

# THE USE OF REMOTE TERMINALS FOR ARCHAEOLOGICAL SITE RECORDS

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## Abstract

The paper gives a general review of facilities used by archaeologists to transmit site data to a remote computer. The author collaborated with P.Buckland in the setting up of the Doncaster information retrieval project, which is also briefly described.

Communications networks are being used to an increasing extent nowadays for the transmission of data between computers, and between a user seated in his own laboratory and a computer which may be hundreds of miles away. The Post Office DATEL system is an example of a communications network which uses normal telephone lines. A 'remote terminal' consists of a teletypewriter, and a transmitter/receiver called a MODEM with a special telephone handset with keys to transfer between the voice and data transmission modes (or more conveniently an acoustic coupler into which a normal telephone handset can be placed). More specialised devices such as printers, plotters and card readers may also form part of the remote terminal. The user telephones the computer bureau in the usual way, waits for the transmission carrier wave to be connected, either by the operator or automatically, then presses his 'data' key or inserts the telephone handset in the acoustic coupler. The remote terminal then effectively becomes part of the distant computer. What this means for archaeologists is that excavation records can be entered into a computerised data bank from a teletype in the site office - the only services required are a power point and a telephone.

Archaeological data was transmitted by communications network at least as early as 1968 (Wilcock, 1969). Newman (1969), with characteristic American flair, transmitted data from a site in Hawaii to a computer in California via communications satellite, while Gaines (1971) has described the successful day-to-day use of a computer in an archaeological field situation where the archaeologist concerned had not received any previous computer training. Thus the routine use of a computer for data recording, analysis and publication is a practical possibility right from the moment the artefacts emerge from the ground.

During the 1972 season of excavation at the DANVM site (Roman Doncaster), an experimental hierarchical keyword system was used for the recording of pottery and small finds. Records were checked automatically on input, thus guarding against the omission of data and the insertion of inadmissible data. It is an interesting point that the archaeologists, initially in favour of plain-language insertion of data with a minimum of stylised coding, quickly devised abbreviations for use in coded input. Using this system it is still possible for the computer to provide the equivalent plain-language printouts. During this exercise the teletype was located in a building

near the site and the telephone was used to transmit data to a computer at North Staffordshire Polytechnic, Stafford, about 70 miles away from Doncaster. Suggested revisions to the system are detailed in the associated paper by P.Buckland.

## References

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