil zone below, then an ideal situation exists for application of Phase 4. A front loader or belly-loading excavator can be brought to the site to strip the overlying mantle of soil from the level at which the archeologist wishes to obtain a broad look at all features.

The machine should be carefully supervised by the archeologist, with an effort being made to leave a slight layer of buffer soil above the level of the subsoil surface. The surface of the subsoil or level to be examined is then Schnitted (shovel-cut) using a gang-schnitt technique, with the entire crew lined up in formation, with careful supervision throughout the slicing process to insure a uniform cut of the soil level being examined. The features so revealed by this slicing method are then plotted with transit or alidade, followed by Phase 3 detailed excavation of the features themselves. To insure the most consistent reading of the soil document the schnitted surface should be kept damp by means of mist spray.

Features revealed by this method can be excavated and their contents analyzed, producing more data than would be possible in the same amount of time if the topsoil zone were removed and sifted by hand labor. Artifacts from features have a much greater time-capsule and cultural-context character, and are conducive to a far higher data producing analysis than the analysis of potsherds from the plowed soil zone, regardless of how meticulously that plowed soil zone is excavated. The plowed soil zone has been subjected to a mix-master process of the plow for a hundred years or more on many Southeastern sites, not eliminating the usefulness of the sherds there, but certainly contributing to a characteristically small size in most instances.

Needless to say the approach of Phase 4 would not be used on sites where no plowing has been carried out, and the objects lying in the topsoil zone are virtually in-situ as left by the occupants of the site. Most of our Southeastern bottomlands have been subjected to extensive plowing, and are therefore characterized by the "plowed soil zone".

If a research design is outlined wherein horizontal distribution of plowed soil zone materials is desired to produce data for comparison with underlying features, then of course, no machine stripping such as outlined in Phase 4 should be undertaken. An important point emphasized here is the fact that the nature of the site should be used along with the questions being asked in the basic research design, to determine the method the archeologist will use in examining his site.

If settlement patterns are a vital question of concern to the archeologist and constitute a major element in his research design, then excavation of five foot squares and trenches such as outlined in Phase 2 and Phase 3 will not reveal this data. If more data as to an Indian village is desired then the "possible" edge of a house
and a few associated pits in a 20 by 100 foot long trench excavated in
the manner characterized by Phase 3, then archeologists are going to
have to begin to carry their excavations beyond the first three phases
of the archeological process outlined here.

If the revealing of five Indian houses through their posthole
patterns can be achieved through the use of machinery to strip the
overlying soil mantles from a level where these house patterns can be
observed as described in Phase 4, can we continue to justify the expendi-
ture of the same amount of money to recover a couple of pits and a few
postholes of a "possible" house through concentration on the methods of
Phase 3 only?

Even when the overlying deposit of soil may have stratigraphic, or
superimposed cultural material in a black soil zone two feet thick, are
we going to always concentrate on obtaining this stratigraphic data at
the expense of the settlement pattern data, the feature data that can be
obtained through the procedure of Phase 4? Are there not some instances
where we can now say that from the presence of X, Y, and Z types of pottery
that we can assign a stratigraphic relationship of 1, 2, and 3, with a
temporal range of 1200 to 1500 A.D., and then proceed to answer other
questions? If we cannot, and must forever examine each site as though
it were the first of this type ever seen by the eye of man, and therefore
has to be dissected in all meticulous detail, then we haven't learned
much from the last half century of archeology! If our traditional techniqes
of Phase 1-3 have not produced enough data in certain areas so that sometimes
at least we might not examine a site as though ceramic chronology were the
only question being asked, then it is indeed time we turn to new methods
to recover our data for us. Here we are not suggesting abandoning Phases
1-3, but urging that when the situation calls for the use of Phase 4, that
we not hesitate to apply it.

We are beginning to ask broad questions of our archeological data,
and these cannot be answered if we do not move into the twentieth century
with our methods and begin adapting our approach to our research designs
predicated by the questions we are asking. We are no longer justified
in excavating two seasons on an exploratory effort using Phase 3 procedures
designed strictly around chronology when the data revealed in Phase 2 has
already shown that the major soil zone is characterized by the presence of
a single component! Such an excavation may well emerge at the end of a
second or third season and not yet have the first indication of an architec-
tural feature, or relationships that obtain beyond the microscopic area
examined in the Phase 3 project. Under such a research paradigm even the
perimeter of the occupation area is often a mystery after excavation is
complete. If we insist on stopping at Phase 3 we should not ask questions
that can best be answered through the application of Phase 4 methods.

When Phase 2 has sampled adequately the various areas of the site
and determined the relationships that obtain between the various ceramic
levels and pre-ceramic components, as well as the relative concentration of
After adequate sampling of Phase 2 has been carried out the archeologist may well make the decision to remove the upper, later components in order to reveal what is, in his judgement, a more important body of data in the deeper-lying strata of the site. It is emphasized that this move must be predicted on the completion of Phase 2 with its recovery of control data on upper occupation zones before machine removal of these zones to get at the lower "more important" zones is undertaken. If, however, the upper zones contain relatively rare data in themselves, Phase 3 methods should be used throughout the depth of the stratigraphic cut, regardless of the time required to acquire such data. Destroying valuable data for "more important" data is not justified, and it is only when more data of value will be gained than lost that upper levels can be judged as "expendible". If the most data can be obtained by spending three seasons on a single house site, then this Phase 3 type procedure should be executed, by all means. This decision making process is a role that the archeologist must play if he is to recover the most data. The point emphasized here is that too often we find a slavish allegiance to methods long outmoded for answering the questions we are asking of our archeological data. Hopefully we can begin to design our methods to fit our questions.

The following is a statement made some years ago that contrasts the archeological project that utilizes only Phase 2 and Phase 3, with one that launches into the methods of Phase 4, which:

...method provides for maximum speed, efficiency, and flexibility ...to recover data from sites such as towns, cities, and forts whose features sprawl over many acres through woods and fields, valleys and hills. It is time to look beyond the womb-like comfort of the involvement with dissecting burials, cellar holes and five foot squares if we are to meet the interpretive challenge presented by villages, ceremonial centers, towns, cities and fortified areas.

Too long have we practiced the ritual of the cult of the square, impotently arriving at feeble interpretations of complex cultures in extensive settlements from the meager evidence presented by a few postholes and a stratigraphic sample from a five foot square. We have often failed to adapt out tools to the scope of the project. We have used a spoon on villages and towns as well as burials. We have looked at cultures through keyholes when we should have been opening doors. This does not suggest the abandonment of the five foot square, but it does emphasize that there are times when
it is a totally inadequate tool, like excavating a village with a spoon. Through exploratory trenching to determine the nature and scope of the features, then totally removing large blankets of topsoil from extensive areas of the site, stripping football field size "squares" instead of minuscule five foot areas, we can begin to open a few doors. Once the archeologist is rewarded by the view of the culture revealed through such doors he is thereafter highly unsatisfied by peeping through keyholes (South 1971:48).

SUMMARY

The archeologist should go into the field with a theoretical research design relating to questions he is asking regarding the examination of data relating to past cultures, the remains of which he expects to examine. However, he should be prepared to fit his research design to the dictates of the site as the data the site produces is revealed through archeology.

The phases outlined here are the means whereby this accommodation of theoretical research design to the archeological realities of the site is achieved.

EXCAVATION PHASES

**Phase 1** The sites cannot be studied until they are located. This is the goal of Phase 1, Site Survey.

**Phase 2** The nature of the sites as to their underlying potential, stratigraphically and horizontally, cannot be known until exploratory testing is carried out in Phase 2, Exploratory Excavation.

**Phase 3** Detailed dissection of important areas of the site for stratigraphic control and horizontal patterning cannot be accomplished without the microscopic approach of Phase 3, Detailed Excavation.

**Phase 4** Questions as to settlement patterns, relationships between structures, types of structures, use areas of sites such as ball grounds, burial areas, dwelling areas, ceremonial areas, relationships between classes of features, etc., can best be answered by the methods outlined as Phase 4. If we know that a village site was spread out along a bottomland for a mile, would not the 100 yard square
approach of Phase 4 be a better sampling method for studying the village than the microscopic view afforded by Phases 2 and 3, the traditional approach to the problem?

Phases 5 through 8 are not discussed in this report, constituting as they do, the laboratory analysis, synthesis, writing of the report, and the explanatory exhibits developed on some sites. These four phases are as followed:

EXPLICATION PHASES

5. Analysis of the Archeological Data
6. Synthesis and Interpretation of the Data
7. Explanation of the Cultural Process Reflected by the Data
8. Development of Explanatory Exhibits on the Archeological Site

The extent to which the archeological analysis can reveal the patterns of culture represented by the archeological data; the extent to which the analysis results in cultural synthesis and interpretation; and the extent to which explanation of cultural process represented by the data can be undertaken all depends on the approach of the archeologist in the field. If he stops his examination at the end of Phase 1, the amount of data is limited to surface finds, and his conclusions must be blanketed with speculation. If he stops his excavation at the end of Phase 2, his results can provide statements as to chronology and aerial distribution, but he can say little beyond. If he stops his examination at the level of Phase 3 he may be able to make a tentative statement about one house or structure, or part of a house or structure, and he may be able to make a more detailed statement as to chronology and stratigraphy, and on deep deposited Archaic Period sites dissection of the most microscopic type reveals abundant data on occasion, as well as detailed dissection of individual houses, mounds, etc., but such excavations do not usually provide broad, horizontally distributed data on settlement patterns, groups of structures, and other data depending on a broad scope view for the most effective interpretation. It is in this instance that Phase 4 is most effective and productive of abundant data.

There are sites that cannot benefit from the use of Phase 4 methods, such as sites relatively undisturbed, and masonry sites, where machines would do severe damage to the archeological ruins. Again, the judgment of the archeologist must be brought to play to keep machines away from such sites.

Phase 8 brings a whole new concept into the discussion, with the use of explanatory exhibits on the site, such as palisades placed in the original ditches discovered by the archeologist, stabilization of ruins so that they can be exhibited and yet can withstand the rigors of being exposed to the elements, rebuilding of parapets of earth beside the fortification ditches discovered by the archeologist, are all examples of such
exploratory exhibits. Sites such as Ocmulgee National Monument in Georgia, Town Creek Indian Mound, and Brunswick Town State Historic Site in North Carolina, and Jamestown in Virginia, are examples of on-site explanatory exhibits of archeologically revealed features, but this phase of the archeological process is not discussed in this paper.

This paper has concentrated on the first four phases in the archeological process, with emphasis on Phase 4, Excavation of the One-Hundred-Yard Square. It has urged archeologists to add to the traditional three phases, this most important fourth phase, with the hope that it can be employed more frequently in the recovery of archeological data, with the view to bringing our methods in closer harmony with the questions we are asking in our research designs.

Institute of Archeology & Anthropology
University of South Carolina
August 19, 1973

BIBLIOGRAPHY

SOUTH, STANLEY