Vital Preservation of Great Information: The Archaeology Data Service and Digital Archiving in Archaeology

CAA 97   Alicia Wise

Papers in the following section of these CAA Proceedings were originally presented in a session entitled "The Archaeology Data Service and Digital Archiving in Archaeology". The purpose of this session was to bring together international contributions on the three themes that run through preservation of computer resources in archaeology:

1. great resources that need to be preserved

2. documentation standards

3. digital archiving

Harrison Eiteljorg sets the scene in *"Archiving Archaeological Data"* where he argues that archiving is a professional responsibility we each have to future archaeologists. His paper provides a good introduction to the concept of digital data migration, with excellent examples ranging from the migration of deeply-structured databases to AutoCAD files. One important point he makes is that even in applications where standard export formats exist, for example CAD packages, migration may not be a simple thing for digital archives. In all cases migration requires professional archaeological knowledge, and a thoroughly documented dataset. He also convincingly argues that the sooner data are archived, the better for all concerned: no segment of the archaeological population can be complacent about this. He sums up with a 6-point list of ways the archaeological discipline can promote proper digital archiving.

Henrik Jarl Hansen describes a very interesting web-based resource in Denmark called Guder & Grave in *"Digital Danish Archaeology: Gods and Graves - an Internet publication on the Bronze Age."* This impressive website is a product of the national museum of Denmark and is designed to give the public access to state-supported institutions and their collections. Contents are drawn from the stores of the Danish National Museum, the National Archaeological Record database, and the Object Register of the Department of Prehistory and Early History. Guder & Grave is well worth a visit at http://www.natmus.dk/ Have this paper close at hand if you do visit, or if you're interested in technical solutions for serving the contents of large databases over the web.

The third paper is entitled *"Museums on-line: Access to Museum Information"* and is written by *David Dawson* of the Museums Documentation Association. This is the first paper in the group that begins to address the issues of documentation standards in digital presentation and preservation. As an archaeologist turned museum-documentation-and-computer-specialist, Dr Dawson is in a particularly good position to summarise efforts within the museum community to network international resources. Projects discussed include the Scottish Cultural Resources Access Network (SCRAN), CIMI, and Aquarelle. The museum community has made considerable effort in networking information, and this has largely been possible due to their widespread attention to documentation standards.

The theme of documentation standards is developed in *Gillian Quine's "The Role of Data Standards in Digital Access and Interchange."* She provides an overview of the excellent standards work of the Royal Commission on the Historical Monuments of England (RCHME) Data Standards Unit. Data standards are simply and neatly defined as rules for recording information to increase compatibility, consistency, accessibility and retrievability. This paper is especially important in advocating a new and more positive philosophy held by standards organisations: advocating standards developed within the archaeological community (or some other community) rather than those imposed by outside organisations. The resulting new generation of standards is flexible, stream-lined, and multi-faceted rather than monolithic. Useful standards for British archaeologists mentioned herein include the NMR data standard, MIDAS, the SMR software standard, and metadata. Regarding metadata specifically, Dr. Quine makes the very welcome point that metadata must be used in conjunction with other standards to be helpful.

"The importance of metadata to archaeology: one view from within the Archaeology Data Service" by *Paul Miller* develops this metadata theme. Metadata is defined as a means of turning data into information and as a tool for facilitating the location of web-based resources in this increasingly complex world. Paul's paper provides a helpful guide through the jargon-ridden world of metadata. Here you can discover what 'elements', 'schemes', 'types', and the 'Dublin Core' really are. The author concludes that metadata will "increase the reuse value of all those kilometres of rotting paper, wrinkling mylar, and de-magnetising magnetic media in rarely visited archives around the world."

This neat ending leads nicely into the final paper, *"Digital Preservation in Archaeology"* by *Alicia Wise and Julian Richards.* As CAA delegates and Proceeding readers will be aware, a huge quantity of vital archaeological information is stored each year in machine-readable formats. This paper is about the importance of preserving archaeological information, and deals specifically with digital archiving efforts underway at the Archaeology Data Service in Britain. This work is facilitated by an outpouring of support within

archaeology and academia generally: sister-services in other disciplines, funding agencies which require digital archiving from grant recipients, and pilot projects in all sectors of archaeology. Awareness of the need for digital archives offering one-stop access to digital records has arrived in archaeology.

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