

NDAD News

Newsletter of the UK National Digital Archive of Datasets

No. 3, July 21st 1998

[Project News](#)

[Project Development Manager's Report](#)

It has been a busy time on the NDAD project, as we continue to register new users, liaise with government departments who are supplying data to us, and launch the new-look web site, which we hope will make the system much clearer and easier to use.



[Lofty Designs](#)

[PRO conference](#)

A number of important recent events are reported in [Project News](#), and in his [report](#) Kevin Ashley summarizes the project's progress to date.

[Personnel Profile: Frances Blomeley](#)

In [Lofty Designs](#) two of our developers explain how we approached the web site redesign, the challenges we faced, and what we hope to achieve by it.

We also feature a full account of the recent [PRO conference](#) at Kew, an event organised under the auspices of the UK presidency of the European Union, at which NDAD staff demonstrated the system to representatives of archive departments from all over Europe.

And as usual we conclude with a [biographical profile](#) of a member of the NDAD team.

Project News

[NDAD Launch](#)
[PRO Conference](#)
[So Farewell Then](#)
[Wedding Bells](#)
[And Welcome](#)

NDAD Launch

On the evening of July 8th a reception was held at the University of London Computer Centre in Guilford Street to celebrate the launch of the [UK National Digital Archive of Datasets](#). Among those attending were Graham Zellick, Vice-Chancellor of the University of London, and Sarah Tyacke, Keeper of the Public Records. Dr Tyacke praised the work of the many people involved in the project, at the [Public Record Office](#) and on the University side: "This is a pioneering service, and we are very proud of it," she said. Members of the project team also attended, as did many staff from the PRO, and representatives of the government departments that have been involved in supplying datasets to the system.



PRO Conference at Kew, 3/4th June 1998

On June 3rd and 4th, several members of the NDAD team attended the conference *Electronic Access: Archives in the New Millennium. A showcase for the European Experience* at the Public Record Office in Kew, and demonstrated the system to representatives of archive departments from all over Europe, many of whom showed considerable interest in the system's combination of secure storage and online access facilities. A [full report](#) on the conference is also published in this newsletter.



So, Farewell Then

It was with deep regret that we said goodbye to three of our colleagues who are moving on to pastures new.

Angela Mott was not infrequently referred to as "the mother of the project" because her work on it stretched back further than almost anybody except Kevin and Ruth. She organized many aspects of the project work, worked on testing and reviewing the system, and prepared many of the

information pages that are used in the system. Her input into all aspects of the project, including its social side, will be sorely missed.

Sophie Bradford has been an Archives Assistant on the project for nearly a year now, and her work has included cataloguing datasets and scanning documentation, as well as dealing with help desk calls, user registrations and our ISO9000 procedures. She is leaving us to work as a Library Assistant on the Retrocon project at Lambeth Palace Library, in preparation for an MA in Librarianship and Information Studies which she hopes to start in the autumn of 1999.



Jonathan Pritchard spent six months as one of our very able Systems Administrators, setting up our servers and services, as well as contributing extensively to development work on the web site. He is marrying his fiancée Mary in the autumn, and they have decided to get away from the smoke and fumes of the Big City, and set up home in leafy Somerset.

We are grateful to Angela, Sophie and Jonathan for all the hard work they have put into the project and wish them good luck in the future.



More Wedding Bells

Our Assistant Archivist, **Peter Garrod**, married his fiancée Sarah in Winchester on June 20th. Sarah is also an archivist, so when they move home we expect all their boxes to be neatly tied up and labelled. We wish them all the best, and hope that Sarah will make an even more honest man of him.



Welcome

Clare Cowling has joined the project as part-time Assistant Archivist. Originally from Tasmania, Clare was trained in the [Australian Archives](#). She has also worked at the [Institute of Advanced Legal Studies](#) on the *Records of Legal Education* project, and continues to work as an archivist for the [Royal College of Obstetricians and Gynaecologists](#). We welcome her, and hope that she enjoys her time working in NDAD.

Welcome also to **Linda Heron**, who has joined us as an Archives Assistant. Linda has a degree in Mathematics from the University of Kent, and comes to us from the Records Department of the Comptroller & City Solicitors within the [Corporation of London](#).



Lofty Designs

The NDAD web site has undergone a complete redesign and overhaul, to improve its organization, accessibility and usability. *Frances Blomeley* and *Richard Davis* describe the trials and tribulations of the process.

All web sites offering information, products or services need to be "designed", and the design, covering the navigational structure, the appearance, and any built-in functionality, will be determined largely by the content which is to be made available. Unfortunately the uniqueness of web site content usually means that the design process has to be tackled afresh by every individual site - the plug-and-play web site doesn't exist. NDAD, providing a unique mix of archival catalogue and large datasets, complex user interaction, and the need for strong security, was a particularly challenging web site design problem.

The original NDAD web site, open for access since March 1998, provided invaluable insights into what worked and what didn't work, and was the basis of a redesign process which led, over 2-3 months, to our [current web site](#). We established two sub-groups dealing with the structural and the visual design aspects of the new site: the products of their deliberations were then combined to build the new site.

At first glance, the NDAD consists of relatively few types of information. We have general site information (Help, Registration, Contact Information, etc.), catalogues, and data. Connecting these 3 areas in a usable and meaningful way seemed at first to be a relatively trivial problem. Thinking through some of the issues surrounding the selection of data and catalogue information, it soon became apparent that this was far from being the case: we needed to guide users (especially first-time users) along quite rigid channels to ensure that data or other catalogue items were viewed in a sound contextual framework. Direct access to pages full of numbers, accompanied by obscure field names, would be useless. Similarly, implementing the high degree of interactivity, particularly for querying and navigating through tables of data, would require particular care and attention if it was to be made at all usable within a web browser.

Our structural model is based loosely on the archival levels: Fonds, Collection, Series, Sub-Series, File, Item, and Piece. As we have only one collection - that of Public Record Office datasets - the mapping really begins with the Series, which we equate with one or more datasets originating from a single government department. The Sub-Series level and the File level are usually combined, and represent a single dataset. We use the Item level to describe tables within a dataset, and the Piece level to describe fields within a table. This hierarchy underlies NDAD's file classification system, so it was hardly surprising that it should also give us the framework for the web site. It also helps users, particularly those with an archival background, to understand our site.

Our [site map](#) shows the framework quite clearly; it also shows how we linked in some of the other associated material - the departmental Administrative Histories, the dataset documentation, and the site information. The map also shows some of the interactive functions available to users. Where appropriate, copies of data, catalogues, or documentation can be ordered as the user works through the site, filling a "shopping basket" which is costed at the end of the session. When users reach the level of field descriptions within dataset tables, they are presented with an iterative process of field selection and querying. It is only when the data is displayed that the user will require more sophisticated navigational aids to help make the information manageable.

This wide range of content and function provided some interesting challenges for the visual design subgroup.

Visual design

A number of important factors were critical in our approach to the site's visual design:

- The web site must be accessible and usable by as large a number of people as possible
- The web page designs should help users navigate within a complex system
- The web page designs should not distract users' attention from the datasets themselves and the supporting information
- A consistent look and feel must readily identify any page of the web site as being part of NDAD
- Superfluous clutter, bells, whistles, and anything dependent on more controversial, recent developments in web technology, restricts accessibility, and is therefore to be avoided.

Accessibility was clearly the biggest issue, and required us to consider carefully the differing capabilities of users. We had to make sure that, within reason, we catered for users with older machines, slower connexions, and old versions of web browsers. A demonstration of the original web site to the Institute of Historical Research highlighted particularly the problems and irritations caused on low-resolution screens (640x480x16 colours) by elaborate colour schemes and superfluous graphics and headings on a page. In addition, it is also necessary to consider the needs of visually impaired users, including those using speech emulators (informative guidance on this was found at the [RNIB web site](#)), those with slow connexions who preferred not to load images, and users of non-graphical browsers.

First thoughts on applying these criteria to a visual design of this site were, not surprisingly, informed by looking at other web sites, particularly those connected with information storage and retrieval systems, such as search engines, museum and library systems. Another particularly useful source of examples, ideas and caveats was a recent publication from O'Reilly Associates, [Information Architecture for the World Wide Web](#) by Rosenfeld & Morville.

A colour-scheme and some general principles were agreed, based on some provisional sketches by Fiona Latham, our artistically-gifted Archives Assistant (she also designed the NDAD logo). With the need for simplicity and clarity in mind, we decided that virtually every page should include:

- A navigation bar at the top giving direct access to key web site key entry-points, in the form of plain buttons in a pale orange (we like to call it "mango")
- Equivalent text-only links at the bottom (a widely-used convention)
- A grey-shaded strip on the left hand side of each page, where a number of buttons could be placed, offering links to other pages of direct relevance
- The pale blue NDAD logo.

In addition work was done to establish some basic principles for the layout of text, and the use and placement of headings, since the original site suffered from many inconsistencies in its presentation of text. This in turn highlighted the need to establish consistent labels for pages and sections of the web site ("Dataset Documentation Catalogue" or "Catalogue of Dataset Documentation" - you will find both on the original site, but not, we hope, on the new.)

Combining structure and design

Initially a development web site was created using pages from the live website reorganised in a directory hierarchy that better reflected the designs agreed by the structure group. The visual designs were applied, and with these working models the process of discussion began in earnest.

Simple as the fundamental ideas seemed to be, the difficulty of implementing them was surprisingly great - quite apart from the fist-fights that broke out over the more refined aesthetics of the site! The many levels of the catalogues, and their interdependencies, frequently required clarification, and long discussions with the archivists often ensued. Many of these revolved around exactly the navigational problems, within the many levels of catalogues, that we were trying to minimize for our users, and it was out of these discussions that the concept of the "lift shaft" eventually emerged.

There had been some early doubts about the usefulness of the grey bar down the side: some alternatives were tried, but proved no better. It became apparent, however, that within the archive the side-bar could very clearly represent the several levels of cataloguing, with high-level catalogues at the top, descending through increasing levels of detail to the sought-after data at the bottom. Thus, as one descends through the hierarchy, appropriate links populate the left-hand bar. Where links to levels below depend on a choice being made in the body of the page, they are **not** shown in the side bar: for example, if the current page is the Series-Level catalogue, a direct link to a dataset table makes no sense, as the user must first select a dataset from the catalogue, and then a table in that dataset

Overall this visualization offers a clear idea of where a user is relative to other levels, echoing the hierarchy of the separate [site map](#), and it will consistently support all of the catalogue structures we currently anticipate dealing with. Even NDAD staff have benefitted from the clarity of this view.

Away from the data and catalogues, in the information sections of the site, the side bar has a less rigorous structure, but still enables important related areas to be drawn to the attention of the user.

Implementing the design

Perhaps the biggest challenge of implementing the design was finding the right combination of HTML to render our designs as well as possible in as many browsers as possible. Some features we wanted to include could not be supported by older browsers, but we have tried to adhere to the principle of "graceful degradation": where we felt we needed to use a feature from HTML 3.2 that is not supported in earlier versions, we ensured it was not a "core" function, and checked that the pages would maintain at least the essential aspects of their design and functionality on older browsers. Even so, some features which we had thought elegant and desirable had to be discarded when no HTML code could be found that functioned adequately across a range of browsers.

We also wanted to avoid frames: these have been put to good use in some web sites where positional context information is important, but they can cause unnecessary difficulties in navigating, printing and text-searching, and an unnecessary maintenance overhead if the site is still to be accessible by browsers that do not support frames. A look around the web revealed that the frames boom appears to have died down, tables instead being used to achieve a similar layout and effect, so this was the approach we adopted.

In addition, we chose to avoid non-standard HTML or vendor-specific tags and properties. Avoiding tags in particular maintains an open, flexible aspect to the system. (Because of the continuing development of style-sheets, use of tags is deprecated in [HTML 4](#).) Nevertheless, attempts at rendering even simple, non-controversial HTML did not always produce the same or even similar results in different browsers. For these reasons, all of the HTML pages were created by-hand. HTML editors and page-designers were tried, but ultimately eschewed because the quality and consistency of the HTML they output was even more unreliable than the rendering of the pages in browsers.

At length, through trial and error, inspiration and perspiration, suitable HTML code, page layout, colours, buttons, text conventions emerged from our experimentation, and the many people who tried out our development site obviously felt much more comfortable with it than its predecessor.

As part of the process of formally documenting the new design, a draft style guide was produced for the guidance of those producing copy (catalogues, administrative histories, help pages, etc.) for the web site, and extensively-documented templates were created, representing each of the discrete page and document-types used in the web site.

We feel that the new web site design offers a major improvement to the NDAD service, and a solid, logical and reliable basis for future developments. We hope you like it too, and find it allows you to do what you want to do. Naturally, further enhancements will be added in time, and we depend on user feedback to inform us of any problems that we may have overlooked. All [feedback and comments](#) are most welcome, and in due course will be fed into the design process for the *next* generation of NDAD.

Conference at PRO in Kew

The recent PRO Conference at Kew provided an opportunity for NDAD staff to demonstrate the system to archivists from all over Europe, and to find out about other recent developments in the field of electronic information storage.



Several members of the NDAD team attended a recent conference "Electronic Access; Archives in the New Millennium. A showcase for the European Experience" hosted by the PRO. This 2-day event (3-4 June 1998) took place as part of the UK Presidency of the European Union.

The main reason for our presence at the conference was to describe and demonstrate NDAD, but we also wanted to gain an up-to-date view on what is happening elsewhere in Europe in the field of electronic archives, and, more generally, to

acquaint ourselves with the particular issues and concerns of the Archive community.

There were over 130 attendees from around 20 countries: apart from the UK contingents and representatives of the European Union countries, delegates from the Czech Republic, Hungary, Norway, Poland, Russia and Switzerland also attended.

The [opening speech](#) was given by Geoff Hoon MP, Parliamentary Secretary to the Lord Chancellor. Although he referred to NDAD, the point about the system that the audience took away with them at the end of his speech was not quite what we had expected or hoped for. Mr Hoon described NDAD as an "initiative for storing and giving access to large databases of material", and went on to explain: "Through a contract with the University of London, the Public Record Office has made provision for the preservation and public accessibility of historic datasets". But the point that caught the audience's attention and drew a laugh was when he said that the system's full title - United Kingdom National Digital Archive of Datasets - is not the easiest to remember. "It is probably quicker to obtain access to UKNDAD than to say it," he quipped. Sarah Tyacke, the Keeper of the Public Record, responded to this point agreeing that it was not the catchiest of names. Still, the NDAD team was relieved that there were no proposals later in the conference to amend the project name: although it wasn't *our* first choice, and we agree it doesn't trip off the tongue, the thought of a change of name at this stage didn't fill us with delight.

The presentations that followed during the two days of the conference covered a wide range of topics. Coverage of **Day One** included:

- the role of Archives Services in the Information Society
- the PRO project "Archives Direct 2001" to create an online Public Record
- the proposal to create a UK national archival network and the 6 individual demonstrations.

Most of the afternoon of Day One was taken up by the 6 separate sessions:

- The development of archival information systems in the National Archives of Sweden
- The SCAN Project - National Archives of Scotland
- Surfing without losing course: an archival description system in the Internet era - Archivio di Stato di Firenze,
- UK - MI5, the CD
- UK National Digital Archive of Datasets - ULCC/ULL
- Electronic Records from Office Systems (EROS) - PRO

The NDAD session was well received but giving the same talk 6 times was quite a task for Kevin. NDAD was briefly described and then demonstrated leaving time for questions at the end of each session. In such a short time it was barely possible to scratch the surface of the system's features and potential, but hopefully it generated sufficient interest for attendees subsequently to visit the NDAD web site.

With the comments about the project's name still in our minds, Kevin included in the presentation some of the [many acronyms](#) that had been suggested for the system, and for various reasons rejected - including GRANDAD, which seemed surprisingly popular with some of the delegates!

In order to cram so much into such a short time, the PRO had divided the attendees into 6 groups, shepherding them to the 6 different locations, ensuring no-one was lost en route, and trying to stick to a very tight time-scale (20 minutes for each session with 5 minutes' travelling time for getting from one to the other). This provided considerable scope for non-adherence to the timetable and for people to be in the right place but at the wrong time, but the PRO are to be heartily congratulated that their 'group guides' managed to keep control of 130 attendees and ensure that all (well, nearly all) were back in the main conference room for the concluding plenary session, only a couple of minutes behind schedule.

Day Two focussed on electronic records, with contributions offered by European experts and users:

- the European Union Electronic Records Programme (describing follow-on activities from the DLM Forum)
- Electronic Records Management Systems (describing the initiative of the DLM-Forum Working Group on Model Requirements for the Management of Electronic Records)
- Progress towards Electronic Document Management in the Department of Health, legal issues in the field of electronic documents and records management; international training projects
- and the need for co-operation in developing/implementing electronic record education and training programmes.

The text and/or abstracts of many of these talks are currently available at the PRO web site: <http://www.pro.gov.uk/news/euro.htm>. The sessions also generated some interesting informal discussions.

It was a useful and interesting conference, with the bonus of being out of central London and in the pleasant atmosphere of the PRO at Kew.

NDAD Acronyms

A search of NDAD's own project archives and discussion groups revealed the following suggestions made at various times by members of the team:

- **GRANDAD** (Grand Regional And National Dataset Archive Database)
- **PROSE** (Public Records Online Secure Environment)
- **VERSE** (Versatile Easy-to-use Responsive Search Engine)
- **POETRY** (Prepotent (Lat.) Organ To Research Yesteryear)
- **PANDA** (Public Access National Data Archive)
- **NERO** (National Electronic Records On-line)
- **HERA** (Heterogeneous Electronic Records Archive)
- **ADONIS** (Archive Data On-line National Information System)



Personnel Profile

Frances Blomeley is one of the NDAD team's Data and Applications Specialists. Frances has worked with a number of our early datasets, consulting with government departments and analysing the data received, and she has also worked extensively on the redesign of the Web Site.

My first degree was Zoology and Psychology at Manchester University. I chose this course as I wanted desperately to find out how brains work; although I learned a lot, but it was not until several years later, when neural networks appeared, that I felt that I understood how brains work.

After graduating, I found myself in Bangor in North Wales, registered for a PhD in the Psychology department of the [University College of North Wales](#), and specialising in a remote backwater of Skinnerian operant work.

My 3 years in Bangor were wonderful in many ways: partly because of the people and the scenery (I could see the mountains of Snowdonia from my office), but also because I finally got my hands on a computer - the Apple IIe.

I had been intrigued by computers for a very long time. For many years I tried to find out how a computer worked; I could not imagine what a computer program was or how it worked. I was always thwarted in some way: for example the undergraduate degree course I had chosen was one of the few at Manchester not to include a computing component. With hindsight, this may not have been a bad thing...

Meeting the Apple IIe changed all that. It's probably fair to say that it changed my life.

Also while at Bangor I became more interested in statistics, and gave a few lectures and tutorials, and helped to teach undergraduates how to use SPSS on the DEC-10. For my own work, I used a Data General NOVA 1200, with programs written in FORTRAN IV, for controlling experiments, simple statistics, and curve-fitting.



My first job was in 1984 as a trainee applications programmer in the Computer Centre at the Polytechnic of Central London (now the [University of Westminster](#)). During my 7 years with PCL I gained a good grounding in a wide range of operating systems, programming languages, and applications.

In 1991 I moved to the Computing Centre at [King's College London](#), initially to provide user support in statistics. By the end of 1991, use of wide area networks, and the applications which ran over them, was growing in the academic community, and I switched from providing statistical support to providing network services support. At that time the UK was a multi-protocol network environment, with numerous different ways of interacting with remote hosts. Trying to understand how the whole system worked, in order to pass on that understanding to other users, required knowledge which ranged from the transmission of bits to national and international politics. At this time a colleague suggested that I write a book on the subject; I leapt upon the idea enthusiastically and spent the next 2 years repenting. But I learned something about networks.

As network services, or rather the Internet, grew, my role at King's became more specialised, and by the time I left King's I managed the Web service, and the News service, and provided the technical input for local Web information providers to make the most of the new medium. Also during this time I was seconded to UKOLN for one day a week for a year, looking into Z39.50, its applications, and its interoperability.

I applied for the NDAD post at ULCC primarily because I had developed an interest in the world of archives, through involvement with the Web front end to the [Liddell Hart Centre for Military Archives](#) at King's, and with the National Networking Demonstrator Project (NNDP). I joined ULCC in February 1998.

Outside working hours, I've been a technical consultant for [Project EARL](#) for three years, helping to build Web-based services around public libraries.

My greatest achievement was to rewire my house - or at least to install 2 ring mains, including 17 wall-recessed sockets. It is still nice to think that this piece of text is being generated by a word processor running on a computer which is running on electricity which is fed by cabling laid by me.