

COMPUTER SYSTEM FOR COUNTY GAZETTEERS

by

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Abstract

The paper describes the gazetteering system for Shropshire and Worcestershire as implemented at the Computer Centre of the University of Birmingham.

In setting out to design this system, I have made certain basic assumptions. Since those who disagree with these assumptions will inevitably find my entire scheme of little use or interest, I will state them at the start and thus save my opponents the trouble of reading further.

1. Gazetteering is a Good Thing!

I assume that the collection of information into an easily accessible form is a worthwhile occupation. Once a reasonably complete coverage has been collected for an area it will then be used by archaeologists, planners etc. to enable progress to be made without the loss of our historical background - in some cases by the preservation of the site itself, in others by the preservation of information obtained from excavation and field work. Experience on the Kenilworth by-pass has shown that developers are sympathetic towards the needs of historians and archaeologists provided - and this is the vital point - that they can be told about it while work is still at the planning stage. This is why information held on a file in the computer with fast and easy access is so much better than the more detailed account stored somewhere in one of the museums or libraries of the county concerned. The first can always be obtained over night, the second may turn up in the first book opened or may take two or three years searching. The computer record, although brief, does specify exactly where this detailed account may be found and so this can be obtained within a day or two.

2. Amateurs can compile these records

One of the main aims of this project is to collect information which requires a certain level of care and intelligence but not lengthy specialist training. These are two reasons for this. Firstly I do not see why amateurs should be deprived of the satisfaction of making a valuable contribution. Secondly we don't have enough specialists to complete the job. We don't even have enough amateurs, but at least we can get some way towards our goal with their assistance. Choosing to wait until the specialists have time to compile such information means waiting until 90% of the sites have been destroyed, leaving a small enough problem. I do not consider this a satisfactory solution.

This aim has had a great influence on the format of the gazetteer records, but another equally strong factor has been the way in which the project developed. It started as a project by the Prehistoric Group of the Shropshire Archaeological Society and indeed the types for Bronze (03), Flint (08) and Stone (21) are entirely their work. They were aware of the large quantity of information which had been collected, published and then lost - lost because you just don't sit down and read through the early issues of *Gentleman's Magazine* to discover whether a field,

due to be bulldozed tomorrow, has ever had any archaeological finds made there. Their idea was to meet regularly in the Shrewsbury library and extract useful information from such sources. At this time they intended to produce a card index of such information and perhaps, eventually, to publish a gazetteer for Shropshire. My part in this scheme was to transfer the entire card-index to a file on the computer and arrange for much of the work of selecting records for a particular purpose to be done by the computer.

In discussing the information, the first classification was to divide the information into 'finds' and 'features'. Here a find is something small which is usually picked up and deposited in a museum, while a feature is large and usually remains in place. It may be destroyed, excavated or preserved, but it is not usually moved to a new position. I know there are examples of megaliths or even whole buildings being removed into museums, but these are exceptional cases and do not invalidate our basic division.

In considering finds, our usual distinction is made according to the major material of the object (see Figure 1 for the list of major generic types). There are exceptions - any metal used to make a coin is listed under 05 and any material used in building is listed under 17- but the basic idea is a division according to material. Types 12 and 13 provide negative information since any object of those materials occurring in Neolithic context implies some later disturbance.

Features (see Figure 2) are typed according to their use. This may change over the centuries, thus requiring several entries with cross-references, or may be hard to decide. We also have an entry, 'Unclassified Sites' for which all we can definitely say is that something is there. Most sites discovered on air photographs will initially be placed in the category and re-classified when more information becomes available. One of the advantages of the computer system is that it can be easily altered as more information becomes available. Then, in addition to types 31 to 38, extra classes were added to indicate what extra information is available. For type 39, the area covered by the photograph is given, together with a list of sites shown upon it and cross reference to other air photographs of the same area. Excavations and surveys are listed, with as much information as possible about the area covered (or uncovered) and what was found or deduced about the site.

The actual format of the record is as follows:-

First we have the generic type: This is a four-figure number referring to a general description of the object (see Figure 3 for BRONZE or COPPER objects and Figure 4 for BURIAL SITES).

Next we have a four letter mnemonic for the area in which it was found. Since most planning authorities work in terms of counties and civil parishes, this code has been chosen to refer to the civil parish as shown on the present (1972) Ordnance Survey map (Seventh Series, 1 inch to the mile). It could equally well refer to 10 km squares of the National Grid, or Domesday manors, or any other subdivision. Civil Parishes is the choice made by the groups at present using the system, although in some senses these divisions are archaic.

The next entry is a number. All items of the same generic type from the same parish are numbered

as they are entered in the system.

The fourth entry is the two-letter code for county. These four items make up the identification for the entry, e.g. the 6th bronze axe found in the parish of Much Wenlock would have identification O301 MWEN0006SA and no other item in the whole country would have the same identification.

Next we have Ordnance Survey map references. In the case of a find, a single reference giving the position in which it was found, as accurately as possible. In the case of a feature, up to four references may be entered if they are needed.

The other important entries are references to published descriptions or unpublished collections in libraries, county records office or museums. In this case, it was soon noted that as members of the group continued with their compilation of a card index, different abbreviations appeared for journals and so when it was transferred to the computer system it was decided to select a standard and very short abbreviation to be used by the whole group (see Figure 5 for a list of books and journals used in Shropshire). This used the two letter county code, SA for Shropshire, and numbered the journals O1, O2 etc., as needed. Provision is made to give the full title of each book or journal on any printout. In addition to the title the year and page number is also given.

For finds, we also have an entry giving its present location, either a museum, or 'PRPO' 'in private possession' or, unfortunately, 'LOST'.

Finally, for each record we provide space for a text comment, which contains any other information which should accompany the record. Since the project started with documentary sources rather than listing objects in a museum, there were not many objects for which measurements were available. Consequently this is one important piece of information which has to appear in the comment.

This is the information which is entered into the system. Figure 6 gives a list of the programs available and the form of output they provide, and it is assumed that these outputs will have many possible uses. First we have the program which gives a list of all entries for any one parish. This should be of interest to anyone wanting information about their home parish. Next we have a program to select all entries for a given generic type. This should be invaluable to anyone setting out to do a detailed survey of some particular object since, in addition to the list, it gives references to journals and museums containing the extra information which is needed for the survey. It does not contain the required information - if it did there would be no need for the survey - but as a starting point for such a survey it is unbeatable.

Next we can obtain a list of all finds in a particular museum. This, of course, only refers to those finds which have been entered in the gazetteer and any museum may well contain many extra finds which have never been published and merely stored in the museum for safe-keeping. Thus co-operation is needed between museum staff and gazetteer groups to merge the information from these two sources and produce a single, complete list. An advantage from this point of view is that I have been invited to serve on the Information Retrieval Group of the Museums Association (IRGMA) subcommittee for archaeology and so shall be in a position to provide translation routines between the two systems. Thus any

information recorded in either format will be available to both systems.

Finally, we have two programs to select according to O.S. map reference and produce either a list or a distribution graph of specified types within the chosen area. This is likely to be the form of output most needed by planners who wish to allow time for excavation and recording of sites threatened by development. This, like all the programs, suffers from the drawback that one can never extract more information from the gazetteer than has been discovered and entered into it. However, such information can be produced, over night in the case of a list and within a few days in the case of a distribution graph and these sites, at least, should be considered.

At the present moment (January 1973) the group in Shropshire have 290 records on their file and the County Archaeologist in Worcestershire has 347 records on file. This is quite inadequate to give more than an idea of the possibilities of the system but I hope in the future to have a fuller coverage and then we shall be able to provide real assistance in the ways I have described.

I shall be very pleased to hear from anyone who wishes to try out the system, either in the two counties mentioned above or to start a file for some other county. Eventually, I would hope to see a data bank in each region, possibly based on the present C.B.A. regional groups, with records held on file in a local university or other institution.

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Figure 1

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GENERIC TYPES FOR FINDS

01	Ornamental Materials
02	Bone or Ivory
03	Bronze or Copper
04	Iron or Steel
05	Coin or Coin Mould
06	Lead or other Base Metal
07	Precious Metal
08	Flint
09	Glass
10	Foodstuffs
11	Written Records: Parchment, Papyrus or Paper
12	Rubber
13	Plastic, Polythene or other modern synthetic
14	Soil Sample and Results
15	Leather, Wool or other textile
16	Wood
17	Building material
18	British Pottery
19	Imported Pottery
20	Clay
21	Stone
22	
23	
24	

Within each of these major classifications, the items are specified more closely, giving the full 4 figure generic type. In most cases, the main material of the object is used for the initial type. Type 5, 'Coin or Coin Mould' is a special case since for this class the object itself seems of greater importance than the material of which it is made.

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Figure 2 June 1972

GENERIC TYPES FOR FEATURES

- 25
- 26
- 27
- 28 Surveys of Sites
- 29 Excavations of Sites
- 30 Features on an Excavation
- 31 Boundaries
- 32 Burial Sites
- 33 Domestic Sites
- 34 Industrial Sites
- 35 Sacred Sites
- 36 Communications
- 37 Fortified Sites
- 38 Unclassified Sites
- 39 Air Photographs

Types 31 to 38 were originally specified for the gazetteer and here the basic classification was according to use, so far as this could be determined. The additional types were added since they refer to extra information which is available for some of the sites.

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Figure 3

Detail of Type 03 BRONZE OBJECTS

- 0301 Bronze Axe
- 0302 Other Bronze Object
- 0303 Bronze Dagger or Sword (double edged blade)
- 0304 Piece of Bronze Armour
- 0305 Bronze Hoard
- 0306 Bronze Hoe or Sickle
- 0307 Odd pieces of Bronze
- 0308 Bronze Ornament
- 0309 Bronze Palstave
- 0310 Bronze Scabbard Mountings
- 0311 Part of Bronze Shield or Buckler
- 0312 Bronze Projectile Point
- 0313 Bronze Horse Trappings
- 0314 Bronze Knife (single edged blade)
- 0315 Bronze Tool
- 0316 Bronze Vessel
- 0317 Bronze Statuette
- 0318 Bronze Votive object

Numbers 19 to 99 have not yet been assigned

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Figure 4 June 1972

Details of Type 32 BURIAL SITES

These are distinguished by their association with human skeletal remains. They may either be sites on which evidence of cremation or inhumation is found or they may be almost identical to another site on which such evidence has been found. Sites which may be connected with burials but no proof is available should be entered under section 35.

- 3201 Cairn
- 3202 Cremation cemetery
- 3203 Inhumation cemetery
- 3204 Chambered tomb
- 3205 Cist burial or Cinerary Urn
- 3206 Loose cremation
- 3207 Cemetery (containing both cremations and inhumations)
- 3208 Loose burial (unspecified)
- 3209 Long barrow, or chambered tomb
- 3210 Mortuary house or enclosure
- 3211 Round barrow (includes disc, bowl etc.)
- 3212 Loose inhumation
- 3213 Rock-cut grave
- 3214 Bog burial
- 3215 Boat or chariot burial
- 3216 Churchyard
- 3217 Lychgate
- 3218 Gallows

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Figure 5

Books and Journals for the County of Shropshire

- SA01 *Trans. Shropshire Archaeological Society*
- SA02 *Victoria County History of Salop vol.1*
- SA03 *Caradoc and Severn Valley Field Club Transactions*
- SA11 Evans - Stone Implements
- SA12 Evans - Bronze Implements
- SA13 Cards in Shrewsbury Borough Library
- SA14 Hulberts - *Salopian Magazine*
- SA15 Gwenrhian Gwynedd's - History of Selattyn
- SA16 William Phillip's Mss.
- SA17 *Shropshire Archaeological Society Newsletter*
- SA18 Notes of L.F.Chitty OBE, FSA, MA in Shrewsbury Borough Library
- SA19 *Salopian Shreds and Patches*
- SA20 Notes of Prehistoric Research Group in Shrewsbury Borough Library
- SA21 Aerial Photo. Nat. Mon. Record in Birmingham University
- SA22 Ludlow Town and Neighbourhood - Oliver Baker (1888)
- SA23 Church Stretton - Cobbold (1904)
- SA24 Aerial Photos. J.K.St.Joseph - Shrewsbury Borough Library
- SA25 Aerial Photos. J.Pickering
- SA26 *Flints in the Clun Valley* H.C.Jones (1934)
- SA27 Notes of L.F.Chitty on O.S. 6" Maps (Old Series) (1930)
- SA28 Aerial Photos. of Arnold Baker in Shrewsbury Borough Library
- WA01 *Archaeologia Cambrensis*
- WA02 Bulletin Board Celtic Studies
- GO62 *Margary Roman Roads of Gt.Britain vol.2*
- MG01 Montgomeryshire Collection

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Figure 6

List of Available Programs

- ARCH.P11 Select & Print all entries for one Parish
- ARCH.P12 Select & Print all entries for one Generic Type
- ARCH.P13 Select & Print all finds in one museum
- ARCH.P14 Select & Print all entries within an area specified by Ordnance Survey Map References.
- ARCH.P16 Draw a distribution graph using selected symbols for selected generic types, either for the whole country or within a specified area
- ARCH.P10) Correct data tape and add new records
- ARCH.P15)