

Guiding the Way to Healthy Resource Creation

WHILE THE PROLIFERATION of digitisation projects is pleasing to those highlighting the advantages of electronic culture, their enthusiasm is tempered by the problems that accompany the creation of objects in digital form. Digitisation is not a straightforward business, and there are numerous possible methods for running a digital project. This heterogeneity is worrying, for without following established standards and practice, the lasting health of digital collections is severely jeopardised. For example, failing to cater for possible changes in hard and software could mean that a resource becomes inaccessible in the long- or even medium-term future. Equally, developing a resource without providing quality metadata means that it will not be interoperable with other resources. While this will not make a resource redundant, it makes the access of the resource a much more difficult proposition.



<http://ahds.ac.uk/public/guides.html>

The Arts and Humanities Data Service is committed to preventing such problems by providing resource creators with detailed advice on good practice and best standards in digitisation. Numerous channels exist for doing this. Guidance can be sought via informal communication over email or telephone, various training workshops or digital essays on the AHDS website. But the most comprehensive advice is made available in the AHDS Guides to Good Practice series. Each of the AHDS' five service providers has published guides on various issues relating to digitisation in their field, as well as offering extensive glossaries and bibliographies. This edition of the newsletter draws attention to some of these specific concerns. The History Data Service looks at database design, while the Performing, and Visual Arts Data Services give an indication of their experience in metadata cre-

ation. The Oxford Text Archive refers to markup and delivery issues in creating and disseminating electronic texts, while the Archaeology Data Service emphasises the importance of working with other organisations in order to develop digital archaeological standards.

The guides are available for free via the AHDS website <http://ahds.ac.uk/public/guides.html>. For the price of £10 each, most of the guides can be purchased in printed form, via the publishers Oxbow Books <http://oxbowbooks.com>

arts & humanities online



ARTS AND HUMANITIES ONLINE is a series of events organised by the AHDS and Humbul (the Humanities Hub of the Resource Discovery Network) to inform librarians and academics of online resources available to them in the arts and humanities. On pages 2 and 3, AHDS Information Officer Philip Pothen gives an overview of what the series is trying to achieve, while one attendee, Luisa Carrer, gives her thoughts on the event held in Edinburgh.



Members of the AHDS Executive and the Arts and Humanities Online Organising Committee (*from left*): Eileen Boyce, Alastair Dunning, Chris Pressler, Philip Pothen, Liz Lewis.

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Arts and Humanities Online all you need to know!

IF THE PROMOTION and implementation of standards, detailed in the rest of this Newsletter, are a vital component of what the AHDS does, so is our commitment to disseminating information about the resources created using those standards. For this reason the quality of our collections and their reusability for research, learning and teaching need to be promoted energetically. In addition, the AHDS occupies a position at the very heart of nationally-funded online provision in the Arts and Humanities, and this is something that remains central to our strategy and our activities.

It was with these ends in mind that the Arts and Humanities Online series of events was conceived. Jointly organised by the AHDS and the Resource Discovery Network, it was planned as a means of giving an introduction to the full range of JISC-funded services in the Arts and Humanities and to detail how these resources fit together within a coherent and comprehensive network of information. The services involved include not only the AHDS



Professor Bruce Brown, Director of the LTSN Centre for Art, Design and Communication, speaking at the first Arts and Humanities Online

and the Humbul Humanities Hub of the Resource Discovery Network, but also EDINA (Edinburgh Data and Information Access), MIMAS (Manchester InforMation and Associated Services), SCRAN (the Scottish Culture Resources Access Network) and the Resource Guide for the Arts and Humanities. An important feature of the series has also been the involvement of the new Learning and Teaching Support Network centres, a different LTSN centre being represented at each event.

The series began with the launch at the British Library in December, and has covered Bristol, Edinburgh and Manchester, and will end in Belfast and Dublin (at the invitation of the Academic and National Libraries Training Co-Operative in Ireland) in May. By then some four hundred delegates – a mix of librarians, IT support staff, academics, staff development officers and many other interested parties - will have attended the series. Evaluation up to the time of printing has been extremely positive, suggesting that a follow-up to the series, perhaps in the shape of hands-on workshop sessions, would be a suitable and very popular development.

Other features of the series include an exhibition during the breaks, which has given delegates the opportunity to meet representatives from the services, to establish contact and to give feedback. There has also been a lively panel session, with discussions about some of the key issues facing support and academic staff in HE and FE institutions in their attempt to disseminate online resources to students, staff and researchers. These are key questions for us as services, and the AHDS has taken an important lead through these events in initiating this debate.

In connection with this, we include the following article (on the next page), written by Luisa Carrer, a research student from the University of Edinburgh. Luisa aims to identify some of the reasons why she attended the Arts and Humanities Online event in Edinburgh and outlines what lessons she learnt from the day.

*Philip Pothen, Information and Training Officer,
Arts and Humanities Data Service Executive*

I REMEMBER WHEN, fifteen years or so ago, a grey machine called a Commodore 64 first entered my house. It didn't take more than a couple of hours to assert itself as a fifth member of my family, such was its immediate power of attraction. To my little-girl eyes, that big return key could solve whatever task: calculations, translations, pieces of research ... i.e., all my due-for-tomorrow homework.



In the exhibition areas, friendly staff were on hand to speak about digital resources

On attending the recent Arts and Humanities Online seminar at the University of Edinburgh, my thoughts went back unexpectedly to that time. Whether fulfilling sophisticated bibliographical searches in the humanities at large, running through online downloadable publications, or consulting subject-based data services for both academic and educational purposes, a web browser and the return key might be just about all the user now needs.

As a first-year PhD student in Comparative Literature and Technology at the University of Edinburgh, not new to computers and information technology, I found the Arts and Humanities Online workshop a really useful, indeed essential means of finding my bearings within the constantly-evolving picture of online arts and humanities resources. As a matter of fact, and Liz Lewis rightly pointed it out in her talk, it is often hard both for new users and those in the know, such as librarians or researchers, first to decode the dozens of acronyms which clutter the field; secondly to be able to apply effectively those services which lie behind them; and finally, perhaps, to find the time and means to promote the value of digital resources in learning, teaching, and research within their own working environments. Barriers to a straightforward and well-founded use of electronic tools are a fact, and this may not only depend on how

users are pointed to resources by institutions or data centres, but also on the widespread concern about their intrinsic quality. Very often, such concern breeds cultural resistance within students and academics unfamiliar with IT.

The crucial need is for promotion and training on a large scale. JISC-funded initiatives like the Arts and Humanities Data Service, the Resource Discovery Network (RDN) and the Resource Guide for the Arts and Humanities, along with Learning and Teaching Support Network (LTSN), are fundamental mechanisms for doing so. On the one hand, they can raise awareness and give a coherent and unified provision of the range of the resources available - mostly selected in advance on the basis of quality and subject-relevance. On the other hand, they can offer a variety of activities - upon-request meetings, forums, workshops - to promote effective use of the resources among individuals or project groups.



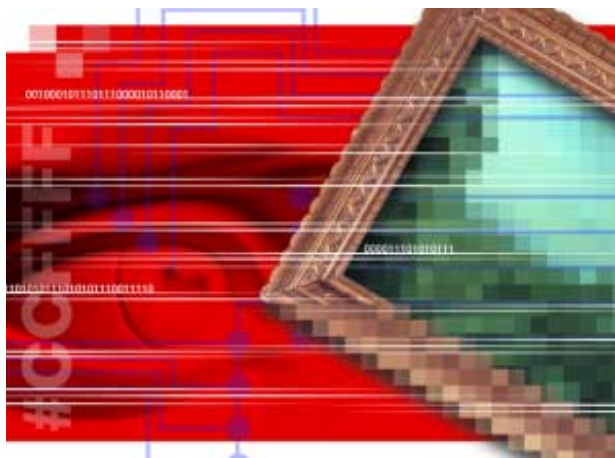
Delegates discuss the benefits of digital resources during the lunch break

My PhD at the University of Edinburgh project aims at developing a comparative study of Italian and British (mainly Scottish) early 19th-century literary reviews, according to a content critical approach, and with a view to digitising those parts relevant to my work. Though just starting, so far I have encountered encouragement and offers of collaboration within my institution. The Arts and Humanities Online seminar met my needs by providing me with accurate and up-to-date supporting material both on what has been done and what is now under way in the field, and also by stimulating (had that been necessary) all our enthusiasm for the potential of IT and therefore of digital resources in the arts and humanities.

*Luisa Carrer
PhD Candidate, University of Edinburgh*

Getting to the Core of Data Description

IMAGINE THE following selection of images - a painting of a gunship patrolling the high seas; a photographic negative of a state-of-the-art oven, circa 1950; a snapshot of a floral print dress designed at the London College of Fashion; and a colourful art deco poster advertising the joys of a trip to the zoo. Such disparate images, transposed to digital format, are all part of the Visual Arts Data Service's (VADS) growing collection, amassed from various digitisation projects. One problem with gathering sources like these is that they tend to arrive at VADS from a variety of locations and with different standards of documentation. VADS, however, needs to be able to present a uniform method for classifying the images. If disparate images are not catalogued in a systematic fashion, users will be unable to search effectively for the images they want.



The cover from the VADS' Guide to Good Practice

Overcoming the above problem is just one example of the role the VADS plays as both a user and disseminator of good practices and standards for Visual Arts data management. By employing existing standards and helping shape new ones, VADS is ensuring that their own collections will continue to live a healthy digital life. And through a programme of consultancy, publications and workshops, VADS disseminates knowledge of these standards to other data creators.

VADS' advisory role is undertaken collaboratively with other appropriate services and

organisations whenever possible. VADS' recently-published *Creating Digital Resources for the Visual Arts: Standards and Good Practice* was co-authored with the Technical Advisory Service for Images (TASI) and is available online at http://www.vads.ahds.ac.uk/guides/creating_guide/contents.html Relevant workshops have also been organised with Edinburgh Data and Information Access (EDINA) and the Performing Arts Data Service.

To tackle the problems of coherent image description outlined above, VADS implements the *Visual Resources Association Core Categories, Version 3.0 (VRA Core 3.0)* in its on-line delivery systems and from there promotes this standard to the wider community.

VRA Core 3.0 is an image-cataloguing standard that has been developed, according to its parent, the Visual Resources Association, to describe "works of visual culture and the images that document them." In all, the published *VRA Core 3.0* standard has 73 fields, which allow data creators to provide flexible and extremely user-friendly descriptions of visual arts materials in their original and digitised form. By creating metadata entries using the relevant fields of the 73 suggested, data disseminators such as VADS can develop detailed descriptions of their collections, whatever the standard used for the original documentation.

VRA Core 3.0 was chosen by VADS as the basis for its image collection data-structure, not only because it is one of the foremost standards for works of visual culture, but also because it promotes the use of a standardised vocabulary, which aids quality and consistency when creating descriptive data. More significantly, however, VADS adopted *VRA Core 3.0* because it relates directly to other visual arts (and other more generic) electronic resource description standards, such as the *Categories for the Description of Works of Art* and *Dublin Core*. This inherent mapping of *VRA Core 3.0* to other standards allows for potentially increased integration of digital image records across diverse systems, a vital benefit given VADS' goal of building an interoperable on-line archive of digital resources. More detailed information on *VRA Core 3.0* can be found at <http://www.vraweb.org>

VADS is currently organising a workshop, in association with TASI, offering metadata guidance and advice on using *VRA Core 3.0* to a series of image collection projects for the JISC Distributed National Electronic Resource (DNER). Once this is completed, further guidance details will be available for the community as a whole.

Brenda Brinkley and the VADS team

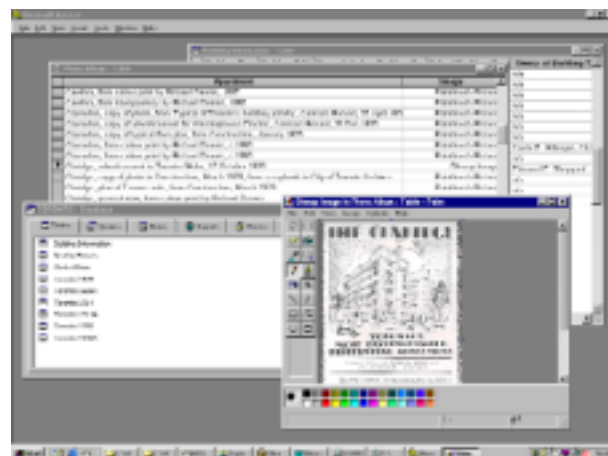
Coming to Terms with History: Good Practice in Database Design

DIGITAL RESOURCES based on historical sources reflect the original material but cannot completely replicate it. This is a situation peculiar to historical IT projects: the structure and content of historical sources usually impose restrictions upon the design of digital resources to an extent not often found in other situations.

When creating a digital resource, the historian has to balance two conflicting aims. On the one hand the resource should reflect the source as accurately as possible in terms of the organisation of information. This approach ensures that any information is not inadvertently excluded before its value is realised. On the other hand, the whole point of computerising historical sources is to increase the usability of the original source by rearranging the information into a form that a computer can manage. Historians are necessarily drawn into a compromise in this situation, and so good practices and established standards become an essential aid to the resource creation process. For an example of the compromises reached by one project, see the AHDS case study on the Gloucester Port Books project at: <http://ahds.ac.uk/casestudies/gloucester.html>

The History Data Service Guide to Good Practice *Digitising History* http://hds.essex.ac.uk/g2gp/digitising_history/ is one source where resource creators can find advice on how best to approach good resource design. The Guide emphasises that good practice begins with the design of the digital resource: the initial model “ultimately influences whether the [resource] can be used effectively by both the project itself and further researchers.” The Guide provides assistance on all the key areas of digital resource creation. These include the processes involved in selecting appropriate standards, and the issues involved in choosing software suitable for

the project. There are recommendations on managing data entry, as well as advice on issues connected with preserving the resource.



Applying good practice is all the more important as resources become more sophisticated.

Two particular aspects of good practice that are also discussed in the guide but are very often neglected by data creators are those of documenting the digital resource, and project management.

Good documentation is vital if a digital resource is to remain technically viable and intellectually valuable in the long (or even short) term. If historians have chosen not to record certain parts of the original source because they cannot be easily captured in digital format, this must be acknowledged. Equally, the resource creator must also notify users where the original data has been simplified to aid computer readability. Failing to provide documentation means that later users will be unable to determine the extent to which the electronic resource is related to the source from which it has sprung. Besides the guide, the HDS provides introductory guidelines for documentation on its web site at: <http://hds.essex.ac.uk/docguide.asp>

Sensible project management is needed as resource creation projects can involve many people working in different locations on distinct but interrelated tasks and with a variety of methodologies. This makes a clear management structure and formal communication vitally important. A particular point to note is that work should be planned on the basis of real estimates of the time tasks will take, preferably gauged after preliminary pilot projects. The HDS guide suggests methods of dealing with such obstacles.

The HDS realises that digital resource projects can be complicated affairs. Historians embarking on such a project, particularly those doing so for the first time, should contact the HDS at an early stage

in their planning. The HDS has a range of introductory information and can, when needed, provide in-depth advice to individual projects. As well as our own expertise we can refer questions to other AHDS service providers, or to other technical advisory services.

Mark Merry and Hamish James, HDS

Mapping Performance - The PADS and Metadata Creation

THE PERFORMING Arts Data Service regularly deals with enquiries from data creators who, having undertaken preliminary research into documentation standards in music, theatre studies, dance or film, are confused by conflicting rules, schema, and advice.

Cataloguing non-book materials such as music scores, photographs, cassette tapes, vinyl records, film stock and all the other items common to performing arts collections has always proved a challenge. Specialist libraries and archives often devise their own in-house schema rather than try to slot specialised collections into universal standards devised primarily with book materials in mind. Performing arts materials commonly have very complex cataloguing needs which are often extensions of problems also attached to printed materials (transliteration of titles, multiple parts etc.) In regard to the digital environment, a particular difficulty is often the tension between the need to document the intellectual content of the resource as well as provide information relating to its format and access. As many resources are also restricted to certain pre-defined uses, it is usually necessary to create additional administrative information to track rights owners and document permitted exploitation of the resource.

Finding appropriate solutions for the documentation of digital resources within this confusing environment is therefore a crucial PADS service, and we are keen to keep abreast of new developments (for example, the excellent work undertaken at the *Minnesota Public Radio Digital Audio Archive* in mapping broadcast materials to the Dublin Core / RDF framework available at www.openarchive.org/meta/).

Enquiries to the PADS often result in the deployment of our 'metadata taskforce', espe-

cially since we are increasingly (thanks to our relationship with funding bodies such as the Arts and Humanities Research Board and the Research Support Libraries Programme) contacted at the start of large-scale digitisation projects, rather than being offered completed resources. The PADS places a high priority on the development of metadata appropriate to a wide variety of data creation, retrieval and preservation needs and we are keen to learn from the varied experiences of our data creators. In many cases, this involves a site visit, round-table discussions with staff involved in



*The PADS have recently introduced a new logo, signifying their hands-on approach with resources such as the *Designing Shakespeare Multimedia Archive*.*

data creation and detailed scrutiny of the proposed data structures. Whilst the PADS recommends the use of the Dublin Core / RDF framework for description of digital resources, implementation often involves a complex mapping of existing concepts and, particularly where a number of archives or libraries are involved (for example, the RSLP-funded *Backstage Project* currently in development and led by the Templeman Library at the University of Kent at Canterbury) several discussion sessions are likely to be necessary as refinements are made to mappings.

The PADS also occasionally has the opportunity to pursue a further involvement with the data creation process. Currently two members of the PADS team are partly seconded to an AHRB-funded project, the *Designing Shakespeare Multimedia Archive* (see the AHDS Case Study at <http://ahds.ac.uk/cases-studies/shakespeare.html>) and are creating Dublin Core metadata both directly from paper-based research resources and from existing database records.

A lucky member of the PADS team will also be

visiting the Humanities Computing Unit at New York University in March. The PADS will advise on a joint initiative with the *Franklin Furnace* <www.franklinfurnace.org> which has an extensive archive of videos of performance art by New York artists, from the 1970s to the present day. The unit is working with the director of the Franklin Furnace, Martha Wilson, to create a prototype archive of the collection, and to investigate the feasibility of streaming this over the Internet.

Catherine Owen, PADS

ADS: Standard-Bearers for Digital Research

ARCHAEOLOGISTS NEED little encouragement to avail themselves of the opportunities afforded by digital technologies. Indeed, the opposite may be the case. The problem is not so much techno-phobia as an occasional over-enthusiasm to embrace new technologies and experiment with new tools. This provides the Archaeology Data Service - whose role is to foster and promote good practice with digital technologies - with an obvious role as a technical advisory facility for those funding that research, and also a role to disseminate and develop standards that are relevant to a wider community. The ADS' three published Guides to Good Practice are at the forefront of that development and dissemination role. Indeed in one case a curatorial organisation responsible for setting project briefs to professional contractors was recommending adherence to the standards set out in the ADS Guide to archiving geophysics data some three years before its due date of publication!

Contrary to appearances, the ADS has not actually written any guides. This may sound like splitting hairs, but the guides actually emerge out of expert working groups with contributors that have particular knowledge of particular issues. The ADS' contribution is to bring these people together. Often they are the pioneers in the field who developed the technologies that others have since adopted; at other times they represent "cultural memory" organisations with expertise in preservation and access. In all cases, however, the dynamic of writing the guide presents not one but two products: the guide itself and the network of expertise that created them. Thus, as well as providing a vehicle by which novice users can obtain the most up to date and accurate advice from expert practitioners, the working parties that come together to write the guides put

leading edge developers in touch with up-to-the-minute advice on preservation and access. The ADS is aware that bringing these groups together should be an on-going concern. The pace of change in the archaeological digital archiving world is so rapid that the *Excavation and Fieldwork Archiving Guide* is now in its second edition. The recommendations in the first edition were overtaken in less than a year from its initial publication.



The cover to the ADS guide 'Digital Archives from Excavation and Fieldwork: Guide to Good Practice'

Not only do the guides fulfil a crucial role in informing the development of academic research, they are also having a palpable impact on professional standards. Standards are by no means new in archaeological research. For many years, organisations like the Institute of Field Archaeologists (IFA) and the Data Services Unit of English Heritage have been working to improve and disseminate guidance on recording practices, conservation and the like. The ADS guides complement these activities very neatly by providing specific advice on the sustainable and appropriate deployment of information technology. Consequently, the guides draw upon existing professional standards, and are drawn into them too. Thus, the second edition of the ADS' *Digital Archives from Excavation and Fieldwork: Guide to Good Practice* is in part modelled on English Heritage's *Management of Archaeological Projects*, while the ADS have been invited to help the IFA to develop professional standards based on the guides. In short therefore, the widespread adoption of the guides mean that professional and academic standards in archaeology are starting to converge.

The research community stands to gain more than any other group from this convergence. The majority of field research in European archaeology takes place in advance of building or other development. The results of that research seldom see the light of

day, even when money is found to publish them. By encouraging the professional sector to consider issues of digital archiving and dissemination, the ADS aims to unlock the untapped potential of this vital but precarious asset. Archaeologists need little encouragement to use computers - the trick will be to share the rewards.

William Kilbride, ADS

The OTA Makes History

"HISTORY IN THE MAKING" <http://www.hull.ac.uk/hitm/> is a collection of digital texts and images which centre around the events of 1848 as described in Part III, Chapter I of Gustave Flaubert's "L'Education Sentimentale", using HTML to facilitate extensive hypertext linking. In addition to the text of the chapter itself, the resource comprises over 300 densely written folios (plans, sketches, rough drafts) and a large quantity of historical and documentary notes which set Flaubert's writings in context. From the outset the resource was conceived as a hypertext package and employs a skillful and sophisticated use of HTML technology, including the extensive use of hotspots to link the manuscript images to their textual transcriptions. The authors wanted to demonstrate the new possibilities opened up by the non-hierarchical configuration of textual and non-textual material characteristic of hypertext, allowing the reader to move easily through the online material in a non-linear way, offering new, multiple readings of the events described. If sufficient resources become available in the future, and new material is added, upgrading the resource to an XML format would be desirable to ensure its long term viability as a scholarly resource for the study of literature and 1848 French Revolution.

Tony Williams, Professor of French at Hull University, the principal author of "History in the Making", first got in contact with the Oxford Text Archive in the Autumn of 1999. Satisfied that the project was on a sound technical footing, and was using standards appropriate to the project's needs and available resources, Professor Williams spent the next year developing the resource, and recently has been back in contact with the OTA to discuss possible deposit options. There is no one method by which the OTA will accession new deposits, we offer a number of services, ranging from a

secure archive-only option, to making resources freely available for download from the OTA web site. Informal negotiations, usually by email, help to establish what the depositor wants while ensuring at all times that the resource will be properly preserved and documented.



An image ('La Barricade de Rue St Martin') from the 'History in the Making' resource

The prototype of the resource was sent to the OTA on CD-ROM, but the project was originally conceived as a web based resource. It is likely that "History in the Making" will be available from the OTA as a single downloadable zip archive, with the option of mirroring the original Hull web site. Limited CD-ROM distribution has also not been ruled out. When the resource is ready for deposit a copy of the OTA Depositor Pack will be sent to Professor Williams for signing. The pack contains a non-exclusive deposit license, which ensures that all rights for the resource remain with the depositor, thus allowing him to distribute the resource in his own way, including commercial publication, while maintaining a preservation copy with the OTA.

Alan Morrison, OTA

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