

An Americanist's Archaeological Field Method and Documentation¹

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Abstract

Field methods in archaeology are always changing and incorporating new techniques. An approach of the Center for American Archaeology (CAA) is presented here to gain new ideas in conducting archaeological excavation and documentation. Based on this experience, I recommend the adoption into the Philippine archaeology system new documentation as well as material processing approaches.

Introduction

My experience in the American archaeological field method is primarily based on the Center for American Archaeology approach used at the University of New Mexico (UNM) Bioarchaeology field school under Jane Buikstra, PhD. For this paper I also incorporate my training on geoarchaeology.

The Philippine field method and documentation was first standardized by Jesus Peralta in his *Field Manual in Archaeology* (1978). Although there have been a number of changes in the field methods since then, these have not been incorporated in the manual. There is then a need to review the manual and incorporate new approaches and techniques. With the economic difficulty and funding problems for archaeological research in our country, there is also a need to maximize the retrieval of archaeological data while minimizing the cost. We need to design a cost effective documentation process.

¹ Editor's note: This paper was read during the Field Methods Workshop, held at the University of the Philippines-Archaeological Studies Program last March 12, 2002. The workshop's objective was to prepare students for the March-April 2002 Summer Fieldschool in Porac, Pampanga. The Geographical Information System (GIS) was used as part of the excavation procedure.

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Excavation Techniques

The excavation in Mound House site in Southern Illinois, USA, used a number of techniques in removing dirt. For the midden area, the overburden was stripped using a backhoe. The grid squares were then laid out. The excavation used 10 cm arbitrary layer. Before any dirt was removed, the excavation square was measured and documented using the Square Level Form. The use of this form will be discussed later. At the beginning of the digging, ten liters of dirt were collected at the northeast corner of the 2 x 2 m square. The collection of the dirt was in chunks to minimize the possible destruction of botanical remains. The color, texture and compactness of the dirt were recorded. This was done with every layer, which in effect created a coring data.

The primary tool for excavation was a shovel. It was sharpened using a two-inch file. The excavator has to be sensitive to possible cultural remains that may be exposed. As a rule, 50-cent size materials were piece plotted in the graph part of the form. After plotting, the material was recovered and placed in a paper envelope (key envelope) or, if brittle, placed in a small box, wherein appropriate provenience was labeled. All recovered materials were placed in cotton debris bags and properly tagged per excavation unit.

The dirt from the square was either directly tossed into the screening table or put in a bucket. The screening table was divided into two parts: the 4 mm mesh screen and wooden planks. Everything that did not sieve through the mesh was collected and placed in a cotton bag and properly tagged.

Before reaching the 10 cm depth, final scraping was done in the square using a sharp trowel. No brush was used and only a cutting motion using a trowel was allowed. In moist clayish sediments, brushing will only smudge the matrix making identification of features difficult.

Both print and slide film photographs were taken of the square. The square was then assessed for possible features through color and texture differences. If a feature was identified this was given an area code assignment. The matrix was designated as Area A and the feature, Area B. These were clearly marked in the square plan drawing.

The excavation of the next level was then started using the same procedure. The feature (or Area B) was then pedestaled and sectioned. It was treated as a different unit within the square. Materials, as well as sediment sample from the feature, were taken separately.

The protection of the sediment matrix is important to identify possible features. Squares not being excavated were covered with black plastic material to avoid direct contact with the sun. For squares being excavated, the matrix (not the excavator) was protected by canvass or plastic roofing. Protecting the matrix from direct sunlight was intended to preserve the moisture of the sediment.

At the end of the day, the team checked on the different specimens and sediment bags and their corresponding tags. The bags were then inventoried in a form for materials collected for the day.

One of the loosely used terms in Philippine archaeology is "soil." Dincauze (2000: 261) defines soil as:

chemically and mechanically altered sediments. The formation of soil requires above all else time; therefore, a soil represents a period in which deposition occurred only slowly if at all—a depositional hiatus and a time of relative stability. A surface that is rapidly building or rapidly eroding will not support the formation of a soil.

Sediments are a collection of mineral particles that have been weathered from parent source and redeposited. It is then more appropriate to use the term sediments if we are not sure if the deposit is a "soil." As Schiffer (1987: 200) said, "when there is any doubt, archaeological dirt should be called sediments."

Documentation

One thing that made an impression on me in my experience with the CAA approach is the form that they were using in documenting the excavations. These forms are not unique and parallel forms are being used by the National Museum of the Philippines. The difference is the integration of the different data into one form, particularly the square level form.

The National Museum system uses a number of forms during excavation. The most common are the Grid Location form (Form No. 4A) (Appendix A), Archaeological Features (Form No. 6A) (Appendix B), and Archaeological Inventory (Form No. 5A) (Appendix C). The interpretations of the square are logged in the square supervisor's logbook or field notebook.

The square level form integrates a number of data within one form. These include an inventory of debris bags, sediment sample, area designations, datum information, key symbols, a grid map with wall and depth measurements, excavation

procedures, description of the sediments and a number of interpretative questions. I can see a number of benefits in using this form. Since most of the information needed in excavating a unit level is integrated using one form, access to the data is easier. It also eliminates the square logbook and all the square level forms can be stored in a vertical file.

Material Processing

The processing of material used by CAA is based on the long history of conducting archaeology in southern Illinois. The system employs classifying materials into Type Collection (TC) and non-Type Collection. Type collection artifacts are materials that can provide more diagnostic information. Examples of these are as follows:

- Lithic TC – complete flakes with or without retouching, blades, adze, ground tools;
- Ceramic TC – rim sherd, decorated sherds, undecorated sherds with residues or botanical imprints;
- Faunal TC – any piece of worked bone, antler or shell;
- Floral TC – worked wooden object, textile, cordage.

Non-TC materials are categorized as debris. The documentation of TC and non-TC will differ. Although both TC and non-TC will be counted and weighed per unit of recovery, only the TC materials will be given individual accession code.

The current practice in the Philippines warrants that each individual material, regardless of size and condition, be given accession codes. In sites rich in cultural materials, more time and large amounts of funds are needed just to conduct the accessioning of the materials.

If we adopt the TC approach, materials that will not provide diagnostic information or new inference will only be counted, weighed and given one number per excavation unit. For example, earthenware pottery without design, which is a non-diagnostic part and redundant will be considered non-TC. In classifying TC and non-TC materials, caution should be made so as not to miss probable diagnostic element/s.

The TC and non-TC materials can also be bagged or boxed separately for storage. This will allow easy retrieval of TC materials for further analysis.

The Use of GPS-GIS

A number of new technologies and computer software are now available for use in archaeology, specifically for mapping purposes. Global Positioning System (GPS) is a satellite-based, worldwide, all-weather radio navigation system. GPS could provide the coordinates of a site. With the removal of selective availability (SA built-in error) two years ago, the precision of the GPS reading has increased. There are also surveyor grade GPS like the Trimble Geoexplorer 3 that has a number of features to enhance data collection. With a docking module or PC interconnection, one can upload data gathered from the field into the computer.

Geographical Information System (GIS) is a database information system consisting of observation on spatially distributed feature. The data gathered are definable in space as points, lines and areas, which can be manipulated to retrieve data and analysis. A number of software such as Arcview, Arcinfo, Cartalynx and Mapinfo are available in the market. These modern technologies are applicable to archaeological work.

The use of GPS and GIS in archaeology has been known in the western world. Its application in the Philippines is still to be fully realized. We have used GPS as coordinate locator for the sites we were surveying. It has not been used to spatially document artifacts exposed in an archaeological digging. I still have to see someone use a GIS integrated in an excavation procedure in the Philippines. For the Porac Field School, we will use the GPS-GIS technology in the actual dig.

Discussion and Recommendation

Stating Mortimer Wheeler's famous quote: "there is no right way to dig but there are many wrong ways" (Wheeler 1954: 1). The Philippine field method and documentation is one of the best systems in Asia and the World. As any field method it is also constantly developing and incorporating new techniques. This is the reason why we need to review the current system and if possible incorporate new techniques and approaches.

Based on my experience with the CAA approach, I recommend the incorporation of the following methods:

- 1) being sensitive to the archaeological record through interpretation of the archaeological sediments, including the protection of the matrix from

exposure to the sun and the wind, final scraping and use of sediment/soil horizons;

- 2) improving our documentation process through the adoption of the square/feature level form and square/feature summary form;
- 3) adapting the Type Collection approach in the accessioning procedure to address the need for cost-effective documentation; and
- 4) using new technology that could enhance the documentation such as GPS-GIS or even using remote sensing equipment such as Ground Penetrating Radar (GPR) and magnetometers.

Hopefully, these recommendations will stimulate discussion on current field methods among practicing archaeologists. I believe that, in the end, it is the individual archaeologist who will decide his/her method based on the particular site condition. Setting a protocol, however, will definitely help the archaeology community protect sites from unsound approaches.

Appendix B
Archaeology Form No. 6A
Archaeology Division, National Museum

Archaeology Form No. 6A
Archaeology Division
National Museum

Area Code _____
Museum Site Code _____

ARCHAEOLOGICAL FEATURES

Recorded by: _____ Date _____

Excavator(s): _____

1. Name of Site: _____

2. Square Number: _____

3. Coordinates: N - S _____
E - W _____

4. Depth from Datum _____

5. Depth from Surface _____

6. Description: _____

7. Associated Objects and Features: _____

8. Dimension: _____

9. Stratigraphic Notes: _____

10. Remarks: _____

11. References:

A. Grid Location From - Sheet No.: _____

B. Grid Location Map _____

C. Photographs _____

D. Illustrations _____

Appendix C
Archaeology Form No. 5A
Archaeology Division, National Museum

Archaeology Form No. 5A
Archaeology Division
National Museum

Sheet No.
Date

ARCHAEOLOGY SPECIMEN INVENTORY RECORD

Site _____ Collector _____

Accession No.	Description of Artifact	LOCATION			Association and Remarks	No. of Pieces
		Square	Coordinates in M.	Depth in M.		
			N-S : E-W	DP : S		

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