

### **1972-2002: History and computing: new tools for the job.**

When I first became a Research Fellow in King's College in the early 1970's, the most important contact I set up was with the mathematician and computer scientist, Dr. Ken Moody. For the next thirty years Ken encouraged us in our work of linking computers and history. He arranged for a series of excellent computer scientists to work with us and acted as an advisor on projects stretching from about 1972 to 2002. They started under the aegis of Donald Parry, another friend, at the Research Centre in King's. It is worth telling the story of this collaboration as a separate section.

Parts of the story of the work on the borderland between history and computing are told in more detail in the historical section of the Earls Colne web-site (q.v). Here I shall summarize it briefly. We first worked with Charles Jardine between about 1973 and 1979, setting up a relational database structure and working out an early mark-up language (which anticipated XML) to help us input the records of an English village. In about 1976 Charles was joined by Tim King, who did his Ph.D. on the same problem and by his wife Jessica as a data-inputting assistant. This took the project on Earls Colne through to the conclusion of its first phase in 1983.

Then in 1986 we started another project that required information retrieval, namely on the Nagas of Assam, and started to work with Dr. Martin Porter. Martin was a student of Professor Keith van Rijsbergen, who in the 1970's at King's Research Centre invented a new kind of retrieval system, based on probabilistic mathematics. This was implemented originally by Martin for the Sedgwick Museum of Geology (SEDGE) and then later developed as the Museum Cataloguing system (MUSCAT).

When I came across the system I could see that it was very powerful, but it only worked on the main-frame computer and it was extremely difficult to use, partly because the documentation was very high level. So I spent a good deal of my time from 1986-1990 working with Martin to bring the system down onto a desk-top computer and to document it in an easier way. The work was extremely difficult and stressful as I had to work closely with Martin and try to understand his logic from the inside. But in the end it was done. Simultaneously Martin was writing the retrieval software for the B.B.C. Domesday Project, on whose Board I was sitting as an expert on 'Social' and 'Cultural' matters. It was there that I met the brilliant Peter Armstrong, later of multi-media fame.

The final phase of this computing occurred when Ken Moody suggested that yet another of his Ph.D. students, Tim Mills, should write an up-date of the system so that it would work on the Web, which was just emerging as the new communications system at that time. It seemed an easy task so in 1995 Tim started on what he thought would take a few weeks. Instead, with huge input in re-organizing all the records, it took seven years. But it was finally finished and published on the Web and CDROM in China in August 2002. (q.v.)

Meanwhile the story continues. For many years Sarah and I have also worked with our friends in Yorkshire, Michael and Cherry Bryant, whom we have known for over thirty years. Cherry read manuscripts of my books, translated and recorded the Earls Colne manor court rolls and helped in many ways. Michael helped in the development

of various multi-media systems and also wrote the 'Bracsort' bibliographic program which both Sarah and I use. Michael and I spent many periods together and dreamed our dreams together. Without Michael's knowledge of computing we would have become stuck on a number of occasions. Recently Michael has agreed to update Bracsort so that it can be used on the Web with a proper interface.

Likewise, the MUSCAT system, which provided an excellent database system for a number of our projects, has become increasingly antiquated as a DOS (Disc Operating System) program. So we are currently working with Lemur Computing Company to create a modern, XML based, version, provisionally called BAMBOO.

Two other activities and sets of contacts which can be dealt with outside the chronological frame are worth mentioning here. The first is work with the Economic and Social Research Council. They provided the major funding for my first project and we gained good advice from panels they set up with first-rate historians, including Roderick Floud, Michael Anderson, Joan Thirsk and Roger Schofield on them. I was also involved with the ESRC on a number of committees. For about six years I was on the Anthropology committee, and later on two Research Methods committees for at least another six years. Although all of this took up a very great amount of time – at the maximum up to about a quarter of my time was involved with this work – it had many benefits in terms of keeping up with the current state of research in the U.K. through reading and assessing research applications.

Secondly, for many years I have been interested in filming and multi-media. In this, for about 15 years I worked with the Audio-Visual Aids Unit in Cambridge, headed by Martin Gienke and David Hurworth. They provided excellent facilities and advice and without their enthusiasm (Martin acted as co-director of the Naga Videodisc Project for example), much of our pioneering work in multi-media, in the recording of interviews with anthropologists, in teaching undergraduates and graduates could not have been done. This has continued with teaching from the partial successor, CUMIS (Cambridge University Moving Image Studio) under an ex-AVA employee, Peter Cook.