

8-1974

Evaluation of Analysis Situations Relative to the Archaeological Data Bank

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

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



Part of the [Anthropology Commons](#)

Publication Info

Published in *The Conference on Historic Site Archaeology Papers 1972*, Volume 7, 1974, pages 146-150.
<http://www.cas.sc.edu/sciaa/>

© 1974 by The South Carolina Institute of Archaeology and Anthropology

This Article is brought to you by the South Carolina Institute of Archaeology and Anthropology 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 digres@mailbox.sc.edu.

EVALUATION OF ANALYSIS SITUATIONS RELATIVE TO THE ARCHEOLOGICAL DATA BANK

Stanley South

Any analysis of archeological materials must be oriented to a statement clearly defining the provenience of the data. Analysis of data from the plowed soil zone representing perhaps hundreds of years of occupation has a different analytical weight than data from a pit representing one moment of time.

If we have an archeological site known from documents to have been occupied from 1720 to 1730, then our chronological period is established by documentation until archeology is able to confirm, deny, or elaborate on this document. When we excavate the site and find that none of the artifact classes about which we have chronological information indicate that the site was occupied at a time other than the decade indicated by the documents, then we have confirmed the historical documentation. The entire group of associated artifacts then have a feed-back value into our data bank of knowledge. Thus we use our knowledge of certain classes of artifacts, such as ceramics, pipestems, and wine bottles as a check against the known temporal period, and if this is found to agree, then we have reason to assign the same temporal bracket to the entire group of artifact classes recovered from this provenience.

The same situation prevails when we have the same documentary control data, but upon excavation we find from the artifact analysis that there is obviously an occupation at a later time than indicated by the documents. Since we have tight stratigraphic and/or feature provenience control we are able to separate an earlier component from a later component, and we find that the earlier archeologically separated component has no class of artifacts dating later than our documented period of occupation. We then have reason to relate this group of archeologically associated artifact classes with our documented time bracket. The other, later artifact classes are then assigned a later chronological position both by virtue of their higher stratigraphic or provenience separation and by what knowledge we have in our data bank regarding the temporal position of these artifacts.

If, however, our excavation reveals a *mixed* deposit with no significant separation of materials by provenience, and artifacts are present from a period later than the documented time period, then we are forced by the archeological data to deal, in our analysis, with the *entire temporal range* represented by the artifact classes.

This basic conceptual premise can be illustrated in a "Data Flow Diagram for Evaluation of Analysis Situations Relative to the Data Bank of Archeological Knowledge" (Fig. 1). The short time span represented by data from a narrow documented occupation period and/or a tightly provenienced archeological data results in a flow of associated data as a contextual unit toward the data bank of archeological knowledge. This data bank can be seen as a piggy bank into which information coins are placed, such as: 1) the chronological association of artifact classes as a time capsule, 2) the associative-functional, artifact-feature

relationships, 3) the spatial associations, 4) meaningfully provenienced horizontal and stratigraphic data in association with site features, architecture, etc., 5) historical documentation, and 6) the associated data reflecting cultural patterning and process as a contextual unit. Such analysis situations produce more data than required from the data bank, and therefore have *Primary Research Priority*.

When the analysis unit represents a long occupation period and/or no provenience control, the result is that there is a data flow of information coins from the data bank toward the archeological components being analyzed. Since there is a long occupation period involved and no provenience control, virtually all information such as function, comparative data, chronology, spatial relationships, associations, documentation, typology and cultural patterning and process must come from our data bank of knowledge toward the analysis and interpretation of the analysis unit. Because of this requirement for more data than it produces for the data bank, this analysis situation has a *Secondary Research Priority*.

There is one situation where two occupations can be suggested for an analysis situation representing a long period of time, and this is when the sequence of artifact types is broken by the absence of a type or types that should be present if the occupation had been a continuous one. Such a situation still requires more data than it produces for the data bank, and is still a secondary research priority situation, but it does have a limited feed-back value into the data bank somewhat higher than when negative data is not present.

An example of the time when we can validly split a long time span ceramic collection is seen where white salt-glazed stoneware and other mid-eighteenth century ceramic types are present, as well as pearlware of the 1780's and 1790's, but creamware characteristic of the 1770's is virtually absent. In the fact of such negative data, and in the absence of other data to the contrary, we might validly suggest two occupation periods represented by the ceramic collection, separated by a period of non-occupation in the 1770's. This does *not* allow us, however, to suggest that the bone or any other classes of artifacts can be similarly divided into groups reflective of two occupation periods.

From this evaluation of analysis situations it can be seen as axiomatic that the value of an archeological analysis unit is in direct proportion to the degree to which there is a data flow from the analysis unit to the data bank for use in interpreting the archeological record. A corollary to this is that in a primary or a secondary research situation the value of the data to future research is in direct relation to the competence of the archeologist in obtaining significant provenience analysis, interpretation, and explanation of the data in relation to the hypotheses being examined in the research design.

In view of the above it becomes apparent for the purpose of defining the occupation period represented by the artifact classes in an analysis unit, we cannot validly select the artifact types belonging to the documented time period as indicated by the records, and ignore or separate those that date later. In such an instance, the archeological record has demonstrated the incompleteness of the written record, and we should

HISTORICAL ARCHAEOLOGY CONTRIBUTED PAPERS - South

then deal with that occupation record. If we concern ourselves with listing artifacts used at particular time periods, and divide our collection on this basis, we need not have done archeology to carry out what is primarily an exercise in the temporal arrangement of artifact types!

The archeologist faced with the analysis of a poorly provenienced and/or long-time-span group of artifact classes is sometimes seen to resort to what he may term "functional analysis" to avoid the mere exercise of temporal arrangement of artifact types. Limited information can be extracted from such analysis, such as the conclusion that plates were used to eat from, mugs to drink from, jars to store liquids, nails to hold wooden members together, shovels to dig with, lamps to provide light, drawer-pulls to open drawers in furniture, and other equally interesting conclusions. There is certainly nothing wrong with functional analysis, but again it is evident that the most data will emerge from our analysis situations when there is a narrow documented occupation period and/or tightly provenienced archeological data. In such primary research priority analysis situations there is more data flow toward the data bank than from it, for functional or other analysis.

If the archeologist finds himself involved with a secondary priority analysis situation where his level of operation is on that of the collector of relics or an antique dealer, then he may well ask whether his time might not be better spent in other pursuits. If in arriving at functional, socio-economic, status, and other cultural interpretations from archeological data the archeologist finds himself leaning on the documents as a crutch, and using archeological data primarily as padding to the historical record, then he is bastardizing the archeological profession. He should use documentary data, but the foundation of his interpretation should be archeological when his historical-temporal, historical-social, historical-status, historical-function explications emerge from the archeological process. There should be a direct and positive nexus between the archeology and the documents in interpreting the cultural process represented by the patterning seen in the archeological record. If there is not this connection, then we are frosting history or writing fiction as a veneer over the data with which we began.

The archeological process requires a systematic, scientific, carefully cited presentation where any conclusion follows from documented, demonstrated patterning of data. An alternative approach is characterized by terms such as "we might expect", or "it can be assumed", or "it stands to reason" that many wine bottles equals a tavern; porcelain equals a rich man; coarse earthenware equals a poor man; and from this "data" we leap to describing the life style of the colonial period in our "cultural explanation". Such an approach does not produce coins of information for depositing in our data bank of knowledge for use in the analysis and interpretation of archeological data.

Our comments here have been designed to emphasize the importance of data flow from archeological sites to the data bank of our knowledge. If our research designs are such that the questions we are asking of

HISTORICAL ARCHAEOLOGY CONTRIBUTED PAPERS - South

our sites can be answered primarily through a data flow from our existing knowledge to the sites we are excavating, then perhaps we should re-examine our questions and our research designs. If we find that we are excavating site, after site, after site with our reports reflecting merely a descriptive statement of the architecture, the profiles, the features, and the artifacts as interpreted through existing data bank knowledge, then perhaps we should begin to turn our attention to those research situations having primary research priority. Kiln sites, stratified sites, short time span sites, specialized use sites, such as those used by silversmiths, blacksmiths, goldsmiths, and other craftsmen as well as sites representative of those areas where architectural or artifact chronology data is lacking are primary research priority sites. This is a direction easier pointed out than carried out since our archeological financing is most often not based on these research considerations. However, by constructing our research designs and our methods around an emphasis on data flow *from research situations to data bank*, we hopefully can increase the amount of *usable* archeological data emerging from our excavations.

Data Flow Diagram For Evaluation of Analysis Situations Relative to the Data Bank of Archeological Knowledge

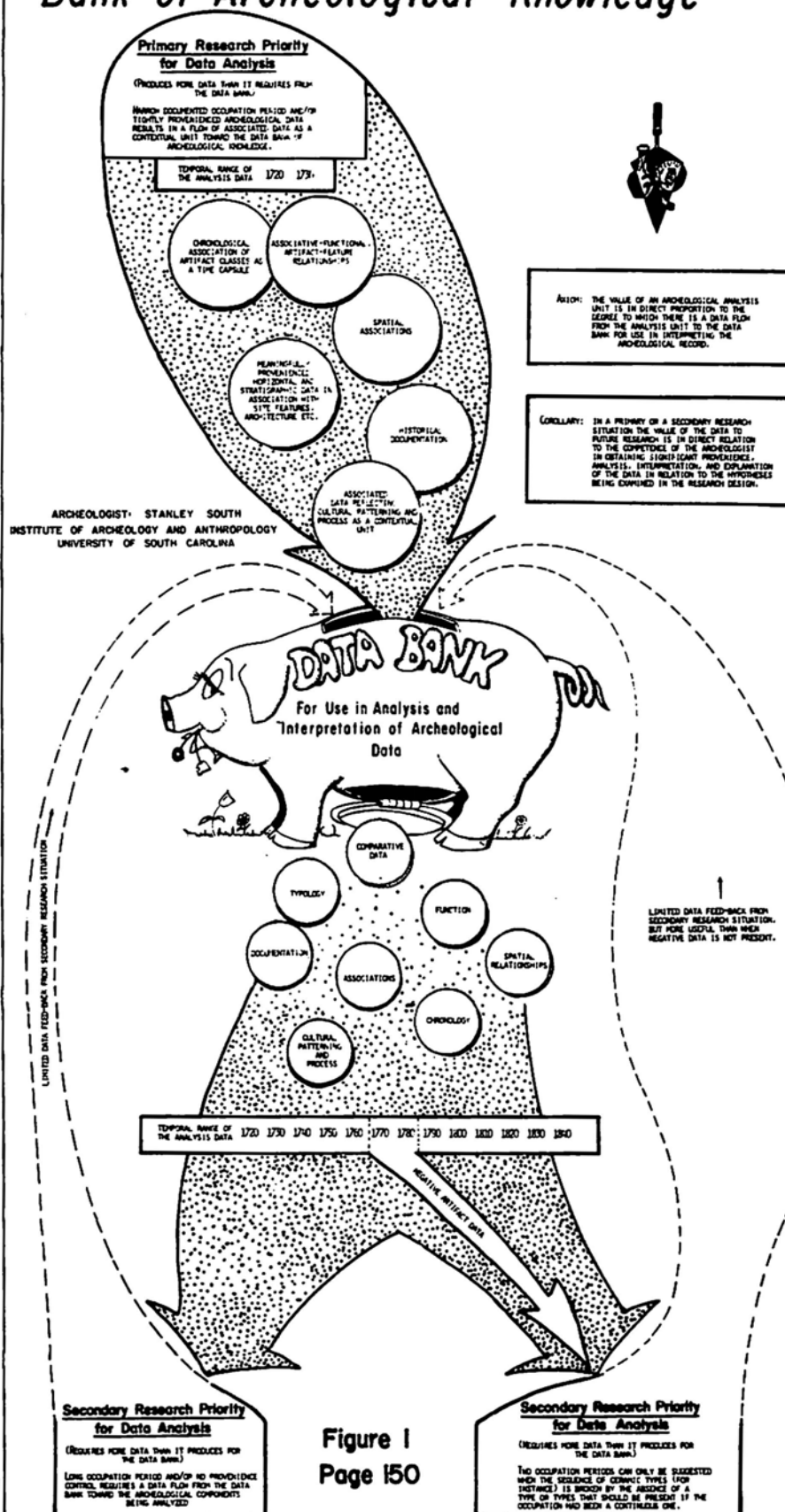


Figure 1
Page 150