

# The Importance of Context

## Documentation is the Key to Successful Analysis

by Stuart Fiedel

**T**he Folsom finds of 1926-7 represented a turning point in Paleoindian studies because of the undeniably close, well-documented association of finely made spear points with the bones of an extinct form of giant bison. Even though radiocarbon dating was not yet available, the bison clearly dated to the late Pleistocene (Ice Age), and the points lying so close to the bones showed that humans had hunted and butchered these animals. A human presence at the end of the Ice Age was thus proven.

Yet in other cases, the associations of artifacts, dates, and geologic strata appeared tight, but their meaning eventually proved ambiguous. At the Double Adobe site in Arizona, for example, milling stones and other artifacts were found stratified beneath a layer that contained mammoth bones. Charcoal from this culture-bearing layer dated between 9,300 and 8,000 radiocarbon years ago (some 10,495-8,800 calendar years BP). For a while, this site was thought to demonstrate that Ice Age megafauna had survived to a late date in the Southwest. Re-analysis, however, showed that both the mammoth bones and the milling stones had been disturbed and redeposited from elsewhere; the association of the cultural material and the charcoal also proved spurious. That illustrates the importance of understanding "emplacement mechanisms" and verifying the context of a find.

As any novice archaeologist learns, an artifact without provenience (i.e., context) has lost most of its scientific value. If we don't know where it comes from, we may never know how old it is, what its cultural affiliations are, or what its function was.

**A**rchaeological excavation is the controlled, systematic destruction of a site. After the deposits have been removed, the original relationships of artifacts and features will never be physically restored. Other researchers will be able to study the site only as an abstract entity, represented by maps, photographs, and detailed verbal and numerical descriptions. It is, therefore, the field archaeologist's primary

responsibility to record the precise horizontal and vertical positions of all significant objects (including stone artifacts, identifiable bones, etc.).

To facilitate this mapping, an arbitrary grid is laid out over the excavation area. It is common practice to lump together ubiquitous small items, such as tiny lithic (stone) flakes, within the arbitrary grid units, which are typically one-meter (3.3-foot) squares. More informative and/or rare finds, such as points, are often piece-plotted more exactly, with a precision of a few centimeters. These data will be needed both for stratigraphic analyses and for behavioral reconstruction, such as refitting the broken

base of a projectile point to a tip recovered from a distant part of the campsite.

Although well-executed line drawings of finds *in situ* may provide more details than photographs, the latter have been a traditional element of site recording since the early days of archaeology. On some digs I've worked on, Polaroid photos were taken of significant finds, just in case the 35-mm photos didn't come out well. Perhaps we overvalue photo-

graphic evidence because of our gut feeling that "the camera doesn't lie," while we sense that drawings may be subtly influenced by subjective judgments.

Excavations are controlled by grids, typically squares one meter across. This team is working at the Kimmswick Clovis site in Missouri.

**N**o amount of *post facto* computerized number crunching can compensate for poorly recorded field data. As the saying goes: "Garbage in, garbage out." Or, as more delicately stated by Philip Barker in 1977, "No statistical analysis ... can be better than the quality of its raw data, the true reflection of the nature and distribution of the samples used in the analysis. ... Statistical analysis of material derived from partial and inadequately recorded excavations will inevitably be misleading though unprovably so." □

STUART FIEDEL is Principal Archaeologist with John Milner Associates in Alexandria, Virginia.



COURTESY OF RUSSELL GRAMAM, DENVER MUSEUM OF NATURAL HISTORY