

Scuola Normale Superiore and Getty AHIP
SN/G: Report on Data Processing Projects in Art

Original Title: Architectural Stratigraphic and Typological
Recording in Archaeology
SN/G Record N.: 100
Institution(s): International Institute for Mesopotamian Area
Studies, Los Angeles (CA), USA
Project Director(s): Giorgio Buccellati
Contact Person(s): Giorgio Buccellati
6760 Dume Drive
90265 Malibu, CA
USA
Tel.: 1-(213)-457-7301
Associated Institution(s): University of California, Los Angeles, Los
Angeles (CA), USA - University of
California
Funding Institution(s): Ambassador International Cultural
Foundation, Los Angeles (CA), USA
Abstract: Based on a coding system developed especially
for this project, data from archaeological
excavations are recorded with a view toward
(a) providing direct feedback during the
excavation itself thereby contributing to
excavation strategy, and (b) establishing a
'global record' whereby complete
documentation of retrieved material is made
available in machine-readable format.
Type of Project: Research databases; excavation management
Subject Indexing Terms: 3rd-2nd millenium BC; Syria; Mesopotamia;
archaeological finds; sites
Authorities/Standards: Subject authorities: Own system .
Thesauri/controlled vocabularies: Own system
Primary Language(s): English; French
Features: Publication automated; Graphics; Thesaurus
construction
Hardware: Radio Shack, Tandy 100
Operating System(s): MS-DOS
Software: Custom software
Reflex (Borland International Inc).
R:base series 5000 (MICRORIM)
Pro-design

- Status: Implemented; Project ongoing; Data available on diskette from December 87, at nominal cost.
- Bibliography: BUCCELLATI, Giorgio; KELLY-BUCCELLATI, Marilyn. **IIMAS Encoding Manual (Non-digital)**, *Aids and Research Tools in Ancient Near Eastern Studies II* (1983). In English.
- BUCCELLATI, Giorgio; ROUALT, Olivier. **Digital Plotting of Archaeological Floor Plans**, *Computer Aided Research in Near Eastern Studies I/1* (1983). In English.
- BUCCELLATI, Giorgio. **Archaeological Encoding Manual**, *Cybernetica Mesopotamica*. Forthcoming. In English.
- BUCCELLATI, Giorgio; KELLY-BUCCELLATI, Marilyn. **Mozan Global Record**, *Cybernetica Mesopotamica* (forthcoming). In English.

BriefDescription :

The project has two major goals which pertain respectively (1) to the quality of the recording process during excavations, and (2) to the public availability of the full record after the excavations. Both dimensions of the project have introduced a profound change in the conceptual way in which archaeological excavations can be carried out, making of electronic data processing not only a welcome tool for greater convenience but also more importantly a catalyst for the revision of established theoretical presuppositions.

While computers have been used for some time already in the typological and quantitative analysis of artifacts, much less attention has been given to the moment of excavation itself. This is due to some extent to the fact that there is hardly any standardization in the system of recording, which is largely viewed as a matter of loose note taking. If so, any type of word, as opposed to data, processing is sufficient, and to this extent computers can obviously add great convenience, but no real intellectual innovation. Our project has developed an explicit and fully articulated coding system for the architectural and stratigraphic dimension of the excavation (which builds on an earlier system published as IIMAS Encoding Manual). With it, both an analytical and a graphic record are maintained, which are accessible through programs written specifically for our purposes.

A particularity of the project has to do with the hardware used: all data entry can be done on the lapsize Tandy 100, a very small and inexpensive battery-operated unit, which drives both a dot matrix printer and an inexpensive plotter. Given the low price of this configuration, we can afford to have several working at the same time in the field, providing not only for ease of operation (no lines

in front of the computer and no delays because of power problems) but also for a safeguard against equipment failure. After producing a hard copy and a disk version of the daily input, data are transferred (in principle on a daily basis) to an MS-DOS system, where the larger archive is developed and maintained. The major conceptual innovation that has derived from this use of computers in the field has been the systematic definition of stratigraphic categories, and the in-depth availability of the full record for strategy reconsiderations at any time during the excavation.

The second major innovation made possible by the project is the establishment of a 'global record', i.e. of the total record of the excavation which can be published as such in the form of magnetic disk. While our own programs allow a utilization of the data (both analytical and graphic), all files are provided in ASCII format easily accessible to other programs for further manipulation by scholars. This will make available primary data, not otherwise published or accessible, on a scope never before attempted in archaeology.