

# Analecta Praehistorica Leidensia 28 / Interfacing the past : computer applications and quantitative methods in archaeology CAA95 Vol. I

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# ANALECTA PRAEHISTORICA LEIDENSIA



PUBLICATIONS OF THE INSTITUTE OF PREHISTORY UNIVERSITY OF LEIDEN

# INTERFACING THE PAST

COMPUTER APPLICATIONS AND QUANTITATIVE METHODS IN ARCHAEOLOGY CAA95 VOL. I

EDITED BY
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UNIVERSITY OF LEIDEN 1996

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# **Excavations and Archives: Alternative Aspects of Cultural Resource Management**

#### 1 Introduction

In this paper I would like to explore how some issues of cultural resource management are beginning to affect the collection of information about excavations and the management of archaeological archives in England. I would like to focus on four main issues:

- The rapidly increasing volume of archaeological documentary and finds archives and the need for longterm curation and storage.
- Access to information on excavations and archives for cultural resource managers.
- The analysis of trends in archaeological fieldwork and its contribution to our interpretation and management of the past.
- The contribution of national computerised databases and analytical tools to these areas, using examples from the MONARCH database of the Royal Commission on the Historical Monuments of England.

I am conscious that I will be talking solely about England and that the volume of archaeological fieldwork and the organisational structures of archaeology vary greatly across Europe but the issues raised should also be of interest to colleagues outside England.

# 2 The Development of the RCHME's Database Information on Archaeological Events and Archives

There has been an increasing trend in recent years in England to re-examine archaeological databases and to begin to distinguish between information on sources and primary investigation and secondary interpretation. This has proved to be particularly important in urban areas with complex and fragmentary deposits and this distinction has been fundamental in the development of Urban Archaeological Databases in England. This distinction has also been fundamental to MONARCH.

I now wish to explain to you the background to how the RCHME began to collect discrete database information on archives and excavations and related archaeological issues. In England there has been a diverse and thriving network of individuals and local, regional and national bodies, undertaking archaeological work, several hundred museums and other institutions in which this material has been deposited, and almost as many newsletters, journals and monographs in which this work could be published.

Growing concern in the 1970s over the very large backlog of publication in England, the safekeeping of documentary archives and finds, and the need to improve awareness and access to them has led the RCHME to actively compile information on archaeological excavations and archives as one of its core activities.

# 3 The Management of Archaeological Archives in England

There have been a number of fundamental shifts in British Archaeology in recent years with funding being increasingly derived from developers rather than government and an increasing emphasis on small-scale evaluations and use of the planning system rather than large excavation projects.

A recent article in British Archaeological News shows that the rapid increase in excavations and volume of archive being deposited in museums is now an issue in England, particularly in major urban centres such as London (Council for British Archaeology 1994).

The existence of a national database with discrete and retrievable information on excavations and archives can provide quantification and analysis of such issues, which extend beyond any one locality or region. To illustrate this, I would like to look at information held on archaeological collections in museums in England by the RCHME, and present some national quantification of the resource derived from information on excavations and archives held in MONARCH.

We have only recently completed the updating and expansion of our information on archaeological events. However, I think the value of a national dataset on archaeological interventions is already apparent (fig. 1). The scale of the increase in excavation in England since the early 1800s, and by implication, its impact on museum collections, can now be seen from the data we have

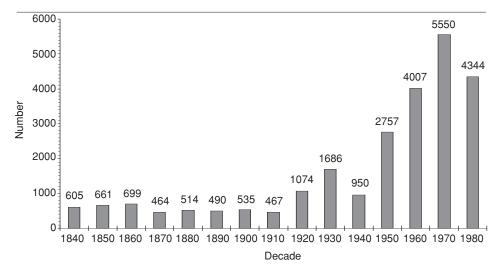


Figure 1. Number of Excavations undertaken in England by Decade.

collected. Figure 1 shows the number of excavations which have taken place in England in each decade since 1840.

From the outset we have aimed for comprehensive national coverage and have recorded excavations of any date, on sites of all archaeological periods, including sites from the industrial revolution, and excavations which have recorded negative as well as positive results. We have collected information on excavations undertaken by early antiquarians in the nineteenth century, through to the growth in excavations between the two world wars and the major surge in excavations from the 1960s onwards. As you can see, there were over 5,500 excavations in England in the 1970s alone.

This information has recently been updated to include all excavations up to 1992/1993 and we have added information on evaluations and watching briefs, and finally surveys funded by English Heritage or its predecessors since 1960.

As of March 1995 we have recorded:

- 28,777 excavations,
- 7,482 evaluations and watching briefs,
- we have located the documentary archives for 53% and the finds for 54% of the total excavations recorded.

For a session on the future of archaeological archives at the Institute of Field Archaeologists conference in England in April 1994, MONARCH was used to provide a broad quantification of the scale of the likely archive and publication problems facing the profession (fig. 2).

The period 1940-1980 was selected to cover the archives being tackled in post-excavation backlogs. 1980 was chosen

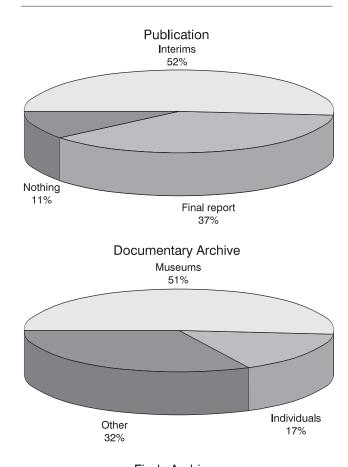
as a cut off date as information on the late 1980s was still being entered onto MONARCH when these figures were compiled.

Over 13,000 excavations were recorded for the period 1940-1980. Final reports had been published for 37%, while for 11% there was no known publication at all. Substantial post-excavation and publication programmes are in progress which will reduce these backlogs, but much will remain unpublished: this emphasises the growing importance of the archives as repositories of original data. The cost of publication and the consequent trend towards summary publication reports supported by a publicly accessible archive will also emphasise the importance of the archive.

Documentary archives and finds had been located for 65% of the excavations over this period. Of the documentary archives located, 51% were in museums, 17% with individuals, and 32% in other locations (principally units and local societies). For the finds located, 72% were in museums, 9% with individuals, and 19% in other locations.

I should emphasise that these statistics should be regarded as best estimates as they cover 2/3rds of the archives for excavations undertaken between 1940-1980; the remaining 1/3rd, for which we have no information on the archive, may not follow an identical pattern.

These figures provide some insight into the growth of archaeological collections, the potential transfers to repositories in the next decade and pressures on resources, which may arise in England. Without central collection and computerisation of information on excavations and archives such an analysis would have been impossible.



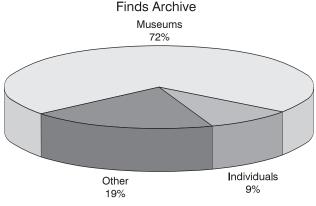


Figure 2. Publication and Archive Locations for Excavations undertaken in England between 1940 and 1980 (as of March 1994).

# 4 Access to Information on Excavations and Archives

The great diversity of organisations undertaking archaeological work, the range of publications and archive locations, combined with the increase in small-scale

evaluations published in limited circulation copy, make access to primary data very difficult for researchers. I think there can be no doubt that archaeological collections can be an under-utilised resource.

In 1991 the Society of Museum Archaeologists undertook a survey covering access to museum archaeological collections in Britain. The survey found that requests to view collections were disappointingly small. 12% of museums, mostly those with very small archaeological collections, had received no requests to view the collections over the previous 12 months. Just over half (53%) received up to 10 requests a year. Only 3 museums received over 100 enquiries a year — and this figure may have been doubtful because some museums did not distinguish between archaeological and non-archaeological enquiries.

Overall a picture emerged of few individual requests to view collections, which were most likely to be restricted to specialist researchers (Merriman 1993).

Several years have passed since the SMA survey was undertaken and hopefully a similar survey undertaken today would show that the position has improved considerably. However there can be little doubt that locating material and gaining access to it can still be difficult and that computerisation of finding aids for archaeological finds and documentary archives has great potential for improving this situation.

The ability to identify collections of excavated material by period or site type is a valuable tool for regional or national research. MONARCH will not give detailed finds lists, but can provide a high-level index to what is in which museum or other repository. For example The Medieval Ceramics Studies Group requested a printout giving details of repositories and publications for several thousand excavated medieval sites in England as part of the Survey of Medieval Ceramics Studies in England, the results of which have recently been published (Mellor 1994).

An example of the difficulty of locating material recently appeared in the newsletter of the Prehistoric Society concerning the archives of Benjamin Harrison (Cook/Jacobi 1994). Harrison, who was born in 1837 and died in 1923, was a collector and recorder of archaeological finds of all periods in the county of Kent in Southeast England. In 1890 he excavated a site at Oldbury, which is still Britain's only significant open-air site of the Middle Palaeolithic. He donated the finds from this site to the British Museum. Recent research on this collection has highlighted the necessity of locating any of Harrison's surviving records and British Museum staff appealed for information through the newsletter of the Prehistoric Society.

A search of the archive records in the RCHME's database identified records from Harrison in several different institutions in Southern England, including the Pitt Rivers Museum in Oxford, Maidstone Museum, Croydon Natural History and Scientific Museum, the Guildhall

Museum in Rochester, the Tunbridge Wells Museum and Art Gallery, and the Surrey Archaeological Society collections at Guildford. Computerisation has allowed our information on the location and nature of Harrison's archives to be extracted quickly and this information has now been passed to staff at the British Museum and a brief note published in PAST (Sargent 1995).

Benjamin Harrison's archive demonstrates how widely dispersed records of any one individual or site can become and our own systematic surveys of excavations and other archaeological archives show how this pattern can be repeated for most sites of regional or national significance in England.

It also demonstrates some of the current problems with access to information, particularly for those involved in cultural resource management working within the time constraints imposed by developers or the planning system. For many the option of writing to a newsletter editor or any traditional form of gathering primary information is just too slow.

In many cases I suspect computerisation and online access to museums, regional and national databases is the only means by which this data will become widely available and used. I would expect online access to the RCHME's information on monuments, archives and excavations and to similar resources such as the British Archaeological Bibliography or regional databases to provide a significant increase in the use of such resources.

### 5 Trends in Archaeological Fieldwork

The growth of developer funded work in recent years and changes in planning guidance, particularly the introduction of PPG 16, have led to increasing discussion on research frameworks and research to monitor new trends in archaeological fieldwork. In England research has been commissioned into the growth and effectiveness of archaeological assessments (English Heritage forthcoming), and funding bodies are beginning to compile database information on projects and research objectives to monitor achievements against policy objectives and improve strategic planning (an example of this is the Management Information System being developed by the Archaeology Division of English Heritage).

The structure of MONARCH and our database information on events and archives as well as monuments are beginning to allow us to examine some of these trends in archaeological fieldwork.

Research 'fashions' in Bronze Age studies and their impact on our knowledge of the period were examined in 1992 in an article in Antiquity by Michael Morris based substantially on analysis from the excavations data in MONARCH (Morris 1992).

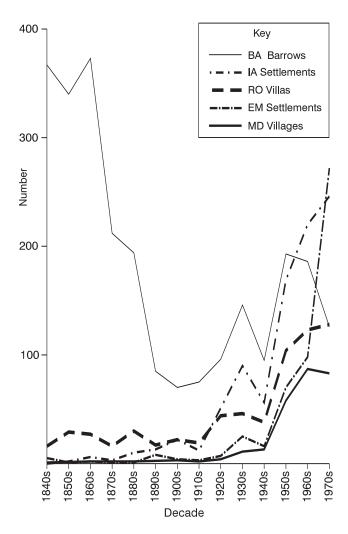


Figure 3. Number of Excavations for Specific Site Types by Decade between 1840 and 1980.

It is possible to examine trends for any period, site or intervention type utilising data in MONARCH. Figure 3 shows excavation trends in England from the early 1840s for specific monuments types and periods, namely Bronze Age barrows, Iron Age settlements, Roman villas, Anglo-Saxon and other Early Medieval settlements, and Medieval villages.

Comparison with figure 1 shows how these partly reflect broader national trends in excavation, particularly the growth in excavations between the wars and the exponential increase from the end of World War II through the 1970s. However, there are some significant differences. The most marked of these is the very different trend in the excavation of Bronze Age barrows, with sharp falls in the number of excavations undertaken in the late nineteenth century and again in the 1960s and 1970s. This reflects the late nineteenth century trend away from barrow digging; the development of a more

systematic and therefore more intensive approach to excavation of individual barrows; and the government sponsored programme of barrow excavation in response to destruction by agriculture in the 1950s and early 1960s, which was subsequently curtailed. The post World War II intensification of research on Iron Age, Early Medieval and Medieval sites is also apparent. The excavation of Early Medieval settlements and Medieval villages reflects other aspects of data retrieval from MONARCH and research trends, as the term settlements covers both rural and urban site types which have been excavated whilst the term villages does not. The trend line for the excavation of Early Medieval settlements therefore includes the large number of excavations started in the 1960s on historic urban centres such as York, Southampton and Winchester.

#### 6 Conclusion

In conclusion I hope I have demonstrated to you the value of computerised data at a national level on excavations and archaeological archives, and of database structures which can link this information to monuments but which also allows them to be analysed as discrete datasets. I have concentrated on MONARCH, England's national database and examples from archaeology in England but hope that you will also find that these examples have relevance elsewhere and for local or regional databases as well as databases at national level.

#### 7 Access to the NMR

The MONARCH database on which this article is based can be consulted by contacting NMR Customer Services, National Monuments Record Centre, Kemble Drive, Swindon SN2 2GZ (Telephone 44 (0)1793 414600 or Fax 44 (0)1793 414606)

#### Acknowledgements

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