Archaeology Field Methods and Information Management

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Field Exercise

1. This exercise will begin at the site of an ongoing archaeological excavation and end with a lab exercise that serves to address questions posed in the field setting. Please be prepared to consider the importance of basic field observations in the formulation of research problems and hypotheses, and the use of basic pedestrian survey methods, mapping, site and unit selection and layout, artifact sampling, and excavation procedures in archaeology. In responding to the lab questions, you will need to have some sense of the basic historical periods for the California Central Coast, which are as follows:

- Spanish Mission & Presidio: AD 1770-1821
- Mexican Republican: AD 1822-1848
- Early Euro-American: AD 1849-1870
- Victorian Revivalist: AD 1870-1890
- Vernacular American: AD 1890-1940
- Modern American: AD 1940-Present

You will consider the aforementioned periods as they relate to the artifact types or architectural features examined in conjunction with your instructor. In considering those artifacts examined in the field or lab, you should be prepared to discuss the probable functional and contextual or relational significance of particular "types" of artifacts as they relate to what they mean for interpreting the archaeological record (e.g., elaborate Flo Blue earthenware shards as opposed to crude utilitarian cooking wares may serve to distinguish a dining area from a hearth or kitchen area).

2. Your instructor will provide a field-based overview and demonstration of any number of the following methods, procedures, and approaches in archaeology as time permits:

(a) The use of basic field observations in the formulation of research problems and hypotheses.
(b) Basic pedestrian survey methods, including transect survey and sampling procedures and their utility in site selection and analysis.
(c) Introductory use of the Brunton compass for mapping a site, establishing a site datum, and determining how to establish an alphanumerically based grid for field mapping.
(d) Criteria and sampling methods (random & non-random) for site, unit, and feature selection and layout.
(e) Basic geometry and mathematics for unit layout and measurement.
(f) The importance of context, provenience, and documentation in artifact sampling.
(g) Excavation procedures as these pertain to unit levels, the X, Y, & Z triangulation of artifacts recovered in situ, unit objectives, identifying and recording stratigraphy, and the mapping of artifacts.
(h) Munsell soils and pH testing and their respective significance in reading the archaeological record.
(i) Sifting of excavated soils and the identification and retrieval of "diagnostic" specimens.
(j) Specimens' collection, procedures for field catalog or documentation, and subsequent analysis.

Lab Questions

1. How do field observations and hypothesis testing go hand in hand with the development of a research program or protocol?

2. Why is it important to establish a "site datum" from the outset of any archaeological undertaking? And, how does the accurate citing of such a point of reference hold significance for the question of specimens provenience and site context?

3. How might you use the Brunton compass to "triangulate" the position of a specific artifact or feature on a relatively large archaeological site? Similarly, how might you use said compass to map an early historic settlement and its various buildings?

4. Using the example of a series of projected 1 x 1 meter, 1 x 2 meter, and 2 x 2 meter excavation units, please use the Pythagorean theorem to calculate the diagonal measure for each of the three noted unit measures. First, what is the formula needed, and second, why is it important to use said formula in order to prepare the "layout" of a specific unit or mapped area?

5. What is the purpose of the Munsell Soils book, and how does said purpose serve to enhance the lab and field objectives of the archaeologist and or geologist? Similarly, how might a pH meter and pH readings from an archaeological site serve the objectives of artifact conservation and site interpretation?

6. What are "diagnostic" artifacts or specimens and how do they serve archaeologists in the interpretation of past human behaviors? How do such artifacts enhance the interpretation of architectural and related cultural features?