Archaeology: From Map to Museum

LD10: Identifying Stone Tool Types

Introduction: Lithics, or stone tools, analysis remains a significant analytical and interpretive dimension of lab and field archaeology. The ability to identify stone tool types, or typology, provides a critical means by which to interpret the cultural affiliation and chronology of archaeological sites and specimens. Since the dawn of archaeology, archaeologists have used a technique known as seriation to type and or organize stone tools in a developmental or evolutionary sequence. Seriation entails ordering individual specimens in terms of basic forms and features that indicate emerging patterns of complexity and sophistication in tool type design over time. In other words, by taking the most basic, or "primitive," types to constitute the earliest tools in a region, later tools are then organized in ascending order of sophistication or complexity. Your assignment today will be to employ basic seriation and typology techniques to create a hypothetical typology of an actual assemblage of stone tools from the High Plains of Nebraska and Colorado.

Directions: Using the subset of an assemblage of stone tools from Nebraska and Colorado, you are to examine, interpret, and type those stone tools provided your group. Please be sure that all stone tools are returned to their original numbered zip lock bags after use. See "Stone Tools" database under "Site Catalog Tool" drop-down list at http://wireless_archaeology.csumb.edu for data entry portion of this exercise. You may require a User Name and Password to access the Wireless Site Catalog Tool.

Part 1: Interpreting Functional Attributes

1.   Please gather with your regularly assigned team or group, and await the distribution of a selection of approximately 5 to 10 individual stone tools distributed by your professor.
2.   Once you receive your respective group's subset of stone tools, please record the bag or catalog number on a sheet of paper along with the names of all members of your group. Forward the list to your professor.
3.   Proceed to discuss among yourselves the possible interpretation of how specific stone tool types may have been used, and why you believe certain functions might be most characteristic of particular types.
4.   Having established interpretations of the functions of particular tools, please assign a label or type name for the tool (e.g., projectile point, scraper, knife, blade, hand axe, etc.).
5.   Be prepared to defend your interpretations as a group based on those specific details or attributes of the artifact that you believe serve as diagnostic attributes or signatures of prior use function.

Part 2: Establishing a Typology via Seriation

1.   Having identified your tool types, please examine that collection of projectile points gathered by your professor.
2.   Having perused the collection, you and your group are to order the collection in terms of a "chronology" of types based on a simple seriation ranging from what you construe to constitute the most basic or "primitive" forms through to the most sophisticated types based on inherent styles and forms.
3.   Be prepared to defend you type sequence or seriation based on that logic, or rationale, used to infer the degree of sophistication of each specimen so interpreted.
4.   If time permits, please prepare a frequency seriation chart or histogram of specific types and quantities noted from the collections. See example of such a histogram provided by your professor, or go to http://www.mnsu.edu/emuseum/archaeology/dating/dat_seria.html.