Catalogue & Index

Editorial

This issue of Catalogue and Index deals with the wide reaching topic of access. Access can be viewed in terms of physical entry to a building, collection of objects or archive. Access is also pertinent within the realm of digital assets and the metadata created to enhance and alleviate the stress of finding stuff when and how you want it.

Our main article is from Natasha Aburrow-Jones who works for the project SUNCAT. Natasha gives us an insight into the challenges of creating and maintaining a national serials union catalogue for the UK. SUNCAT aims to provide locations and holdings of serials in research libraries as well as being a source of high-quality bibliographic records for cataloguers. *This article was developed from a paper delivered at CIG Annual Conference 2006.*

Irene Lafferty of the National Maritime Museum takes the theme of access to explore development of terminology sets to enhance access to objects at the NMM, whose collections cover everything from astronomical and time-keeping instruments and ship models to weapons and fine and decorative arts. Irene describes the issues surrounding access to such a diverse collection.

Robin Smith, Senior Manuscripts Curator for the National Library of Scotland describes the huge undertaking creating metadata for the recently purchased John Murray Archive, a collection of world importance. JMA includes material from past luminaries such as Lord Byron, Jane Austen,

Charles Darwin and David Livingstone.

Gerald Burla and Aimee Ellis are further afield in Yukon and inform us of the work by the cataloguers at the Yukon Energy, Mines and Resources Library. The team had difficult decisions initially as to how granular their approach should be; collection, item or set of images. *This article was developed from a paper given at Internet Librarian International in London in 2006.*

Julie Johnstone from the Scottish Poetry Library illustrates the library's creative use of indexing for access to poems Julie describes the intricacies and philosophical debate which occur when cataloguing a poem.

Mike Heaney, Bodleian Library at Oxford University, describes the challenges and future developments of the library catalogue.

Our final article is a transcript of a speech from well-known librarian, Stuart James, former Chief Librarian at the University of Paisley. Stuart retired at the beginning of 2007 and CIG Scotland held an informal get-together and presentation at their AGM. Stuart was a founder member of CIGS and will be missed by all who knew and worked with him.

Penny Robertson, Editor, C&I

Contents

SUNCAT: the creation, maintenance and challenges of a national union catalogue of serials in the UK

Natasha Aburrow-Jones, Project Officer, SUNCAT.

Introduction

SUNCAT is designed to be the national serials union catalogue for the UK, supplying locations and holdings of serials in research libraries, as well as being a source of high-quality bibliographic records for cataloguers. A "serial", as a definition covers a multitude of publications. AACR2[1] discusses "continuing resources", but a simpler definition is that the term "serial" covers periodicals, newspapers, magazines, journals, annuals, and so forth, which are issued in intervals, whether those are regular or irregular. Serials are prone to title or issuing body changes; mergers; absorbing other titles, and so forth; the cataloguing of serials is rarely straightforward.

This is the first time that such a catalogue has been built in the UK, covering all regions, and subject areas. SUNCAT covers the entire journal as an entity, and does not include article level information; integration into the wider information environment is essential to link SUNCAT into the world of articles. Building SUNCAT has raised some interesting challenges, which are discussed below.

A brief history

In 2001, research was undertaken to examine the feasibility of developing a UK National Union catalogue for all materials[2]. One of the main messages that emerged was a real need for improved information about serials held and their locations and holdings. A major issue raised was that of variable bibliographic and holdings data in library catalogues.

As a result of the UKNUC feasibility study, it was decided to develop a serials union catalogue. Following a scoping study[3], an Invitation to Tender was issued, initially for a two year period, with funding from the JISC (Joint Information Systems Council) and RSLP (Research Support Libraries Programme), with the purpose of building a UK Serials Union Catalogue. (Later funding was supplied by the JISC alone.)

This was scheduled in three phases:
Phase 1, from February 2003 to December 2004, created the catalogue, and populated it with data from the ISSN Register and the CONSER database, along with data from 22 major UK research libraries, including five copyright libraries.
Phase 2, from January 2005 until December 2006, builds on the work undertaken in Phase 1, increasing the number of libraries contributing to SUNCAT. A pilot service was launched in February 2005, which became a full service in August 2006.
Phase 3, running from January 2007, will be a consolidation of the service, including the addition of some unique developments, and resolution of outstanding issues concerned with duplication of records.

The contract for the creation of SUNCAT was awarded to the University of Edinburgh, led by EDINA, one of the two JISC-funded national data centres, based in the University. EDINA provides access to data and research resources to UK Higher and Further Education Institutions. Project Partners to EDINA are Ex Libris, who supply the Library Management System (LMS) that underpins SUNCAT, called Aleph, and have contributed greatly to SUNCAT developments.

Aims

SUNCAT has two primary aims, which resulted from the findings of the feasibility and scoping studies.

For researchers: a source of information about location of serials, including information about access, for print, electronic and any other type of format of serials.
For librarians: a source of high-quality bibliographic records, available for download, enabling libraries to upgrade records on their local catalogues, and to act as a location tool for reference and inter-library loans.

An additional, but important, aim is to raise consciousness of the importance of quality serials information among UK researchers and librarians.

Contributing libraries

SUNCAT could not exist without the hard work put in by its contributing libraries. In Phase 1, the contributing libraries included both national and university libraries, selected on the basis of their significant and large research collections. The CONSER database and the ISSN register were also purchased. The combination of these databases, coupled with the serials data from the 22 Phase 1 contributing libraries, provided over four million bibliographic records to populate SUNCAT, and provide critical mass.

Phase 2 contributing libraries were chosen to increase the number of unique titles in SUNCAT, and thus provide as complete as possible a list of all titles held in the UK. This included data from a further 50 libraries. As well as additional university libraries, some major public

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libraries and libraries from learned societies and specialist bodies are included. The inclusion of these smaller, specialist libraries ensures that SUNCAT will hold many unique titles not widely held in the UK, and these collections are made more visible to researchers and librarians alike. Geographically, these libraries cover the length and breadth of the UK – from Stornoway on the Isle of Lewis, south to Exeter, from Belfast in Northern Ireland and the west, to the University of East Anglia in the east[4].

Technical description
SUNCAT uses the Aleph 500 software, supplied by project partners, Ex Libris[5]. Aleph is used world-wide in many major academic libraries. Aleph possesses the functionality of being able to display information in union view. Essentially, this means that SUNCAT is a physical, centralised union catalogue, with data from all its contributing libraries stored in a single database. Titles are deduplicated to view, so that there is a single bibliographic record for each title with a list of holdings. This deduplication takes place "on the fly", at the point of display. Records for the same title are matched together in sets, using a complex algorithm, with the fullest record from the set chosen as the one for display. Before load, the SUNCAT Identifier is added. The matching algorithm matches above format, so that records for electronic and print journals will match together, to create a clear and easy display of SUNCAT.

Data manipulation
Processing of the data from contributing libraries has proved to be an interesting experience, showing the range in data quality and local practices, seen not only across libraries using the same LMS, but also those which are library-specific. Harmonisation of data into a form

suitable for loading into the database provides one of the challenges inherent in SUNCAT.

Firstly, the contributing library sends a file of its serials data – bibliographic and associated holdings records – to the SUNCAT ftp server, preferably in a MARC communications format. However, text files, and even word documents and Excel spreadsheets have been accepted. A data specification is then drawn up, based on close inspection of the data, and the answers to two questionnaires supplied by the contributing library. The data is converted only after approval is given by the contributing library; the resulting conversion is checked before the data is loaded.

There is some standard data manipulation, which all files undergo in their data conversion. Some manipulation is Aleph-specific (such as placing the local control number in the 001 tag), and some is more to do with adherence to the rules in AACR2 and MARC (such as changing 245$h [computer file] to 245$h [electronic resource]). These are to ensure that these fields – where they exist in the record supplied by the contributing library – adhere to the SUNCAT upgrading standard, which is based on the CONSER minimum standard.

Holdings information is also standardised, as much as is possible. For a coherent display, Aleph uses the 852 tag in union view for both location and the textual summary holdings statement. The contributing library MARC organisational code is placed in the 852$a; the location is in the 852$b; the shelfmark in $h; and holdings information is in the $3. This is a non-standard use of the 852$3, but it was the best place for the data to be held, taking into consideration the display in the Aleph OPAC.

As well as this standard manipulation, each library has its own non-standard data manipulation. There are similarities between the data supplied by libraries using the same LMS, but each library has to be treated as unique. These LMS-specific themes are not enough to write a data specification; individual library practices make up the bulk of the data harmonisation. Every library has its own historical practices, and previous LMS legacy issues. These all have to be taken into consideration when writing the data specification. For those libraries which use UKMARC, there is an automatic conversion process into MARC21 (used by Aleph) during the normal conversion routine. For libraries using a non-MARC system, the data has to be placed into MARC21 before the data conversion can occur. This means that a separate specification has to be drawn up, in conjunction with the standard data specification. Fortunately, all the non-MARC libraries in SUNCAT have used a standardised form for their bibliographic records, which means that the conversion into MARC21 has been relatively painless. However, it does mean that the records created tend to be rather brief, and that can cause problems with matching in with records for the same title, thus adding to the duplication of records in SUNCAT[6].

It is only after thorough checking that the data is considered ready for load. Often, the writing of the data specification has brought some out-of-date practices to the attention of the contributing library, which has led to the bibliographic / holdings records affected being changed as a result.

SUNCAT must maintain the currency of the database. This is achieved by receiving updates from its contributing libraries, which are loaded in at regular intervals.

There are two types of update – a partial file, which contains only those bibliographic and holdings records in the library catalogue that have changed in some way, either new, deleted or altered, and a full file update, which is where the whole serials file is sent for replacing. This latter system of updating records is not without its pitfalls, but is being resolved.

Matching

SUNCAT offers a duplicated union view, so that there is a clear display, with one bibliographic record displaying holdings for all records for that title underneath. In order to achieve this, SUNCAT uses a sophisticated matching algorithm, whereby records for a given title are matched together, but kept separately, and holdings are merged at the point of display.

The algorithm matches records when they are loaded into the database; this algorithm is based on a complex points system, which was originally developed for Melvyl, the union catalogue for the California Digital Library. SUNCAT has made some refinements to this algorithm, to account for varying cataloguing practices. The addition of the BNB and the 7XX added entries (700, 710, 711 tags only) allows a greater flexibility on the matching. A set of records is determined in a three-stage process, involving an initial pool selection to retrieve potential duplicate records, then a quick-match facility (if a record matches with another on title and ISSN, and reaches the number of points over which threshold it is deemed a match, no further matching occurs), and, finally, a full match, if no quick match takes place. This final stage takes into account other, more detailed fields which help identify that particular serial title. Records are merged together to form a set.

The record that is chosen for display is known as the "preferred" record, and is

the fullest bibliographic record in a given set. This is chosen by a points system, governed by a table running behind the scenes. Points are given to the presence of particular fields, such as a 245, an 856, a 110, one point for each 6XX tag. The record in a set with the most points becomes the preferred record. Only the total number of tags is taken into consideration, not the quality of the information therein.

If a set has a title which occurs often to represent different journals, such as "Annual report", the title will be given fewer points in the matching process than normal, thus ensuring that no quick match will occur. Only a full match is invoked, to ensure that all other data elements are present and match correctly before two such records match together. Such titles are added to a list of common titles, and are an intrinsic part of the matching process. This list does lessen the number of potential mismatches, although, equally, it means that some records will not match when they are supposed to, due to paucity of data in one or both records, and thus adds to duplication.

The matching algorithm matches above format, so that, for example, records for electronic journals and print journals will match together, if they are deemed a match. The decision to do this was based on the premise that it would be of more use to the end user to know that a title existed, in whatever format, through one record, than having multiple records for the same title. This also reduces duplication of records.

One of the major developments that EDINA and Ex Libris have been working on together is the SUNCAT-ID (SUNCAT Identifier). This is an identifier which currently matches existing sets in SUNCAT. In due course, as records are upgraded and

improved, it is expected that one Identifier will represent each title. The development of the SUNCAT-ID entails a major change in the basic concept of the Union Catalogue, which was previously based solely on automatic and dynamic procedures.

The ID creates a more "fixed" union catalogue. It is stored in the 049$a tag, and is applied after data conversion and before data load. Matching has been noticeably improved as a result of the ID, removing overlapping sets (whereby the transitive nature of the matching algorithm means that a record may belong to more than one set). It also means that the database can be maintained more easily, and data improved as records can be merged or separated as necessary, by forcing matches.

Data quality

One of the major issues, first highlighted in the UKNUC report, and confirmed with the building of SUNCAT, is the problem of data quality in both bibliographic and holdings records across all contributing libraries. The use of lower levels of cataloguing standards results in the duplication of journal titles on the database, as there is simply not enough data to match on, so the record will not match in. There are several methods which SUNCAT is utilising to combat this duplication.

Firstly, the matching algorithm has been improved, as discussed above. The inclusion of several new fields and the alteration of the way some extant fields work are designed to improve the matching, and have been relatively successful.

Secondly, the SUNCAT team will be able to match and un-match records from sets, overwriting the SUNCAT-ID with a correct one.

This will be achieved through a function on the Librarians' Interface, discussed below. Database maintenance is an important function of any catalogue, and SUNCAT is no exception.

Finally, contributing libraries will be asked to upgrade any records that they have supplied to SUNCAT which have been chosen as preferred records or have been verified as unique. The upgrading of a record is to the SUNCAT upgrading standard, which is similar to the CONSER minimum standard.

SUNCAT will also continue further investigation into the issues of duplication within the database, maybe through the future use of an API.

SUNCAT is also finding ways of improving the holdings records that are supplied with the bibliographic records. These can be very brief; in order to supply more information, the library name in the holdings is hyperlinked, taking the user to the front page of the library catalogue or website. This will allow the user to repeat the search to gain the most current information. A further development is to link the holdings with the catalogue record on the library's own system for that title; this is being developed at present.

Librarians' Interface
One of the major SUNCAT developments is the Librarians' Interface, which allows any contributing library access to customised reports and download facilities. Access is allowed through an authentication process; for normal searching and viewing, SUNCAT is freely available, and requires no authentication.

Downloading is probably one of the most important functions for a cataloguer. SUNCAT will allow download, after authentication, for all contributing libraries in a variety of formats. It is anticipated that the most heavily used download format will be that using the z39.50 protocol; however, for those libraries that do not use this, a download from the web function has been developed, which will allow the library to download bibliographic records through a web interface. The record itself will be in a variety of formats, including MARC communications format and text format, specified by the library. All users are able to email a text version of the record to themselves, using a standard save / email function. Assisted matching will help improve the duplication of records in SUNCAT, and allow librarians to verify records as unique. Some records will not match, either because they have no other matching record in SUNCAT, and should not match, or because they do not have enough fields to match with an existing set. For any record that does not match in with any set, a report will be created, customised to be library-specific. The contributing library is asked to check these records through the Librarians' Interface. The record can then be verified as unique; alternatively, it can be matched in with another set, from a selection of records available as part of an automatic process through the Librarians' Interface. The record is downloaded, and added to the library's catalogue; it is also updated in SUNCAT.

The design and functionality of the Librarians' Interface is currently being tested; it is hoped to have it ready for the contributing libraries to use in a few months.

AIMSS
The JISC-funded AIMSS (Automating Ingest of Metadata on Serials Subscriptions) project has been completed. This proof of concept project involved the transmission of serial holdings information for the Universities of Glasgow and Leeds from Serials Solutions, a Public Access Management Service, to SUNCAT, where the records existing for the universities were updated. ONIX for Serials (Serials Online Holdings) was the format used for transporting the data.

Future of SUNCAT
At the outset, it was known that SUNCAT would face major challenges, not least because of the low and variable quality of data in UK libraries. The data quality has, indeed, been a major challenge, but it is an achievement that the holdings of over 50 major research libraries are on SUNCAT, and these can be viewed through a well-received interface.

The number of duplicated records has been reduced by fine tuning the algorithm and the implementation of the SUNCAT-ID has eliminated overlapping sets. The introduction of a facility to provide manual matching will improve matters; more software solutions are being actively sought to improve duplication still further.

In order to provide an invaluable service to librarians and researchers alike, SUNCAT must fulfil more roles than maintaining its currency. It must provide a stable service, high-quality records for downloading, more contributing libraries, more unique titles, an improved geographic coverage across the UK, linking with related services (such as Zetoc), and different views onto the data (such as an arts-only results screen, or results for libraries within one specific region). Only then will SUNCAT truly be the National Serials Union Catalogue for the United Kingdom.
Based on a presentation delivered at CIG Conference 2006.

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Developing terminology standards to enhance access to collections at the National Maritime Museum.

Irene Lafferty, Collections Terminology Officer, National Maritime Museum

With experience in archive, library and museum cataloguing in academic and specialist archives, libraries and museums, I am currently employed at the National Maritime Museum as Collections Terminology Officer. This project role involves producing terminology guidelines for archive, library and museum collections, including guidelines for formatting personal and corporate names, object names, vessel names and subject key-wording of collections. Development of terminology standards will enhance access externally and internally to NMM collections through the Museum's collections management databases, via the NMM Collections Online web pages[1] and online catalogues[2], and supports key NMM projects which aim to make collections accessible to a wide audience.

The diversity of the NMM collections which encompass charts, maps, manuscripts, rare books, astronomical and time-keeping instruments, ship models, ship plans, vessel photographs, weapons and fine and decorative arts means that developing common terminology standards is quite challenging and must emerge from a collaborative process. A Collections Terminology Group has been formed to manage terminology, comprising myself and a cross-section of NMM staff. The group discusses terminology issues and considers suggestions for improvements/alterations to terminology practice.

My first project involved researching and writing guidelines on personal and corporate names. A key part of this process involved investigating the internal management of people's names in the NMM collection databases: Mimsy XG (objects) and Unicorn (manuscripts, charts, maps and books). I also interviewed NMM staff drawn from across the collections to understand their key terminology concerns. The internal investigation revealed that the development of terminology guidelines was very much needed to enable efficient and accurate retrieval from the NMM databases which currently hold inconsistently entered and duplicate names. Duplicate names have arisen partly as a legacy of previous data conversions and partly through a lack of unified guidelines across the Museum. Given that object data is now integrated into one collection database (Mimsy XG) and the importance of providing online access to collections and enabling cross-searching of Unicorn and Mimsy XG databases, a more joined-up approach is necessary.

I researched best practice in the archive, library and museum sectors, including examining national and international standards for the formatting and structuring of names. In general, AACR2[3] is used as the basis for name guidelines and recommendations, with archive and object orientated guidelines adapting and extending AACR2. Best practice investigations also involved conducting interviews with documentation managers at national galleries and museums in London and I obtained copies of name guidelines used by the museums in question for comparison.

The investigation revealed that the development of terminology guidelines which encompass archive, library and museum collections is quite unusual although the need is widely acknowledged. I found that the scale of the task meant that different organisations were progressing in different areas of terminology: this makes cross-organisational collaboration particularly welcome with the generous sharing of knowledge, experience and documentation products.

So far, I have produced guidelines for formatting and structuring personal and corporate names. Unsurprisingly, I based the guidelines on AACR2 with reference to other standards such as National Council on Archives, Rules for the Construction of Personal, Place and Corporate names[4] and object orientated guidelines such as the Getty Institute, Categories for the Description of Works of Art: Persons/Corporate Body Authority[5], and the Visual Resources Association, Cataloguing Cultural Objects: a guide to describing cultural works and their images[6]. I adhered to the fundamental principles of name authority control in AACR2, namely, specifying criteria for choosing a preferred name and linking variant and related names to the preferred name. The guidelines follow AACR2 formatting conventions for entering personal name data – such as initials, prefixes, titles – and AACR2 conventions for structuring corporate name headings. Other guidelines (as outlined above) are used to supplement AACR2 for formatting attributed and ambiguous names for personal and corporate names associated with objects and for formatting name data not covered by AACR2 such as place of birth and death, occupation, relationship to the object/role and biographical information.

It is important that name terminology guidelines enable cross-searching of library and museum databases. To this end, I mapped Unicorn MARC name authority fields and subfields to the corresponding Mimsy XG name authority fields and ensured that the field content in Unicorn and Mimsy XG was harmonised Inevitably, there are some differences in entering names which arise from the divergence between the data formats. For example, dates of birth and death are entered in one field in MARC but dates are entered into two separate fields in Mimsy XG. Mimsy XG name authority records are more extensive than MARC name authority records, with separate fields defined for gender, place of birth and death and occupation; this data is not normally entered in MARC authority records or is entered in a free-text field, 678 biographical or historical data. However, the guidelines ensure that the formatting of key data such as forename, surname and corporate names is harmonised, thus enabling more effective searching.

Museums have traditionally lagged behind the library sector in developing subject terminology, mainly due to the diversity of material in their care, so Library of Congress Subject Headings will provide a useful starting point from which to investigate subject terminology. The NMM recently developed an in-house Maritime Thesaurus and a key part of the Terminology Officer role will be assessing the extent to which the Maritime Thesaurus is a suitable source for object names and subject terminology and whether it should be used in conjunction with other terminology sources. We will also need to consider that the specialist nature of the thesaurus supports very specific subject searches as opposed to broad subject searches and therefore may not fully meet the needs of diverse and non-specialist audiences.

The National Maritime Museum collections terminology project shows that traditional library cataloguing skills and library terminology standards are relevant to documenting and making accessible museum collections.

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Cataloguing the John Murray Archive – work in progress

Robin Smith, Senior Manuscripts Curator, National Library of Scotland

When the John Murray Archive (JMA) arrived at the National Library of Scotland in April 2006, it came amid a flurry of publicity which included many superlatives – the biggest lottery grant of its type, the largest library fund-raising campaign ever attempted, the best-ever investment in literature by the Scottish Executive.

Costing just over £31 million, it certainly is one of the world's most important publisher's archives and it includes texts and letters written by many of the most significant names in British cultural, political and scientific history – Lord Byron, Jane Austen, Charles Darwin, David Livingstone – the list of names goes on…

Along with securing funding for the purchase of the archive, the Library has been able to design a three year programme of projects that together aim to make the archive accessible. A new reading room and a permanent interactive exhibition have been opened at the Library's George IV Bridge building, and there are plans for a number of exhibitions at other venues. There has been a successful writer-in-residence project, and the educational project has already seen all sorts of people being inspired by seeing what the archive has to offer.

Underpinning all of these interpretative activities is the cataloguing project, which has three full-time staff dedicated to the task of sorting and describing the archive. One year on, we are a third of the way through the cataloguing project. It is an appropriate time to look at what we have achieved so far, and what we have learned.

The demands of the other projects in the programme have meant that the cataloguers have been set quite challenging targets. We have been fortunate that we can build on the Library's existing expertise in processing publishing archives, and on the fact that JMA arrived in good order, having been well maintained by the various members of the Murray family through the generations.

What seemed to us one of the most daunting constraints was the opening of all 71 metres of the archive for consultation just four weeks after it arrived. Archival cataloguing is always a slow process, and we are used to helping people consult collections while we are working on them, although doing so can make the cataloguing process even slower. It can also pose problems for people using the collections who see them first in one order, often with no reference numbers or temporary numbers, and then return to re-trace their steps after we have moved things around.

In fact, this constraint forced us to look at re-use of data more closely than we might otherwise have done. We have built the preliminary finding aid on the transit logs which were created by the initial acquisition project. This project aimed to bring the archive from London and place it on the shelves in Edinburgh in as much the same order as possible. The meticulousness of this operation gave the cataloguers a ready-made record of the existing order of the one thousand boxes and volumes in the archive from which to begin work.

We have been able to keep the archive accessible throughout the sorting process. This process will not be fully completed for another year, and parts of the archive are not yet integrated into the manuscript circulation system. This means that it is placing continuing demands on the archive's curators as intermediaries between the archive and its users. Reducing the need for assistance in using the archive is one of the cataloguing project's key goals and perhaps the biggest single change to its accessibility resulting from its becoming a public, rather than private, collection.

Another reason for systematic recording of steps in the sorting process is the need for discipline when three people are working on the archive at the same time. This is common practice for large governmental or organisational archives, but is more unusual in manuscript collections that are on a smaller scale and can often be processed by one person. As project manager, I was concerned that dependency between different sections of the archive might impede progress, and that cataloguers might become precious about their 'own' parts of the archive. The engaging nature of the material generates a strong sense of ownership. Careful matching of tasks and sections of the archive to the different strengths of three team members has avoided problems.

The team has also been purposefully brought together for some tasks at key points in the process. We held a summit meeting at the end of 2006 to decide on the overall order of the main series in the archive and the numbering system. This involved the cataloguing project staff and other manuscript curators. It is unusual for us to carry out this process collaboratively. It is far more common for it to be completed by one person with little, if any, consultation. The project has highlighted the possibility for greater collaboration and consultation between cataloguers who

are each working on different collections. While there will always be decisions which are unique to each collection, improved communication will lead to staff development and more consistent standards where there is scope for uniformity.

Sorting methodology

With three people sorting at once, and with readers and other projects using the archive, we also needed explicit sorting methodologies. With small-scale collections it is possible for the cataloguer to use basic methods of sorting, such as manually re-ordering a word-processed list, or even to physically sort the material without supporting documentation. The constraints of the project meant that we needed to automate this process as far as possible.

With personal and business archives that contain diverse material it is difficult to fully automate the sorting process. Sometimes there is simply no explicit logic to the order of items, or their descriptions are not formulated in a way that can be interpreted by a computer as logical. We used a semi-automated process, by adding fields to the database generated from the transit logs as these were refined and revised. These fields will not form part of the final catalogue, and so are best seen as disposable aids to sorting. These contain the series and sub-series that were developed as we moved deeper into the sorting process.

We found that we also needed some rough short titles and name entries which are not appropriate for retrieval and description, but which could be used for preliminary automatic sorting of sections of the database. We used structured numbering for the final stage of sorting before assigning manuscript reference numbers. Rather than using an archival referencing system, the Library follows the manuscript

cataloguing tradition of using sequential numbering which does not attempt to convey the organisation of the archive. These structured numbers will be translated into | Encoded Archival Description component numbers to indicate hierarchical levels and local parent-child record identifier references to enable vertical navigation through descriptive levels in the full catalogue.

Having the resources to experiment with this methodology has been extremely valuable, and it is already being applied to other large cataloguing projects in the Library, beginning with the papers of Field Marshal Earl Haig, the First World War British Commander-in-Chief. It is also applicable to the production of inventories, which is the standard level of description for most of the Library's manuscript collections.

Cataloguing system and standards

A new cataloguing system is the cataloguing project's contribution to improving the Library's infrastructure. It will eventually be used for all manuscript cataloguing and inventories. The current phase of development also includes intellectual property data, and uses the PREMIS model and data elements for rights management. The long-term aim is to provide a single point of information about the collections for users and for collection management information for staff. This will represent a huge cultural change for staff, who are used to working with a variety of manual and automated systems. It is symptomatic of the lack of resources devoted to archival metadata creation that it nearly always takes an externally funded project to provide the technical infrastructure.

Another reason for archives developing automated systems for metadata comparatively late is the

timescale of production of archival standards. There is generally a gap of around twenty years – an entire generation – between librarians publishing a standard and archivists getting round to doing the same. For example, the International Standard for Bibliographic Description (ISBD (G)) was first published in 1977 while the archival equivalent, the General International Standard for Archival Description (ISAD(G)) did not appear until 1994.

There was initial scepticism about the applicability of archival standards at the Library, possibly because some of the cataloguing practices lean more towards manuscript librarianship rather than strictly archival practices. Part of the preparation for the John Murray Archive project was a detailed examination of our existing catalogues. This revealed a strong degree of compliance with the main standards, particularly ISAD(G). There is not a great deal of work to be done to bring our practice into line with international standards, which will ensure information exchange. The changes to cataloguing practice which will be implemented in the JMA project are as much concerned with making the catalogues more usable and more accessible. Now that the overarching standards have been quite widely adopted, this is the key challenge for archival description.

Embedding project practices

A potential problem with major project funding such as this is a lack of integration between the project and the existing staff in the organisation. Because of the developmental nature of the project, there is inevitably going to be a slight lag between new practices being introduced in the processing of the John Murray Archive and then being transferred to other collections. The project has tried to minimise the effect of this

delay by involving all staff in some key activities. The work on standards mentioned above, was mostly carried out prior to the project, so existing staff are already prepared for some of the changes.

As the cataloguing system has been built and implemented, there have been regular user testing sessions. These have been particularly helpful in bridging the gap between project and permanent cataloguers. User testing is a very democratic activity, because everyone's experience and reaction to the system is equally valid. Working on improving the cataloguing interface, even in small ways, has also given the staff ownership and prepared them for the changes to their working practices.

The cataloguing project is working with two other JMA projects which aim to maximise digital access to the archive. This is the first time that a dedicated team of cataloguers have also worked on digital transcripts of texts, and the Library has implemented its own interpretation of the Text Encoding Initiative standard to support this work.

The projects also presented the opportunity to rationalise the creation of descriptive metadata for the physical and the digital. We have up till now created the two independently, although this is more the consequence of how digitisation developed in the Library rather than a purposeful policy. As the digitisation process matured, a networked database was established with the primary aim of controlling access to all of the Library's digital objects. As a result, we found that some items in the manuscript collections were being given more detailed descriptions in the digital object database than they had in the manuscripts cataloguing system. In effect, we were creating a two-tier society, with paper-based orphans who were getting left behind their digital counterparts. There is also the problem of keeping the two systems synchronised when reference numbers or the status of collections change.

For the JMA project, we are creating descriptive metadata for physical and digital items in the manuscripts cataloguing system. We will use structural metadata to link the descriptions to the administrative metadata specific to the digital objects in the Library's digital object database. This uses PREMIS to describe the objects, with some fields from the NISO-MIX standard which is for technical descriptions of still images.

The next two years...
The first year has focused on the developmental work which has been needed to ensure the creation of good quality metadata. Rich metadata requires innovative and imaginative search interfaces. Now that the cataloguing standards and systems are in place, the next challenge is to explore how all this data can best be delivered.

All of what we are doing is very much in keeping with the spirit of John Murray the publishers, who were not afraid to explore new ideas and push forward boundaries, at the same time as selling some of the most popular books of all time. John Murray pioneered the travel guide – they were the 'Rough Guides' for 19th century travellers on the grand tour through Europe. John Murray II described these as 'friendly aid' to guide people by giving them practical information combined with historical and cultural contexts. Our aim in this project is to supply just this sort of friendly aid for 21st century virtual travellers.

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Cataloguing Aerial Photographs within the Government of Yukon's Union Catalogue Environment

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Sitting across the table, the apprehensive expressions were obvious. The reaction was justified under the circumstances. The representatives from two government departments were asked to surrender managerial control of their aerial photograph databases, a proposition that would make the most adventurous information manager nervous.

In 2004, the Yukon Territorial Government proposed to standardize the management of aerial photographs housed throughout a number of government departments at numerous locations throughout the territory. The photos had been circulated up to now to government personnel, to project contractors, and to the general public using a multitude of methods including a sign-out sheet, a spreadsheet, and a MS Access database.

A few months earlier, the largest government library in the territory, Yukon Energy, Mines and Resources (YEMR) Library, purchased a new integrated library system (ILS). To further justify the cost of the software, the Library was encouraged to seek out potential partners to share and expand the use of this software in order to improve information management across the Yukon Government while also maximizing the use of this expensive database software. With this mandate in mind, it was suggested to combine the multiple aerial photograph databases into one, the newly acquired ILS.

Not only was this proposition unsettling for the partners, but also daunting for the librarians at YEMR Library. Library professionals do not staff the information centres in many of the government departments, so it took some convincing to assure the stakeholders that the ILS could

manage the photo collections. In doing so, the staff at YEMR promised results, which they themselves were not sure they could deliver.

One commitment made was the assurance that a MARC record could be manipulated to produce the search results familiar to the different patrons. The responsibility to make this a reality fell to the cataloguers at YEMR Library.

The first decision the cataloguers needed to be made, as obvious as it may sound, was what to catalogue. Generating MARC records for each aerial photograph, approximately 80,000 in number at the time and in-creasing, was unrealistic. Cataloguing each roll number (each complete series of photos) as a serial, was the strategy selected. The individual photos were bar-coded, associating them with the MARC holdings records for the respective departmental partners (creating holdings summary information for display in the public access catalogue).

The elasticity of the MARC record, that cataloguers regularly expand and challenge, was utilized when decisions were made about how to customize MARC records in order to enable patrons to search using terms they are familiar with, as illustrated in Appendix I. The first stretched interpretation of MARC was made to the repeatable 086 (Government Document Call Number) tag. The NTS map sheet numbers (the codified numbers used in Canada to define geographical areas is called the National Topographic System, or NTS) were listed here for each flight line, as per local practice. Another local field, 090 tag, lists the aerial photograph roll number as the local call number within the bibliographic

record. Both of these fields are indexed and searchable by patrons. The searching demands and requirements of each unique client and department appeared to be satisfied by the flexibility and the familiarity the MARC records provided.

Structurally, the holdings and item MARC records for the aerial photographs resemble serial records, but the bibliographic MARC record is a cartographic surrogate. Since the records represent cartographic materials, the scale and the spatial coverage for the whole of the flight path is recorded (when known). The title of the photo set listed in the 245 tag is taken directly from the first photo in the sequence. This is what the remote sensing company (the company that took the aerial photographs) called their flight path. Most often these names are geographic in nature (e.g. Teslin Lake area). The cataloguers also tweaked the general materials description, adding the phrase 'aerial photography' in parenthesis after the standard 'cartographic material' description. This action permitted the patrons to sort the results list by medium if so desired.

The specific material description field again focused on the roll number as a whole. Therefore, if there were 400 photographs in the series, that is the figure used in 300 $a, even if the libraries housed only a portion of the roll. These partial series most often occurred when the majority of the photos in a series covered areas outside of the Yukon Territory, and only the images at or within the Yukon Territory's borders were of interest to the territorial government. The remainder of the data recorded within

the tag was standard; subfield $b indicated colour or black & white images, with the dimensions of the prints written in subfield $c. Seldom was there any accompanying material, but information regarding the filter, aperture, and altitude (along with the number of images) was recorded on the first image in the roll. This additional data was recorded within a general notes (500) field.

A local collection code, located in a 998 field, was originally included within the records to delineate ownership of materials. However, a second purpose for this information would soon emerge. It is now used to enable a quick search button on the YEMR Library's OPAC to limit client searches to aerial photographs by simply toggling a button. The data in this field is also utilized as the foundation of a search query that links a geographic information system (GIS) to the integrated library catalogue, a development that resolved a major issue one of the departmental partners had initially with the merger.

During the merger negotiations, the Department of Highways and Transportation wanted assurances that the aerial photographs would be searchable by road mile markers. The staff at YEMR Library maintained the position that the road network could be queried by mile marker, even though they secretly had no idea how. That task fell to the cataloguers.

The first attempt at resolving the issue was quite creative. The date range subfield within the topical subject tags was modified to incorporate distance instead of dates. To facilitate the future exchange of records, the cataloguers also added a disclaimer in the general notes field explaining that the date range within the subject tags was not dates, but road mile markers. The staff at YEMR Library experimented with a

sample set of approximately 100 records using this method, with poor search results. If Library staff had difficulty producing the desired results, it was realized that such a searching mechanism was not feasible.

As a result, it was decided to forgo creativity for functionality. Within the subject tags (650 field), the geographic subdivisions remained, but the date range/mile markers were removed. Instead, a geographic contents note was generated, which included every mile marker integer (e.g. km 1, 2, 3 …) associated with the photo series. This strategy was time-consuming and cumbersome; however, the expected and desired search results were realized. The benefit to patron service outweighed the cost of staff time and effort in record production.

The addition of the geographic note aided in locating aerial photographs containing images of roads, but the Yukon Territory is over 500,000 km² and has only twelve highways. There are many open and natural areas in the photo series, which cataloguers could not possibly describe within the subject areas in MARC records. The YEMR Library solved this problem by developing a product, SkyLine: www.emr.gov.yk.ca/library/ skyline_jump.html, to link GIS searching capabilities with the integrated library system (Virtua) to create a visual query. Library patrons have begun to make use of this feature, but it is still a relatively new concept in the library world. As such, the YEMR Library is continuously modifying the search indexes and examining usage patterns to aid in determining the evolution of the product.

When the need to better organize and manage the aerial photograph collections within the Government of Yukon arose, it was the information

management specialists who were called upon to meet the challenge. It was the familiarity of these individuals with patron search needs, patterns and parameters that permitted them to confidently massage the MARC records in order to produce the desired query results. A wise and not so old cataloguer once remarked that cataloguing is as much an art as it is a science. The staff at Yukon Energy, Mines and Resources Library created a masterpiece in their interpretation of aerial photograph surrogate records.

Appendix I

List of Modified MARC tags in Cataloguing the Aerial Photograph Collection

086	for NTS (National Topographic System) areas (repeatable)
090	for flight line (as call number)
245	created title using common geographic area name as "title" for subfield 'a' and [cartographic material (aerial photography)] in subfield 'h'
255	for scale and longitude/latitude information (same format as for maps)
260	as per MARC
300	as per MARC
440	with "Aerial Photographs" as the series and the flight line as the volume number in subfield 'v'
500	for filter and altitude information
650	as per MARC using Library of Congress Subject Headings
998	local collection indicator used for indexing

Indexing at the Scottish Poetry Library

Julie Johnstone, Librarian, Scottish Poetry Library

'The indexer, like the poet, focuses intensely on his subject in order to extract its essence. A word or a brief phrase can elicit an image in a poem and must suffice to present a concept in an index. …both weave a net of words and phrases in the exercise of their craft' [Sher, 1994, p.102].

The SPL started out in 1984 with a collection of 300 donated books. It now holds over 30,000 items. It is a remarkable collection of tremendous depth and range. The SPL collection represents and encapsulates the heart and mind of Scotland – whether it is turning its gaze inward at itself or outward to the world beyond its borders. The SPL is a living library, a place of energy, engagement and interaction. Its collection is not an archive – although its comprehensiveness and range makes it a unique resource – it is a collection that exists to be used, handled, borrowed, read. Central to acquisitions policy is the objective to collect all poetry published in Scotland, and in this sense it is conserving the poetic heritage of Scotland. And yet, equally important, is making that poetic heritage accessible to as wide a range of readers as possible.

Assisting users in their navigation of that poetic heritage is the SPL's online public access catalogue INSPIRE, (INternational & Scottish Poetry Information REsource), designed and maintained by Gordon Dunsire, CDLR, and Penny Robertson, SLIC, in co-operation with staff of the Scottish Poetry Library. The SPL holds not only books and pamphlets of poetry from Scotland, Europe and beyond, but criticism, background and reference material, news cuttings, audio recordings, and

periodicals. Searching for a particular poet will bring you not only single poetry collections by that poet, but that poet's work included in anthologies, their work as editors, as translators, their articles and poems in magazines – and searching for the same poet as a subject will bring up works written about that poet, reviews of their books, even poems written about them. An incredibly rich resource for a researcher or poetry lover.

Indexing has always been an important aspect of the cataloguer's work at the SPL and is seen as a vital means of opening up the unique resources held at the Library.

It takes two main forms: the Scottish Poetry Index (SPI), the SPL's index of Scottish literary magazines, and the policy, from the very inception of INSPIRE, to fully index books and other material by subject, language, place of origin, and period. Items can be catalogued to a level where subject terms are assigned to individual poems within collections. Particularly useful is the SCOTBIB element, an index term attached to the records of Scottish related items by year of publication. This, together with terms such as Scots and Gaelic language, and combined with thematic terms, such as heather, football, loneliness… can enable highly effective searches. INSPIRE offers a range of browse and keyword searches, by title, name authority, subject, series.

A library user might not be interested in a particular poet; they might be interested in finding poems about particular subjects. Subject access can bring poems out of the collection and into public or private arenas

where they can be valued, treasured, and, perhaps most importantly, read. Poetry anthologies are the best-selling and most easily marketable form of poetry book: poetry readers, especially those new to the form, appreciate the thematic access and perspective, and this allows a 'way in' to what might be considered an impenetrable form. Subject indexing may facilitate access to single author collections, just as anthologies often allow a reader to discover a poet they like. 'Where do I start?' is a refrain of a user anxious to explore a new field of literature. People need a way in to poetry; subject access can provide that.

Experience at the SPL reveals that user requests frequently take the form of subject enquiries. Requests can come for poems on both abstract and concrete subjects: from academics wanting in-depth thematic searches on the nature of Scottish identity; from anthologists needing poems on rivers, food, or gardening; from members of the public needing light-hearted romantic poems for Valentine's Day or a poem about the death of a child to read at a funeral; from the press requiring a poem about gun control and massacres of schoolchildren or the collapse of a bridge; from a wildlife centre needing poems about specific types of birds for an exhibition; from relatives needing a funny poem about ageing for an eightieth birthday party; from patients requiring poems about living with Aids or cancer. Apart from specific subject requests, the subject index might be used to find a 'lost poem': a member of the public remembers a poem her grandmother used to recite to her, but can only remember that it was about frogs or fairies. The reward in finding

the right poem for a user is immense. The reward of enabling a user to find that poem themselves is even greater.

A poem can be both personal and universal. It can be used for personal pleasure and reflection, but also as a means of insightful illustration of an issue. What we value intellectually is revealed in our approach to subject access [Miller, 2003], and, with an increasing emphasis on multi-disciplinary approaches, providing better access to imaginative literature will contribute to the overall efficiency of the intellectual search for material [Beghtol, 1990]. The cost of not providing effective indexes and subject access to poetry is the under-utilisation of the Scottish Poetry Library collection.

One important element of the SPL collection is its periodicals. Literary magazines are the building bricks that form the structure of a nation's literary life. They are a vital outlet for poetry publishing; the testing-ground for poets' early work, and a major source of literary criticism. But the magazines themselves are notoriously ephemeral, and their contents infrequently indexed. In 1992, in a bid to remedy the poor bibliographic coverage of this rich resource, the Scottish Poetry Library succeeded in gaining one of the first research grants to be awarded by SLIC, and undertook a project to index the poetry and poetry-related material in twenty Scottish magazines published from 1940 to 1992.

The Scottish Poetry Index (SPI) was originally published in hard copy, was amalgamated with the Library's catalogue when it migrated to an online version, and now exists electronically as a separately searchable part of INSPIRE. Most of the magazines covered in the original project are now defunct, but those titles still in

existence (*Chapman, Lallans, The Dark Horse* and *Zed 2 0*) are still indexed as new issues appear.

The SPI covers not only the individual poems, but also critical material, reviews, and other items such as letters, editorials and obituaries. The title and author indexes mean that a wealth of poetry, some only ever published in the journals, and including much of our leading poets' early work, is traceable (where and when was Norman MacCaig's poem 'A Man in Assynt' first published?) and detailed bibliographies of a particular poet's work can be created. With its facility for calling up criticism and reviews, the index is invaluable for academic research.

The printed series is also a useful tool for studying the development of Scottish literary journals and the broader culture of Scotland during this period; detailed introductions by the editors have been included. Individual poems are analysed by subject, theme, language and literary form, which makes the SPI ideal for teachers and others requiring a thematic approach.

Here's an SPI record from a search for entries by Ian Hamilton Finlay. It's a very early poem, published before Finlay started Wild Hawthorn Press. It is an invaluable type of record for surveying the very early stages of a major poet's publishing career.

http://slic1.cdlr.strath.ac.uk:8080/ipac20/ipac.jsp?session=118034W811M81.2971&profile=spi&source=~!spl&view=items&uri=full=3100040~!25041~!18&ri=1&aspect=power&menu=search&ipp=20&spp=20&staffonly=&term=ian+hamilton+finlay&index=.SPIAK&uindex=&aspect=power&menu=search&ri=1#focus

```
LDR 00885aam 2200145a 45
008 000808s stk 000 p eng|d
100 1   $a Finlay, Ian Hamilton, $d 1925-2006
245 10 $a Fishing from the back of Rousay / $c Ian H. Finlay.
500      $a In: Lines review. No. 17 (Summer 1961); p.38.
650 17 $a angling < sports & games < recreation < man & society < man
            kind. $2 local
650 17 $a poems & poetry in journals < journal forms < bibliographical
            forms & other media < books & literature < artistic & cultural
            themes < intellectual  life < personal existence < mankind. $2 local
650 17 $a Rousay < Orkney Islands < Northern Scotland < Scotland <
            Great  Britain < United Kingdom < British Isles < Western &
            Central Europe < Europe < continents & landmasses < geography
            < Earth (planet) < natural world. $2 local
655 7   $a SPIPOE. $2 local
740 00 $a Lines review. No. 17 (Summer 1961)
999      $a 25041
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If you search by subject for 'angling' poems you retrieve 41 entries in the SPI, widening the search to the entire INSPIRE catalogue retrieves 133 hits.

Search for Edwin Morgan, Scotland's current Makar, or Poet Laureate – and you get over 300 entries. This can be narrowed down to poems, reviews or interviews. And here's the entry, for example, for an early concrete poem by Edwin Morgan.

http://slic1.cdlr.strath.ac.uk:8080/ipac20/ipac.jsp?session=118034W811M81.2971&profile=spi&source=~!
spl&view=items&uri=full=3100040~!19729~!
5&ri=4&aspect=power&menu=search&ipp=20&spp=20&staffonly=&term=morgan%
2C+edwin&index=.SPIAK&uindex=&aspect=power&menu=search&ri=4#focus

LDR 00787aam 2200133a 45
008 000808s stk 000 p eng|d
100 1 $a Morgan, Edwin, $d 1920-
245 14 $a The computer's first translation / $c by Edwin Morgan.
500     $a In: Akros. Vol. 6, no. 18 (Mar 1972); p.20.
650 17 $a concrete poetry < verse forms (examples) < rhyme, metre & stanza form < technique of poetry <
        art of poetry < books & literature < artistic & cultural themes < intellectual life < personal existence <
        mankind. $2 local
650 17 $a poems & poetry in journals < journal forms < bibliographical forms & other media < books &
        literature < artistic & cultural themes < intellectual life < personal existence < mankind. $2 local
655 7 $a SPIPOE. $2 local
740 00 $a Akros. Vol. 6, no. 18 (Mar 1972)
999     $a 19729

If you look in Morgan's *Collected Poems*, you won't find this poem listed in the index – revealing how important a role the SPI entries can play in full bibliographic searches. Working on the *Complete Poems* of Edwin Morgan will be a challenge, but the SPI will directly assist. Now do a search by subject in the SPI for concrete poetry, and you get over 80 entries.

Indexing at this level is not without its challenges. Possibly the most difficult aspect of this indexing process is to index by subject. What happens when you are indexing a book of poems or a single poem in a magazine? How does the indexer approach the allocation of a subject to that poem? Fishing for the right terms, ones that will actually be of use in helping someone sometime find a poem that is exactly right for their individual needs is a challenge indeed, and this indexing can be only partial.

The Scottish Poetry Library has indexed the subjects of poems since 1991 and is keen to promote this aspect of its catalogue. Typically the indexer will examine a poetry book and, if they notice any poems that have a specific subject matter, they may decide to attach the corresponding subject term to the record. So if a book includes a poem about pearls, for example, the term 'pearls' is attached, to allow a user to retrieve a list of all the books in which a poem about pearls is included. To find the poem the user must access the original book and search through it to find the poem the indexer had in mind when attaching the term – potentially a time-consuming process and requiring careful and responsible indexing on the part of the cataloguer. This offers a possibly patchy service, but can be of value particularly if the librarians provide intermediary assistance.

An in-house thesaurus has been developed to assist with this process. 'Local' subject terms are added to a MARC record for a document using the 650 tag, and are selected from the thesaurus. If a term is not included in the thesaurus, but is considered required, it is added to the thesaurus. The thesaurus was tailored to the needs of the SPL, but is constructed according to accepted standards, with a strong focus on hierarchies and cross-references. The scope of the thesaurus is very wide as well as very detailed. As the SPL is fond of saying, it includes subjects from *aardvark* to

zen, and reflects the scope of poetry writing: poems can and are written about almost anything.

A research study that was carried out in 2005 explored the challenges involved in the indexing of poetry by subject. Poetry, as a heightened form of imaginative literature, causes particular difficulties for the indexer. The interpretation of a poem is a subjective act, dependent on personal response and a necessary exercise of the imagination. The suggestibility of a poem, due in particular to the use of metaphor, leaves it open to a multiplicity of meanings; subject matter and theme may be ambiguous. Translation of the aesthetic whole into a set of useful index terms is problematic. Are our best attempts better than not trying at all? Or is inaccurate indexing merely misleading and detrimental to facilitating access to the resources we value?

Perhaps you have come across a poem by William Carlos Williams that says that so much depends on, what was it? A wheelbarrow? What colour was it? Red? And was it raining? And wasn't there something about white chickens? You know the one. What subject terms would you select to attach to the record?

Can you really be sure what the poem is actually about? What is its subject? Why would someone want to find it? Is it really about wheelbarrows and chickens, or about something else entirely? Is it about perception? Observation? The writing of poetry? Is it trying to say something about the subject matter of poems? Can accurate or useful subject terms be assigned and agreed upon? Can the importance of the manner in which it is laid out on the page be taken into account? Is it counter-productive to assign terms when meaning is so ambiguous? Using *wheelbarrows* as a

subject index term would enable retrieval if someone needed to find this particular poem and had forgotten the poet and title, but does that subject term really get to the heart of the poem and allow effective access on a higher level of meaning?

Poetry could be argued to be a form of writing that defies subject analysis. Is it possible to retain the complexity, subtlety and nuance that may be found in a good poem when it is reduced to a selection of standardised index terms? A poem is *'a speaking picture'* according to Philip Sydney [Kemp, 1997, p.171], combining visual and textual elements. Like a painting, photograph or novel, its whole is more than the sum of its parts. According to T. S. Eliot, if it is *'genuine'*, it can communicate *before* being understood [Kemp, 1997, p.176]. It can have tremendous scope and can 'travel' far within a few lines. It evokes states of mind or emotion in the reader. Like fiction, it experiments with language, and plays with our perception of reality. Its style and form can be essential to a reader's perception of its subject matter. To focus on the words without paying attention to how those words are conveyed is to miss much of what a poem is about. Like images and novels, it may employ symbols to hint at different levels of meaning, metaphors to embody its message. It may *suggest* rather than *say*, causing understanding to be at an instinctual level that cannot be adequately verbalised.

Poets tend to explore abstract concepts through the medium of concrete terms. The most obvious subject of a poem may not be what the poem is really about. There is general agreement that the indexing of imaginative works is not very useful unless it embraces both concrete and abstract levels [e.g. Ranta, 1991]. Full-text searching is not an adequate

answer for poetry. It will not enable retrieval of poems that are *about* a subject but do not mention that subject specifically in the text. On the plus side, an indexer can at least use the verbal language of the poem, unlike image indexing where they must face the issue of translating the non-verbal into the verbal. Yet, there is still much to *translate* in a poem, and superficial indexing could obscure the intended subject, or meaning of the poem. Unlike non-fiction, where useful indications of subject matter can be extracted from titles, forewords, introductions, contents lists or abstracts, poetry offers no such convenient tools of interpretation and access. Even titles of poems, when available, can be of little use in ascertaining the true meaning or subject matter of the poem. Often it is only after considering the poem in depth that the relevance of the title falls into place. And yet, how far should the indexing of poetry travel into the realm of literary criticism? Poets often talk of 'letting the poem speak for itself'. A poet is *'the priest of the invisible'* according to Wallace Stevens [Kemp, 1997, p.177], but the indexer must attempt to translate what may seem intangible into useful subject terms that do retain the essence of the poem. At the subjective level of meaning, it is very hard to achieve any degree of consistency in the subject indexing process, but subjective analysis could provide valuable access to information [Shatford, 1986, p.45]. Understanding of, and response to, imaginative literature depends on the individual reader, their emotional state, their life experiences, and their cultural and educational background. The indexer must anticipate the range of interpretations sparked by this heightened form and the possible uses that a user will want to put a poem to. Should elements of subjectivity be denied or embraced?

These are challenging issues, but, when considered against a backdrop of resource constraints greater problems are apparent. It seems that to index a poem adequately with respect to its multiplicity of meanings and the poet's intentions may take considerable time, time that most indexers cannot afford. How will an indexer get to the *'core meaning'* [Saarti, 2002, p.5] of a poem in a limited time frame?

Little research has been carried out into this specific field of indexing. Findings could benefit not only indexers of poetry, but could have implications for the study of indexing in general, highlighting the limitations of traditional indexing systems designed primarily for non-fiction. Similar challenges arise with the indexing of images and new models have been found necessary.

How important is it to be consistent, for example? The primary focus of the study was to analyse inter-indexer consistency and indexer-user consistency, and the impact of the use of a controlled language tool on the indexing process. The study also considered the impact of subject expertise and item complexity. Three groups of participants were asked to assign subject terms to the same set of twelve poems: professional librarians with experience in indexing poetry at the Scottish Poetry Library, a group of poets, and a group of library users. The professional indexers performed the exercise once using natural language and again using a controlled vocabulary; the poets used natural language; the users suggested search terms. The resulting data was analysed for consistency within and between each group.

Perhaps not surprisingly, the study found little evidence of consistency. Inconsistency was found to be due to several factors: indexers differed in the interpretation of a poem; they differed in their depth of analysis of the subjective elements of a poem; they differed in what elements of the poem they assigned terms to (abstract or concrete, core or peripheral, general or specific); they differed in their use of the controlled language. Also of concern was the lack of consistency found between the terms assigned by the indexers and the search terms suggested by users. The problematic use of professional terminology was of particular note. These are useful, if not unexpected results, and are probably recognisable to all indexers.

There is no doubt, however, that providing these additional forms of access opens up the collection and enables readers to find poems and information about poets – thus meeting the objectives of the Library. The challenge to provide the most effective retrieval will always be with us. There are times when so much does depend upon a red wheelbarrow glazed with rain water beside white chickens. The final words lie with the poet William Carlos Williams from his poem 'Asphodel, That Greeny Flower':

It is difficult
to get the news from poems
yet men die miserably every day
for lack
of what is found there.

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Things my catalogue never told me.

Mike Heaney, Executive Secretary, Oxford University Library Services Bodleian Library.

Cataloguing is going through some exciting times. There are some stimulating and some threatening things on the horizon, or even knocking at the door. The carthorse that is AACR2 is about to metamorphose into the thoroughbred Resource Description and Access, ready to compete with all the Dublin Cores, XML schemas and other rival codes Out There. At the same time there are the commercial players whose search and result algorithms might produce outcomes as satisfactory to the users as any library catalogue – or even better for them. Amazon and Google between them offer a variety of opportunities to bypass the library catalogue entirely.

Be honest – have you ever just looked for a book on Amazon in preference to your own library's catalogue? I have. The question is, why?

Our library catalogues are built around some quite specific ideas of appropriate search strategies. The two key approaches are the known-item search and the subject/ keyword search. But these are not the only strategies we use in real life.

One of the most common search strategies we adopt is the 'I'll know it when I see it' approach for an 'unknown known' item (maybe we should call it 'the Rumsfeld strategy'?). Perhaps we remember more or less where we saw it, we probably remember more or less what it looks like. I remember our own Deputy Librarian many years ago coming into the reading room and saying to me 'I'm looking for a book with a black cover'. My own iconic example of this kind of search concerned a book I serendipitously encountered as a student in the late 1960s. It was an unintentionally hilarious gem of a book. All I could remember (having seen it before I became a librarian and learned how to do things 'properly') was that it was by a Manchester cotton merchant of Andorran ancestry; that it

was privately printed in the 1880s; that it expounded the author's entirely fanciful and comical ideas about the history of languages; that it was a fairly substantial book (quarto-sized); and that it had a green cover with an intricate gold design on it.

In the 1980s I decided that I wanted to find it again. Fortunately I work in a legal deposit library (the Bodleian) in which I have the privilege denied to most users of browsing in the bookstacks. In the period 1861-1883 the Bodleian created a rudimentary classification scheme, within which books were further subdivided by size. So I scanned the shelves in the 'quarto -sized language books' section, looking for a substantial green and gold book – and found it. (For those interested in finding it, it is Charles Lassalle, *Origin of the Western nations and languages*, Manchester: J. Heywood, 1883; and snippets are available from Google.)

Some library management systems do allow us now to add a thumbnail of a book's cover, but this is not part of any cataloguing standard; and it is, of course, not searchable.

With today's technology it should be possible to take a scanned image of a book cover and characterise the colours that occur and even the presence and nature of pictorial matter. Image analysis will identify the boundaries of the main regions of colour and can label them appropriately. The user can be offered (perhaps via a palette) searches of books that are 'predominantly red' or 'blue and green', or 'yellow with a face on'.

If we want to take 'wacky searches' further, there is no reason why size or extent, or illustration, should be used to limit searches ('big red books with pictures'). These can be picked up from the 008 field or from elements of the 300 field.

If I had been able to search my catalogue for a biggish green and gold

book about languages published in the 1880s maybe I would have found Lassalle without scouring the shelves…

Another area where our catalogues can let us down is in telling us what something is good for. (I'd like to acknowledge here the ideas of Richard Butterworth who first alerted me to the possibilities; see his 'A Case Study of Use-Centered Descriptions:

Archival Descriptions of What Can be Done with a Collection' in Dion H. Goh and Schubert Foo (eds) *Social Information Retrieval Systems: Emerging Technologies and Applications for Searching the Web Effectively*. Hershey: Information Science Reference, 2007, pp.67-86). Subject indexing does get us some way, of course. A book about biology is – or should be –good for telling you something about biology. The 'audience' fixed field element also helps by indicating that a book is good for a juvenile audience, etc. but, especially for collections of source material, the description of content is not half as helpful as an indication of the potential uses to which the material may be put. Shipping lists of emigrants to New Zealand, for example, may have the correctly assigned subject heading 'New Zealand – Immigration and emigration – Sources' but they are now most used for the study of family history.

Similar functions do exist in library catalogues that can, for example, bring together material on reading lists ('Resources useful for your degree in football management'). The catalogue can function as reading list or bibliography. But all such functions are one-way. What Amazon and others offer is the opportunity for user feedback ('Be the first to review this book'). The development of Web 2.0 applications, social networking and other interactive approaches leads to expectations among the user community that books, DVDs, films etc.

will be commented on. Caroline Brazier recently described the British Library's initiatives in this area ('Resource Discovery at the British Library: New Strategic Directions', World Library and Information Congress: 73rd IFLA General Conference And Council, 19-23 August 2007, Durban, South Africa; http://www.ifla.org/IV/ifla73/papers/113-Brazier-en.pdf accessed 8 October 2007). The BL intends to add book-jackets and reviews to the core OPAC; user tagging and enhancement of catalogue descriptions. There are plans for cross searches of catalogues, tables of contents, web pages and digital images. In the days of card catalogues there was a mantra 'the catalogue entry is a surrogate for the item' (much to my surprise, on Googling it I find it is still in use!). Its effectiveness as a surrogate can be gauged by imagining the following conversation:

'**Have you read the new Harry Potter?'**
'No but I've read the catalogue entry.'

Full text search and retrieval are resource discovery tools an order of magnitude beyond the catalogue. But the variety of source data out there is such that it is difficult to conceive of a 'one size fits all' approach to such searches. A bespoke interface tailored to the strengths and characteristics of a set of objects grouped together in a resource database will always trump a generic cross-search engine. A library catalogue, except in the most specialised of institutions, will always represent a heterogeneous assemblage of resources. The large proprietary datasets will more naturally reflect some kind of selection and theme. Hence, the increased need for collection description and user-centred descriptions.

As Brazier writes, 'The key to successful digital discovery does not lie solely within the traditional model of library resource discovery'. A catalogue cannot now stand alone as a set of descriptions of what things are. We need interaction with users to help us describe what things are good for. And we need to realise that the traditional library catalogue will occupy only a portion of the search and discovery space used by our readers.

What goes around comes around

Stuart James, former Chief Librarian, University of Paisley

This is likely to be my last professional speaking engagement, certainly my last one as a 'practising' librarian. On a personal note – and this will be a very personal talk – I find it very fitting that my swan song should be to CIG Scotland: this, after all, is the Group I first cut my teeth on as a committee member and of which I have been a member since its formal foundation in January 1983 (there had previously been a feasibility and consultation period from 1980). I shall try to avoid this being a catalogue of names and events from the past, but propose instead to select a few high-lights and make a few general points.

Back to the future in a sense. A bitterly cold evening in January 1983 and a highly erudite talk on information retrieval by Strathclyde University's Michael Blake in the warmth of the National Library of Scotland's board room followed the formation of the CIG Scotland committee and the official launch of the new group. I said no catalogue of names, but I must highlight just a few as these were the people who got CIG Scotland under way and kept it on a very successful course.

Our first chairman was Duncan Irvine of Strathclyde University's Andersonian Library: his brisk and effective chairmanship kept us all focussed on business, but his sense of humour also welcomed the many comments and jokes that seemed to infuse our meetings. We were kept on track (and supplied with jokes and witty comments) by Frank McAdams, our secretary; such a sad loss when he died shortly after his retirement from Strathclyde University's School of Librarianship. Frank's energy kept us up to a constant mark with meetings and publicity – he it was who declared to the world that CIGS was to be the think tank of Scottish librarianship, and his efforts as much as anyone's helped make it so. I got the job of Treasurer (possibly because I was the only one who admitted to having a calculator in his briefcase).

To complete the name dropping, and with sincere apologies to those I have no time to mention, I must record the likes of Arthur Maltby and Bernard Gallivan (for Scolcap of blessed – or not – memory), as well later as Fred Guy, Janet Aucock and Jack Davies, all three of whom are still serving the Group. Then of course there was the very early meeting when a young man from Napier College Library started talking about games of dungeons and dragons and computers and how they all related to information retrieval, and the rest of us wondered what he was on about – these were the days when hi-tech was still knitting needles in edge-notched cards. So we co-opted him anyway and the arrival of Gordon Dunsire proved one of our most far-sighted decisions. Not only is Gordon still chairman of the group but in the intervening period we have all benefited from his knowledge of developments in the world of comput-

ing and their relation to our field of interest: not just what is happening now but what is coming next week or next year. Democracy in action CIGS-style: some years later after I had also been secretary we needed a new chairman and I found myself nominated with the comment from (guess who) "You've held every other office, so you might as well have this one too."

We polled the group members in Scotland and as a result got a clear pattern of what they wanted, and which we duly provided. Half-day meetings in either Glasgow or Edinburgh with costs kept to the minimum to attract the widest audience. And it worked: our meetings were always well attended, and often pretty lively too as we always included plenty of time for discussion. We also organised annual visits, a feature I am delighted to see continues today, to libraries who were doing something of interest to our members and which they could demonstrate to us. The other major decision we took was not to publish our own newsletter: we would instead use established newsletters in Scotland or the UK to publicise ourselves, as well as direct mailing (latterly of course e-mail) of notices to members. What that cost in postage was more than off-set by not having printing costs to worry about; it also gave us more immediate and direct contact with our members for meeting announcements.

For speakers we were always well-supported by the British Library: John Byford, Joyce Butcher, and Ross Trotter all came to speak, as did a young Lynne Brindley. We also had plenty of expertise in Scotland to draw on, and Alan Jeffreys of the CIG UK Group also came up from Newcastle on at least two occasions.

One early meeting was of particular significance, especially for the CIGS Treasurer as it turned out. We contacted Derek Austin in London to come and talk about Precis, but he could only manage for the day if we paid a full air fare for him. We debated and decided to explain to our members that for this one meeting we would have to increase our charge way beyond the standard £5 a time in order to bring him to Scotland. Come the day and we had a record attendance - more than seventy people paid up to attend. Derek had asked that as he hadn't been in Scotland for a long time could he come in the morning and someone show him the sights of Edinburgh. I volunteered and drove to Edinburgh Airport well before his flight was due, only to hear an announcement as I entered the airport "Would Mr Derek Austin's driver please come to reception." He had arrived on an earlier flight, but I met him and on the way into the city discovered he was interested in minerals and gemstones. So I took him to the Chamber Street Museum which has an outstanding minerals collection, and he was duly impressed. After lunch and the meeting I took him back to the Airport to be told that he had enjoyed himself so much that he wouldn't charge his expenses to CIGS after all. The Group lived off the profit from that meeting for several years, and it enabled us to subsidise future meetings for our members.

To save duplication, and to maintain communication, we worked with other groups as much as possible and held quite a few joint meetings with other LA Scottish groups, and occasionally with the Society of Indexers. We also maintained close contact with the CIG national committee and always had a CIGS representative there. CIG for its part was always impressed by the level of activity we maintained in Scotland and hoped to spread some of that to other parts of the UK, but with little

success. For my own part I found myself as Secretary of CIG for six years, under the chairmanship of the inimitable Keith Trickey and later of the equally dedicated Sue Brown.

Our relations with CIG UK have always been highly cordial and culminated in the CIG conference coming to Edinburgh in July 1990. A couple of memories of that: sitting in the bar at Pollok Halls waiting for sodden visitors to return from a ghost tour of the city in torrential rain, and sharing breakfast with delegates to a Nato conference wearing more medals than had been seen in one place since World War 2.

An earlier historic achievement for CIGS had been when the Joint Steering Committee for the Revision of AACR2 brought its annual meeting to Glasgow. The most famous names in world cataloguing circles descended on the city and were greeted and entertained by CIGS members and by Strathclyde University's School of Librarianship. Their open meetings were attended also by a handful of CIGS members as observers, one of the rare occasions I believe when the invitation to observers was actually taken up.

Having established a successful pattern of meetings we branched out more ambitiously, first of all into a series of pioneering Microfairs where libraries using those new-fangled PCs for various clever purposes brought them along to demonstrate what they were doing. That went on for a few years and really was a pioneering powerhouse for the profession as ideas were exchanged both formally and informally.
But it ran its natural course and as computers in libraries became more commonplace we found a new idea in a series of annual Information for Scotland seminars. The idea was (prior to, during and after devolution) to

review the whole provision of information by, for and about Scotland. My main recollection of the first seminar, back in the National Library of Scotland's boardroom, is something of a nightmare. The meeting was very well attended, but because there was so much to cover we had a range of speakers each supposedly limited to twenty minutes. But the limit proved more supposed than real and my task as chairman in trying to keep things on track was fraught with difficulty. It was not helped either by my having written notes for my introduction on the train across from Glasgow so that I do recall the first words spoken publicly at an Information for Scotland conference were "Oh dear, I can't read a word of what I've written."

Over the years we have had a range of prestigious speakers at Information for Scotland and many issues have been aired and discussed. Again, this was a meeting we organised in collaboration with other groups and in recent years have spread into other domains with archives and museums contributing to our deliberations. But Information for Scotland, like Microfair before it, now seems to have run its course. The experience of those events is that it is as important to recognise when something should come to a natural end as it is to have the bright idea in the first place.

Early in my career I decided that I would not join any committee I saw just as a talking shop but would give my time only to those that actually did something productive. Well, CIGS has always lived up to that, which is one of the reasons I remained involved with it for so long. It has been ground-breaking and hectic but always very practical; talk at CIGS meetings often enough led to things changing, either in different libraries or more widely across the profession. Classification and cataloguing, or whatever it might be called nowadays, has always been and remains more than ever core to our profession. As I moved up the ladder and found myself more and more a library man-ager than practitioner, I found that attendance at CIGS committees and meetings helped me keep my feet on the ground; my widening professional involvement also allowed me the opportunity to remind colleagues across the profession of the centrality and importance of classification and cataloguing.

But more than anything else it has been fun: I have made so many friends through CIGS and CIG and many of my memories are of laughter and enjoyment over and above the practical outcomes of our work. I am probably preaching to the converted in this audience, but I do encourage everyone to get involved: you will get so much more out of it even than you put in. And remember, as I have preached so often in the past, our professional bodies are not their officers but you their members. And finally I must quibble with a comment in this afternoon's AGM: there is no such thing as an ordinary committee member of CIGS: they are all very extraordinary.

The Catalogue and Index Group visit to the Lindley Library

Andy Calvert, Cataloguer, City of London Libraries

The Lindley Library is the library of the Royal Horticultural Society and late in February it opened its doors for a group of CIG members to see how cataloguing is managed there, some of the challenges involved and some of the innovative approaches they have developed in order to make the collection more accessible to researchers and horticultural enthusiasts alike.

History of the Library
Debbie Lane, Head of Cataloguing, greeted the group on arrival and introduced Dr. Brent Elliot, RHS Historian and Library Director, who began with a talk on the history of the society and its library. The Society itself was created in 1804 upon the suggestion of Josiah Wedgwood to form a group of interested parties to discuss discoveries, research and present papers on horticultural topics. It was granted the Royal Charter by Prince Albert in 1861 and continues to maintain the early principles of Josiah Wedgwood's group to promote horticultural research, gardening and the study of garden history.

The Society maintained a library from its early days, but much of this collection was lost through a sale necessitated by financial difficulties. It was not until later that the Society, now solvent, was able to purchase the library of one of its former secretaries, the famous botanist John Lindley (after whom the Library is named). This went some way to replacing what had been lost, though it still left many gaps where there once had been treasures of horticultural literature and it is for this reason that the Library was established as a separate charity, saving the collections from potential plunder during any future times of financial difficulty.

The Library continues to maintain and build its collection from this separate fund and now contains over 50,000 books dating from 1514, takes 300 periodicals and holds 22,000

botanical drawings at the main library in London alone.

Early Book Cataloguing
Dr Elliot then continued with a presentation on early book cataloguing at the Lindley Library, an area of particular importance due to its collections and for horticultural research. Dr. Elliot stressed that the concept of duplication as we understand it in modern publication does not apply to early books, where amendments might be made to a work during the printing and publication process. This means that manifestations of what appear to be the same edition of a work are in fact different in content and collation, providing a challenge when it comes to description.

Cataloguers at the Lindley Library have developed two approaches to deal with this problem. Firstly, the data included in the bibliographical description is extensive, with detailed notes describing the contents, history, references to and provenance of an item. Secondly, hyperlinks within the catalogue record provide access to PDF documents that contain additional detailed collation data complementing the data provided in the collation field of the MARC record. This provides the cataloguers with an area to make free text descriptions on collations, including comparisons with other editions, and importantly for these early works, the opportunity to add superscript characters etc. needed to provide data that had otherwise proved difficult to accurately represent within the library management system environment (for an example see the record for Brunfel's 'Herbarium' of 1539).

Illustrations also give an indication of the history of an edition and so, like other elements of the description, are accorded special attention. The content, numbering and sequence of illustrations are given in detailed notes along with descriptions of processes used and quality of the colouring showing where an edition of a work might be unique in the same way that

the collation details provided in the attached documents are able to do. For describing the illustrative content and full details of the artists responsible, these added files have a different use. Tables are provided to show contributing artists and the particular species illustrated in ways that are not possible within the rules governing bibliographic description and MARC records. This provides comparable data on botanical artists that allows the researcher to cross-reference illustrations between editions or a number of different titles to which an artist might have contributed. It also allows specific details of the species illustrated within a work to be provided and therefore to show when and where species were first developed.

Why go to all this trouble? Because not only does this allow research on the development of individual cultivated species but also shows how horticultural practice has developed through history. Therefore early illustrations provide a key resource in this research with details such as colour being of a critical nature in the identification of species and varieties, an aspect central to horticulture, with further implications in both tracing the naming of species through the botanical nomenclature used and in identifying editions of a work. ('Compendium de plantis' by Mattioli, 1571 provides an example).

The solutions developed by the cataloguers at the Lindley Library demonstrate how cataloguing practice can work to promote the aims of the RHS within the framework that enables standardised description and data sharing, and how the catalogue can itself be extended beyond a resource discovery tool *research become a resource in its own right* to knowledge on the subject, in addition to being a promotional tool for the library with enriched content providing a greater level of remote access through the web.

Modern Book Cataloguing
Carole Sharp, 20th Century

Cataloguing Supervisor, then provided the group with an overview of how the cataloguing of later collections is managed and some of the challenges it has presented along the way, particularly during the retrospective conversion of the card catalogue and recent refurbishment process that forced the staff to move to less than ideal conditions.

The card catalogue was created in the early 20th century and evolved under a number of different standards. This led to difficulties when electronic cataloguing began in 1994, as data inputers copied the information directly from the cards, resulting in inconsistencies within the electronic records. This highlighted a particular need for professional cataloguing skills in order to interpret the data on the cards according to contemporary cataloguing standards and practices. The scale of the project, however, was a consideration and meant that resources limited the work that the cataloguers could do and the level of supervision they could provide.

Nevertheless this issue, and the particular needs of the collection led to the development of an in-house cataloguing manual that enabled the project to be prioritised along two lines: the age of the work and the amount of detail required in the description. This approach has meant that to date all the 20th century collection has now been fully catalogued with attention now turned to the 19th century collection, currently under way. In addition the team also deals with approximately 700 new books per year.

Cataloguing continues to be done in UKMARC with no immediate plans to move to MARC21. AACR2 provides the standard for bibliographic description, although the needs of the users and the nature of the collection again mean that this has been adapted, most obviously in terms of added entries. These are extensive, listing all contributing illustrators and photographers as well as (in the case of early books) publishers, owners, dedicatees etc. going beyond the

specification of AARC2. Subject access is also provided through entries developed in many cases specifically according to the needs both of the collection and the interests of the institution and its users, as has the classification system which uses standard UDC for several areas such as plant hunting (910) and biographies (920) but a specially developed scheme for other areas, with UDC as its foundation.

Image Database

Debbie Lane gave a presentation on the Lindley Library image database and cataloguing along with their future plans for its integration with the LMS. The library currently includes images such as title pages within catalogue search results and viewable over the Web. In addition an in-house image database on the I-base platform allows library users to search up to 7,000 images from both the rare book collection and Lindley picture library. Future plans are for this database to be integrated with the book catalogue to allow combined searching from a one portal, providing full images and

related book results from a single search, eventually allowing users to access all the images from a single work via the Web once the project is completed.

To facilitate current image provision in the catalogue, LMS suppliers SIRSI developed a bespoke script to allow retrieval of the images, held on the SIRSI server, through an accession number so they could be presented along with the bibliographical record within the search results. Two copies of each image are held, providing a thumbnail and higher resolution copy, accessible by clicking on the thumbnail that users within the library are also able to magnify so that images can be studied in consider-able detail. This meant that the digiti-sation process had to be done on site to allow the cataloguers to check the scans ensuring that they were of sufficient quality.

Whilst the I-base system provides the facility to attach initial metadata including subjects, giving access to the images, there are plans to provide much deeper indexing depth to allow

greater detail in searches and higher precision in the results, which when implemented in conjunction with the depth of description in the bibliographical records provides a great deal of information for researchers through the catalogue.

The visit ended with a tour of the library including an opportunity to see just a few of the examples of botanical illustration held in the picture library. Acting Picture Librarian Lucy Waitt spoke about some of the images we were looking at along with the history and work of the Picture Library. In adapting and developing practices to meet the demands of their organisation and users the cataloguing team at the Lindley Library are demonstrating how the catalogue and professional cataloguing skills are playing a central role in developing the services of the library into the future, introducing and managing innovations to create a resource that opens up a world of horticultural literature and research.

Book reviews

Education for library cataloging : international perspectives / ed. Dajin D. Sun and Ruth C. Carter. Binghamton, NY : Haworth Informa-tion Press, 2006. 492 p. (co-published simultaneously as *Cata-loging & Classification Quarterly*, Vol. 41, no. 2 (2005) and Vol. 41, no. 3/4 (2006)). ISBN 0789031124.

This is a mind-expanding book, but a hard read. It contains "22 papers written by 28 authors from over 20 countries spanning 6 continents" and the 4 page introduction is not wrong when it says the reader should expect a kaleidoscopic view of the subject from what follows. What the book lacks, though, are any of a kaleidoscope's reflecting surfaces – any chapters that would bring into a

coherent framework the book's multiple themes and concerns. Sometimes these themes are shared across continents, sometimes not. Parallels exist in nations' library school and continuing education programs, but there are strikingly divergent accounts too. Where parallels exist (economic, historical, personal) the outcomes for training in library cataloguing are not always the same. Reaching the end of this book is aposiopetic in the extreme; with a Shandean flourish you are left concluding "They order ... this matter better [or at least differently] in ..." well, just about everywhere. As context is such a determinant in country after country, it seems per-plexing at best that the articles' conclusions could not have been

drawn together into a longer chapter that attempted to place them in the subject's global contexts. It is worse than perplexing in view of how very fiercely debated those contexts now are.

The meat of the book is mostly in the raw data it provides of the curricula of library schools across the world (excluding the U.S.). It is useful to have this information between two covers. In every case the data exceeds, through added comment and discussion by the authors, the same information to be found in the schools' web pages (and in some cases the basic information itself is not to be found via the web). While the data predominates, it is the authors' analyses of why things are

the way they are that should ensure these articles are widely read. The profession's low status and unreformed administration can be deeply influential – in Japan this state-induced malaise is hard-coded in the employment system. As influential on the teaching of cataloguing – but at least within the profession's control to change – is the legacy of local rules and standards, perhaps most dramatically felt in Germany.

In several countries in fact the divisions run even more deeply as "cataloguing" has been understood to mean bibliographic description at the almost total expense of authority control. The paper from Poland highlights this dilemma, discusses how automation has been a positive influence in undoing "old Grycz" and its emphasis on description and sees further likely improvements through teaching FRBR which will make students aware of the "net of relationships between the nature of ... the elements and their attributes and the functions they perform in a retrieval system". It would be enlightening to tease out the ingredients from the determinants of history that would be needed to de-velop an optimum training program for the future, applicable in any country. Contrast Poland with India, for instance, where (thanks to Ranganathan) it has long been (although now no longer) a mandatory requirement at Master's level to design a "depth version of *Colon Classification* for a micro-subject". Alternatively, take any number of countries and compare the impact of technology. This is variously interpreted as increasing the need for cataloguing training (China), threatening it (Nigeria) or even invalidating it completely in the case of Israel where courses have been dropped as copy cataloguing has prevailed, although short-sightedly as it turned out as many libraries discovered an insufficiency in available copy.

This summary cannot hope to include all the future needs these papers perceive as desirable to be met, but to cite a clutch of them reveals their

common stance that the lack of a standard defining what should be taught in education for cataloguing is profoundly damaging. In the three papers from the African continent there are pleas for automation to increase, in China more practicum hours are found to be essential; in Korea there should be more opportunities to learn foreign languages (a requirement amazingly under-emphasized throughout this book), begin or enhance liaison with counterparts in other countries, and acquire more library science journals; in most countries the balance of practice and theory should be resolved once and for all as should the integration of teaching documentation of e-resources and new media. IFLA's CPD section's guidelines for standardizing what is taught clearly can't come soon enough, although one wonders if a more effective solution could be achieved via bodies unmentioned in these pages such as the Mellon Foundation or the Open Society Institute. An ongoing failure to arrive at any "homogeneity" (Spain) in what cataloguing education should consist or simply a lack of agreed obligatory elements is only going to weaken yet further what the paper from the British Isles eloquently calls a subject that "dare not speak its name", one punctured by "shame", believed to be "boring and depressing", and grievously misunderstood by senior management.

For this reader the most fascinating pages were those from Australia describing a project wherein students were given cataloguing instruction but simultaneously required to give equal time to questioning its worth and function. There's something potentially depressing in signing up for a course only to find, from day 1, the lecturers so insecure that they need to ask their students whether it is worth them teaching it. That said, only one student held on to his belief "there would be a given body of knowledge to be learned, with tried and traditional pedagogical strategies in place". Shining out from the description of the students' reactions, however, are perceptions all of us would benefit from reading. Their

criticisms seem to justify the case made by Gorman nearly two decades ago that teaching cataloguing is to teach "the way in which librarians should think". What we need now is to give the same students the course at University College London in which they will indeed be asked to "create a bibliographic record from scratch" (p. 161) and see how they react to "asking themselves a series of questions about the content of a discipline, the needs of the researcher, the services available" (p. 170, n. 55) as these generate and determine the record and the catalogue. It's too much to hope that the future of cataloguing education can be "intoxicating" to ponder (as it is, apparently, in Iran) but these pages lead you back again and again to wish that if any international standard is developed for cataloguing education it has the self-confidence to assert the skill as consistent in timeless and proven *methods of thinking*. To too many this skill is labelled mere pedanticism and it is probably going a bit far to claim the cataloguer "as an artist, he creates and recreates where necessary" (Nigeria), but Gorman's question remains maddeningly unanswered by the profession: "Who can deny that a person ignorant of bibliographic control would be incapable of carrying out the reference process?" This book should go a long way towards affirming the need for an answer, embodied in a standard.

- James Caudwell,
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***The theory and practice of the Dewey Decimal Classification system* / M. P. Satija. Oxford: Chandos, 2007. 206 pp. ISBN 978 1843 32435 9 hbk (£57), 978 1843 32434 2 pbk (£39.95).**
This book consists of 14 chapters and four appendices, with a ten-page bibliography, and provides a straightforward introduction to the DDC and its use. The author devotes two chapters (26 pages) to the history of the scheme and its governance, followed by two on an introduction to the scheme and its structure. The rest covers subject analysis, tables of

preference (which Satija, in my opinion correctly, calls precedence), number-building, and use of the tables, most of which have their own chapter. Each chapter is provided with examples made up for the purpose. However, although coverage is fairly comprehensive, the result, to my mind, is that there is too much background and not enough practical guidance.

There are also quite a number of strange statements and downright errors, too many to list here. For example, it is quite incorrect to say (p. 37) that all Dewey numbers should be treated as decimal fractions. The heading 'Enigma of zeros' seems to make a mystery where none exists, as in fact there would nothing enigmatic at all about the number of zeros used in a class-number if it were explained clearly. The suggestion that spaces after every third digit facilitate memory 'during the passage from the catalogue to the stacks' is erroneous, and in fact is not followed in the book. It is wrong to suggest that period numbers can be added to areas at 314–319, or that the period numbers from 930–990 can be added elsewhere. The fact that 'history of philosophy in India' (p. 84) is 'different from the history of Indian philosophy' does not justify creating a non-existent and explicitly forbidden number (109.54) for it. This kind of thing would be very confusing for the unwary beginner.

The bibliography contains many misprints, and the index is unsatisfactory in several ways. It seems strange, for example, to index 'zero' and 'zeros' separately. The word 'index' itself does not appear, being under 'relative index' only; elsewhere this is abbreviated to 'RI' with no explanation. There is an entry for 'William, Nancy J.' which is presumably supposed to refer to Nancy J. Williamson, but as neither name appears on the page in question it is impossible to be sure. Generally there are many terms which one would not expect anyone to look up.

Appendix 3 is called 'Revision tutorial'. One must question the usefulness of such questions as 'When was Melvil Dewey (1851–1931) born?' as a test of the reader's comprehension of the scheme. Of course such understanding cannot be tested properly with this kind of tutorial, and it would have been better to omit it altogether. As a summary of the history of the scheme the book might be useful, but then that information can be found elsewhere. The book is too expensive for what it is, and for beginners it really cannot be recommended.

- J. H. Bowman, University College London

Organizing information: from the shelf to the web / G.G. Chowdhury and Sudatta Chowdhury. Facet Publishing, 2007. xxv, 230 p. ISBN-10: 1856045781 ISBN-13: 978-1856045780

The authors state in the preface that the teaching of cataloguing and classification in LIS departments is less and less common and that this is the opposite of how it should be, a statement with which I totally agree. Therefore I was looking forward to reading what claims to be a "key student text" and also to learning a few new things myself.

The first six chapters cover: the what and why of information organisation; organising information in non-library environments; cataloguing, including information on AACR2 and FRBR; bibliographic formats, including information on MARC21; library classification (including details of classification schemes such as DDC, UDC, etc. and classification of electronic resources); and subject heading lists and thesauri, including LCSH. I felt that some parts of the chapters on organising information in non-library environments and bibliographic formats were perhaps too complex and densely written to introduce the topics they attempted to cover.
The remaining seven chapters move on to cover the organisation of

Internet information resources; metadata; mark-up languages; ontology; information architecture; the semantic web and finally current research, issues and trends in information organisation.

A glossary is included at the beginning of the book, which was not as useful as you might think; I thought that a lot of the definitions contained too much technical jargon and that it could have benefited from having the terms explained in layman's language.

The general tone of the book, particularly in the first few chapters, made me feel like I was reading an essay rather than an authoritative textbook on the subject. I did like the presence of questions at the end of each chapter and the references were comprehensive. All in all, I would not recommend the book to newcomers to traditional cataloguing and classification. They would be better served by a text that introduces them to the subject more gently and includes more comprehensive examples and practical exercises to help them understand the whys and wherefores. However, the later chapters on metadata and classification of digital resources and the semantic web, etc. would be useful for anyone looking for an introduction to those topics and gaining pointers to further in-depth research into these areas.

- Lesa Ng, Intute Content Co-ordinator, Heriot-Watt University

Roaring into our 20's: NASIG 2005. Proceedings of the North American Serials Interest Group, Inc. 20th Annual Conference, May 19-22, 2005, Minneapolis, Minnesota. / Margaret Meering, Elna Saxton editors. Haworth Information Press. 368 p. ISBN-13 978-0-7890-3288-1 (paperback) £15.32

"Roaring into our 20's" is published simultaneously as Volume 50 nos. 1/2 & 3/4 of *The Serials Librarian*.

NASIG celebrated its 20th anniversary with no fewer than three pre-conferences in addition to the annual conference. The proceedings of the pre-conferences are also included in this volume. These covered: serials holdings; serials Esperanto, promoting a common language for publishers, vendors and librarians; and a session on how to hold more effective meetings.

"Thought provoking perspectives from experts in library serials!" is how this volume is summed up in the back of the book blurb. Not a bad summary, but the perspectives are by no means restricted to librarians. The conference included contributions from most sectors of the "serials profession". The book is organised into vision sessions (two papers); strategy sessions (12 papers); tactics sessions (18 papers); the volume also contains a summary of the poster sessions presented; lists of delegates and an index. The subjects covered include library issues certainly, including bibliographic standards (ISSN; AACR3/RDA); usage statistics; storage; collection development; cataloguing; binding; linking, etc., but also considered are technology, the media and public discourse, scholarly communication and how to deliver more interesting presentations. Not all of the contributors appear to have submitted formal papers and some of the articles are actually summaries of what was said prepared by the recorder. Each article is introduced by an abstract.

I am by no stretch of the imagination a serials librarian, but I found much to interest and stimulate. For those who are serials professionals, there is certainly enough substance to follow particular themes of the moment through the book, such as scholarly communication or getting value from e-journal packages. I would recommend reading this to anyone with an interest in serials or the impacts of changes in technology and scholarly communications on libraries.

**- Alan Danskin,
Data Quality & Authority Control
Manager, British Library**