## CONTENTS

## EDITORIAL

### *Ars longa...*

WHEN YOU READ THESE WORDS another long-awaited volume should be on its way to our publishers.  A draft "penultimate" schedule for the Arts (then Class V) had been prepared by the mid-1970s, but the work was put aside in favour of other classes which were deemed to be more pressing.  Only in the later 1990s did the Classification Research Group take up the challenge again, discovering that

problems in the arts are, in their way, no less testing and stimulating than those one may encounter in the sciences and social sciences.

The art of classification may indeed be richly illustrated (no joke intended) by the classification of the Arts. Do read (or re-read) Derek Langridge's wide-ranging and thought-provoking *The classification of arts, crafts and entertainments*[1], Douglas Foskett's article *Revising Class W : The Arts*[2], and part of Jack Mills's apologia last year[3] to get a good idea of the many difficulties which have had to be resolved. There is no single, simple solution, and Class W (as the Arts class has become in BC2) will not attempt to offer one. However, the alternatives will be presented in a manner which should be much clearer to the user of the scheme.

To give readers a foretaste, the outline of Class W is to be found in the pages of this issue of the *Bulletin*. It is fairly detailed, to give a good idea of the structure and range of the class, but it is definitely not detailed enough for classifying a collection!

And if all goes according to plan, that perennial headache Class C, Chemistry, should be following close on its heels.

### *Almost the annual lecture*

Last year's annual lecture, following the AGM, was a relaxed talk by Alistair Miles about SKOS, the Simple Knowledge Organisation System, with quirky PowerPoint illustrations. Unfortunately they did not lend themselves to reproduction here and Mr Miles himself suggested and produced a "straight" article on the subject. It cannot be denied that much of flavour of the live talk is lacking, *so please make an effort to get to the Association's AGMs – you don't know what you may be missing!*

### *BC2 libraries*

It is a pleasure to be able to include two more contributions in the series devoted to libraries using the classification. David Johnson is keeping the BC2 flag flying at Saint Peter's College, Oxford, despite the relentless promotion of Library of Congress standards throughout the university library system. In total contrast, Clare Swanson and her colleagues describe their work at The General Teaching Council for England, and also tell us something about themselves : this personal touch is welcome, too.

### *KXH B Blisswords...*

I announce the passing of the Blissword puzzles, without many regrets. Conceived as light-hearted teaching aids and entertainments, they outlived their usefulness. But how *do* you teach your students, staff (or yourself) to use the classification? If you have ideas and practices which you have used successfully, why not share them with us?

### *... and finally*

Thanks to all contributors – and readers! Keep on responding kindly to my pleas for news and views for the *Bulletin*. Contributions really are appreciated, and not only by
*Tony Curwen,*
*Aberystwyth, August 2006*

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[1] Langridge, D. J. *Classification and indexing in the humanities.* London : Butterworths, 1976. Chapter 6, pp 78-94.
[2] *Bliss classification bulletin,* No.42, 2000. pp. 16-17
[3] *Bliss classification bulletin,* No.47, 2005, pp. 14-15

# *BLISS CLASSIFICATION ASSOCIATION*

Minutes of the ANNUAL GENERAL MEETING of the Bliss Classification Association held at 2.15 p.m. on Friday, 25 November 2005 in the New Seminar Room, Senate House Library, University of London, Malet Street, London.

Present:

>C. Andel (Lexis-Nexis)
>D. R. Beasley (INSPEC)
>James Brooks (CAB International)
>Vanda Broughton (University College London)
>Nicholas Cochard (Government esd-toolkit/IPSV)
>Richard Crabtree (Senate House Library)
>Tony Curwen (Personal member)
>Frank Emmott (Personal member)
>Angela Haselton (Tavistock & Portman NHS Trust Library)
>David Johnson (St. Peter's College, Oxford)
>Heather Lane (Scott Polar Research Institute)
>Jeremy Larkin (NCH)
>John Lindsay (Kingston University)
>Marion MacLeod (Fitzwilliam College, Cambridge)
>Helen Mackin (Barnardo's)
>Jack Mills (BCA)
>Mark Palmer (CAB International)
>Richard Procter (CARET, University of Cambridge)
>Elizabeth Russell (Personal member)
>Catherine Sharp (SOAS)
>Miriam Shaughnessy (Department of Health)
>M. J. Stapleton
>Mike Thacker (Government esd-toolkit/IPSV)
>Leonard Will (Willpower Information)

**1.** **Apologies** were received from Jean Aitchison, Philip de Friesz, Chris Preddle and Julie Robinson.

**2.** **Minutes of the previous meeting**

The minutes were circulated. The minutes were approved and signed as a correct record.

*Proposed:* Vanda Broughton; s*econded:* Angela Haselton

**3.** **Matters arising**

There were no matters arising from the previous minutes.

**4.** **Progress of BC2: Editor's report**

4.1 Mr. Mills commented on his written report, which had been circulated to the meeting and would be appended to the minutes.

4.2     He commented on the lack of progress with publication, and his awareness of the disappointment this caused to users.  He hoped that 2005 would prove to be a turning point in the production of the classification.  He explained the problems caused by the inadequacy of the existing software for schedule layout and indexing; these had now been resolved by the creation of a new set of programs.

4.3     The major event in 2006 would be the publication of Class C Chemistry

4.4     Much work had been done on Class W Fine Arts; this was nearing completion, and would also be delivered to Thomson, in July 2006.  The sequence of forthcoming new schedules would also include Technology

4.5     Work continued on the music class and the development of a combined classification and thesaurus; the new software would include programs for the generation of the thesaurus from the classification structure.

4.6     Mr. Mills thanked the Committee for their work, and for their promotion of BC2.

4.7     He also commented on the overall poor resourcing of BC2, particularly on the financial front.  A small grant had been received from CILIP for the inputting of data from manuscript versions of Applied biology.  In the coming year considerable effort would be put into attracting new funds.

**5.     Physical production of the schedules**

5.1     Mr. Coates spoke about the delay in the completion of the chemistry class caused by his manual editing of the machine generated index; production of the index was not a totally computable process because of the flexibility of approach required, mainly for linguistic reasons.

5.2     He felt that the role of the alphabetical index had been widely underestimated, and that the conceptual problems of index making were not appreciated.  The index revealed many inconsistencies in the structure of the classification, and, while he appreciated the frustration of members, the reputation of BC2 for quality and integrity should not be compromised by issuing work known to contain errors.

**6.     Finance and membership**

6.1     Ms. Haselton tabled a written report.

6.2     Because of delays caused by holiday arrangements, the accounts were unsigned, but they had been approved by the Auditor.  A signed copy would be submitted to the next Committee meeting, and would appear in the Bulletin.

6.3     The BCA had gratefully received another anonymous donation.

6.4     Subscriptions appeared to be down, but this was explained by the late circulation of renewal notices.

6.5     The amount received from royalties was very low; hopefully the production of new classes would improve this.

6.6     The accounts were unanimously approved.

*Proposed:* Vanda Broughton; *seconded:* Jack Mills

6.7 Ms. Haselton invited any new members to make contact.

**7.      BC Bulletin**

7.1      The Chairman invited Mr. Curwen to speak about the Bulletin, and thanked him for his extraordinary work in producing such an excellent publication.

7.2      Mr. Curwen invited contributions to the Bulletin, which he was always willing to receive, although these would earn no reward, save the honour in BC2 circles!

**8.      Auditor's election**

Mr. Mills thanked Ken Best for his work and expressed the BCA's indebtedness to him.  He had expressed his willingness to continue, and his re-election was proposed by Vanda Broughton and seconded by Elizabeth Russell, and approved nem. con.

**9.      Committee elections**

9.1      Vanda Broughton and Marion MacLeod were re-elected to the Committee nem. con.  As no-one had volunteered to fill the role of Secretary, Vanda Broughton would continue to perform these duties.

9.2      Mr. Mills welcomed any expressions of interest in the Committee, explaining that the duties were not very demanding.

**10.      AOB**

As there was no other business, the meeting closed at 3.15 p.m.

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## ✂ Snippets

**WebWatch**      The Association's own web site is still alive

**http://www.sid.cam.ac.uk/bca/bcahome.htm**

(although it could do with a little refreshing in places, maybe)

while the discussion list

**http://www.jiscmail.ac.uk/lists/LIS-BCA.html**

has proved useful for announcements about the AGM, etc., but is notably devoid of any discussions!  If you have comments and queries about both published and forthcoming volumes, problems in applying the scheme, suggestions for revisions – amendments and new vocabulary (lots of these!), news of yourselves, your libraries and information units and more besides, please share them with us.  It is most important that this is a channel of communication *to* the Committee and not just from it.

*Please use it – we don't want to lose it!  And remember that it is a great way to help a scattered membership keep in touch.*

# BLISS CLASSIFICATION ASSOCIATION

### Consolidated Receipts and Payments for the Year Ending 31st July 2005

## RECEIPTS

| 2004 | Balance brought forward at 1st August | 2005 |
|---|---|---|
| *6303.28* | Deposit account | 4897.68 |
| *605.67* | Current account | 525.14 |
| *377.09* | Reserve account | 380.93 |
| | *Subscriptions* | |
| *170.00* | Personal | 90.00 |
| *705.00* | Institutional | 195.00 |
| *83.08* | Royalties on 2nd edition (Bowker-Saur) | 38.83 |
| *51.53* | Distribution from M & G (Charibond) | 64.40 |
| *109.75* | Alliance & Leicester share dividend | 120.75 |
| | *Donations* | |
| *500.00* | Anonymous gifts | 700.00 |
| *36.50* | Supply of out-of-print schedules | 0.00 |
| | *Interest payments* | |
| *59.65* | Deposit (Nationwide) a/c | 88.14 |
| *3.84* | Reserve a/c | 6.76 |
| ***9005.39*** | | **7107.63** |

## Current Assets at 31st July

| 2004 | | 2005 |
|---|---|---|
| *800.13* | Charibond (at cost) | 800.13 |
| *525.14* | Cash in Current account | 219.36 |
| *380.93* | Cash in Reserve account | 387.69 |
| *4897.68* | Cash in Deposit (Nationwide) account | 4897.68 |
| ***9502.99*** | | **7213.87** |

# **PAYMENTS**

| *2004* | | *2005* |
|---|---|---|
| *459.00* | Committee expenses | 370.97 |
| *259.16* | AGM expenses | 133.04 |
| *29.40* | Stationery, postage and photocopying | 0.00 |
| *0.00* | Publicity | 40.00 |
| *181.51* | Bulletin expenses | 150.00 |
| *2272.57* | BC2 expenses (computer equipment, printer paper, publicity) | 0.00 |

**Balance in hand at 31st July**

| | | | |
|---|---|---|---|
| *4897.68* | General deposit account  (Nationwide) | 5806.57 | |
| *525.14* | General current account | 219.36 | |
| *380.93* | Reserve account | 387.69 | |
| *5803.75* | | 6413.62 | |
| *9005.39* | | **7107.63** | |

**Angela Haselton**
*Honorary Treasurer*
40c Morpeth Road
LONDON
E9 7LD

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**Auditor's Report**

I have examined the books, bank statements and other relevant papers of the Bliss Classification Association and find the above statement of accounts to be correct.

**Ken Best**                                          19 November 2005
*Honorary Auditor*
30 Cissbury Close
HORSHAM
West Sussex
RH12 5JT

**PROGRESS OF BC2 IN 2005: Editor's report to the AGM**

*Design and Compilation of Schedules*

**CLASS 2/9  Preliminary Classes.**  Outline schedules of these were prepared and discussed at two Classification Research Group (CRG) meetings; the first considered the communication and information component of these classes and the second considered the exceptional class of Phenomena (objects of knowledge, as distinct from forms of knowledge, or disciplines).

**CLASS C  Chemistry.**  This class continued to give trouble and cause delay.  All the corrections necessitated by the remedying of the faults disclosed by work on a comprehensive A/Z index (using the new software) were made on a new version, which was sent to Eric Coates and Leonard Wills (who is lending valuable assistance in the struggle).  Although it is unrealistic to suppose that no further errors will be found, it is hoped that these will not be too difficult to remedy and it is hoped to have new camera-ready copy to send to the publisher in the New Year.

**CLASS GS  Applied Biology.**  The conversion of the massive mss draft of this to electronic form (paid for by a grant from CILIP) is now virtually complete; this will greatly facilitate its finalization. So it now takes its place in the queue of science and technology classes awaiting finalization and publication – i.e. (in order), Chemistry, Technology, Earth sciences,  Biological sciences, Applied biology & human environment.

**CLASS W  The Arts.**  This large & complicated class is now very near to completion.  On this assumption, a CRG meeting recently discussed a detailed outline of the whole class.  It is hoped that crc (camera-ready copy) will go to the publishers in the Spring.

**CLASS WQ/WS  Music.**  As reported at the last AGM, Jean Aitchison and other Committee members have been working on the problems of adding a thesaurus to this class (which will be published separately from Class W The Arts).  Paul Coates has now agreed to produce new software to handle the problems posed by the new format.

*Development of BC2 in general*

Your Committee, despite the brake which must be imposed on their enthusiasm by the delays in publication chronicled above, continues to be very active in a number of other areas.  It is the main agency by which the wider community communicates with BC2.  Its correspondence reports in the past year have included, for example, enquiries from an American librarian on how BC2 might help organize his website, from a Swedish journalist on how BC2 handles the concept of Innovation (it's a Phenomenon, of course) and from Wikipedia on how BC2 might help its updating.

The problem of funding is a constant source of anxiety and perhaps our greatest failure in the past year has been the lack of progress on this front.  It is hoped that this situation will see some improvement  in the coming year.  The Committee also keeps a sharp eye on technical matters of schedule construction, as is seen in the basic policy issue raised in the Bulletin (on the best v. the better) and in questions such as the handling of alternatives in the schedules (always a distinctive feature of BC2).

To end on a more personal note: BCA heard with great regret of the unexpected and premature death of Steve Pollitt, a good friend of BC2.  In happier vein, we congratulate Heather Lane on her new job at the Scott Polar Research Institute, Cambridge, which nevertheless has its sad side for BCA which has lost one of the best Secretaries any organization ever had.

*J.M.*

# The Bliss Classification Association

**an association to develop and promote the**
**Bliss Bibliographic Classification**
(Registered Charity no. 270580)

## Officers and Members of the Committee 2006

# SIMPLE KNOWLEDGE ORGANISATION
# AND THE SEMANTIC WEB

## *Notes on the Bliss Classification Association Annual Lecture 2005*

## Alistair Miles

CCLRC Rutherford Appleton Laboratory

*Alistair Miles's presentation took the form of an informal talk illustrated by PowerPoint diagrams and illustrations which do not 'flow' so well on paper. For publication in the Bulletin he has kindly produced this introduction to SKOS (Simple Knowledge Organisation System), a machine-readable representation format for controlled structured vocabularies and for subject indexes.*

### Scope, Design and Assumptions

The scope of SKOS (1, 2) includes those types of controlled structured vocabulary that are intended for use within retrieval applications. These include thesauri broadly conforming to the ISO 2788:1986 guidelines, and both synthetic and enumerative classifications schemes, although some further work is required to establish the full requirements deriving from the application of synthetic classification schemes such as the BC2.

The model underlying the design of SKOS assumes that the basic purpose of a controlled structured vocabulary is to establish a set of distinct *meanings*, and to provide a way of referring to those meanings that is unambiguous at least within the scope of the vocabulary. For example, in a classification scheme such as the BC2, each class establishes a distinct meaning, and the notation for that class provides a way of referring to its meaning unambiguously within the scope of the BC2 schedule. In a thesaurus broadly conforming to ISO 2788:1986, each descriptor establishes a distinct meaning, and the lexical value of the descriptor itself is used to refer to that meaning unambiguously within the scope of the thesaurus.

Both a classification scheme such as the BC2 and a thesaurus broadly conforming to ISO 2788:1986 can be understood as consisting of a set of *conceptual units*, that is, a set of units each establishing a distinct meaning, and each providing a means of reference that is unambiguous at least within the scope of that classification scheme or thesaurus.

A SKOS representation of a controlled structured vocabulary begins with a description of its underlying conceptual units. Each conceptual unit may be allocated a Uniform Resource Identifier (URI), and it is recommended that this URI be used as the primary means of reference within computer systems. Note that, although URIs are commonly used to refer to "web sites", it is a basic principle of the Semantic Web (3, 4, 5) that URIs may also be used to refer to anything from a make of washing machine to a country to an abstract concept such as multi-faith society. Using URIs as the primary means of reference within computer systems enables unambiguous reference in an open-ended system, which is vital where data from multiple sources is being combined and merged.

Each conceptual unit is then associated with *labels* and *documentation* that serve to explain the intended meaning, and provide a way of generating visual representations on screen or in print, and/or representations for other modalities (e.g. aural). The basic type of label is a

*lexical label*, i.e. a string of Unicode characters. For example, the character string "Animal physiology" is the preferred lexical label for the BC2 class with the notation "GBB". Each lexical label may be associated with a particular natural language (such as British English), which provides a basis for *multilingual labelling* of conceptual units. Each lexical label is either *preferred*, *alternative* (i.e. non-preferred), or *hidden*. A conceptual unit must of course only have one preferred lexical label per language. Hidden lexical labels are usually not rendered when generating a visual or aural representation, but are made available to computer search applications – typically this feature is used for commonly mis-spelled or mis-typed words.

SKOS also currently provides support for *symbolic labels* (i.e. a label that is an image, rather than a sequence of characters), and in future may provide support for other types of label such as *speech labels* (i.e. labels that can be read by a speech synthesis engine) and *math labels* (i.e. labels that consist of complex mathematical notation).

Different types of *documentation* (also called *annotation*) may be associated with a conceptual unit. Currently supported are *scope notes*, *definitions*, *history notes*, *edi-torial notes*, *change notes* and *examples*. Additional types of documentation may be included via the extensibility mechanism that is built in to the design of SKOS. Documentation may of course be provided in multiple languages.

The basic structure of a controlled structured vocabulary may be represented via *semantic relationships* between conceptual units. SKOS offers built in support for three types of semantic relationship – *broader*, *narrower* and *related* – and custom relationship types may be defined via the extensibility mechanism. The meaning of the built-in semantic relationship types follows the guidelines given by BS 8723 part 2. Some further work is needed to explore whether the hierarchical relationships of some classification schemes fall within the broader/narrower paradigm.

SKOS also enables a *subject index* over a collection of items to be represented in a machine-readable format. A subject index essentially consists of a set of links between items in a collection and conceptual units in a controlled vocabulary. Two types of indexing link are built into SKOS. The first is the basic *subject* link – this link establishes the given conceptual unit as a subject of a work, where the work may be about several subjects. The second is the *primary subject* link – this link establishes a given conceptual unit as the primary or principal subject of a work. These two types of link allow both the typical subject index constructed using a thesaurus (where the subjects of a work are described) and the typical subject classification constructed using a classification scheme (where works are classified by their primary subject) to be represented and differentiated. Note that it is quite reasonable to allow these two types of link to coexist within computer systems, where there is no need to locate items within a single physical region such as a shelf in a library.

SKOS includes some support for representing meaningful groupings of conceptual units, known in BS 8723 as "arrays" with "node labels", although there are some issues with this feature that remain to be resolved.

Currently there is no built in support for the synthesis of conceptual units to represent compound meanings, although proposals are under discussion at this time, and this is seen as an important feature.

**Application, Context and Status**

SKOS is intended to support the interoperation of three principal software components involved in the management of digital libraries: (a) a tool to manage the development of a controlled structured vocabulary; (b) a tool to manage the devel-opment of a subject index or classification for a particular collection of items; (c) a tool to enable retrieval of items from a collection using a vocabulary and an index. By representing both a controlled structured vocabulary and a subject index or classification in the SKOS format, and by publishing these *data* in the World Wide Web, the data may be shared and re-used across application boundaries.

Typically, several collections may use the same vocabulary to index or classify their items (for example several libraries use the BC2 schedule). Traditionally, retrieval services are provided locally per-collection, however there is a growing need to provide retrieval services across two or more collections, with a single virtual point of access. This allows a user to pose a single question, and have matching results returned from multiple sources, rather than having to individually query each of several collections. A more demanding situation is met were several collections use different vocabularies for indexing or classification, and a user needs to be able to search across those collections in a coherent way.

These are specific examples of a more general situation, where data are distributed across multiple locations, and where computer applications need to be able to *harvest* and *aggregate* those distributed data, in order to operate on the "bigger picture". Another example, completely unrelated to the field of library science, is provided by a company where information about employees, project, products, and finance are managed in different databases, but where managers need to be able to pose questions such as, "which employees have worked on successful product development projects?" A day-to-day example is provided by the need to manage and to share personal data such as contacts, email, calendar, and bank details, across computer applications and also between friends, family, colleagues, or organisations, in a seamless and secure way.

The World Wide Web Consortium (W3C) has promoted the development of an underlying technological framework to enable solutions to this type of scenario, within the scope of its *Semantic Web Activity* (4, 5). To quote Tim Berners-Lee (3):

*"The goal of the Semantic Web initiative is to create a universal medium for the exchange of data where data can be shared and processed by automated tools as well as by people."*

To allow thesauri, classification schemes and subject indexes to be shared and re-used by many organisations and individuals, SKOS has been built using Semantic Web standards. SKOS is an application of a lower-level Semantic Web technology called the Resource Description Framework (RDF), which provides the logical "glue" needed to join data from different sources together. SKOS and RDF make extensive use of Uniform Resource Identifiers (URIs) to provide an unambiguous way of referring to abstract or physical things within computer systems. For example, if URIs were allocated to the classes of the BC2, any library system could use RDF to share its data with any other library, and their data could be meaningfully integrated and cross-references, without fear of ambiguity.

SKOS has been developed within the context of W3C's Semantic Web Activity (4). The initial development work was carried out by the Semantic Web Advanced Development for Europe project (SWAD-Europe), funded by the EU-IST 5th Framework programme. Subsequently development continued within the W3C's Semantic Web Best Practices and Deployment Working Group (SWBPD-WG), which has published the SKOS Core Guide (1, 2) and SKOS Core Vocabulary Specification as W3C Working Drafts.

At the time of writing, SKOS is a work in progress. The SKOS Core Guide and the SKOS Core Vocabulary Specification provide the normative documentation for the use of SKOS, and are published as W3C Working Drafts. The current intention is to develop SKOS towards a stable publication by the end of 2007, and therefore any comments and suggestions especially with respect to the requirements for the machine-readable representation of synthetic classification schemes would be warmly welcomed. All discussion relating to the development of SKOS is conducted via the public mailing list *public-esw-thes@w3.org* – comments and suggestions should be sent to this address, and all are welcome to subscribe and to participate in the discussions.

## Acknowledgements

## References

1.      SKOS Core Guide.

2.      http://www.w3.org/TR/swbp-skos-core-guide

3.      SKOS Web Site.

4.      http://www.w3.org/2004/02/skos

5.      The Semantic Web – an Interview with Tim Berners-Lee.

6.      http://www.consortiuminfo.org/bulletins/semanticweb.php

7.      W3C Semantic Web Activity.

8.      http://www.w3.org/2001/sw/

9.      The Semantic Web, Scientific American.

10.     http://www.scientificamerican.com/linktous.cfm?articleID=00048144-10D2-1C70-84A9809EC588EF21

## Contact

A. J. Miles
E-mail: a.j.miles@rl.ac.uk
Phone:  +44 1235 445440        (01235 445440)

# SUMMARY OUTLINE OF CLASS W THE ARTS

\* Filing order of facets is the reverse of citation order.  This gives an inverted schedule: concepts in a compound class are combined retroactively; i.e., a concept filing later in the schedule is cited before one filing earlier; e.g., WKB G9E  Painting – Landscape – British (which combines WK Painting, WBG Landscape, and W9E British)

**W      The Arts**

\* Classes W/WB take only works covering arts in general, i.e., covering visual arts, music & performing arts.

| | | |
|---|---|---|
| W2 | **.** | *Common subdivisions – as Auxiliary Schedule 1* |
| W27 | **. .** | (History by period & place) |
| | | \* For qualifying W29/W3C only.  For art history proper (of the works of artists), <u>see</u> W3E/WY. |
| W29  2 | **. .** | Biography |
| | | \* Other than of artists.  The latter are cited immediately after the particular medium. Many alternatives are given; <u>see</u> Appendix 3. |
| 3 | **. .** | (Relations with other subjects)  Copyright.. |
| W34 | **.** | (Agents)  Tools, instruments, equipment |
| W37 | **.** | (Operations)  Techniques.. Drafting.. Production.. |
| W3C | **.** | *(Materials as constituents of artworks)* |
| W3E | **.** | **Art product, art object, works of art** |
| W3H | **. .** | (Properties)  Content, meaning.. Emotions.. Comedy.. |
| W3I   L | **. .** | (Elements)  Composition & design.. Form.. Colour.. |
| | **. .** | *(Kinds of arts defined by earlier facets)* |
| W3R | **. .** | *(Kinds of arts by movements, schools, styles)* |
| | | \* For original styles <u>see</u> place/time of origin (e.g., WK9 FLR I Impressionist painting). |
| W3S | **. . .** | Universal styles, A/Z. Classicism.. Realism.. |
| W3T | **. . .** | Historical styles, influences, revivals |
| W6A | **. .** | *Kinds of arts by special categories of persons* |
| W6A  F | **. . .** | Folk arts.. Ethnic.. Religious.. |
| W77 | **. .** | (Kinds of arts by period)  Ancient.. Modern.. |
| W9 | **. .** | (Kinds of arts by place)  Western.. Non-Western.. |
| | **. .** | *Kinds of arts by special categories of artists* |
| WBA  M | **. . .** | Children's arts.. Disadvantaged persons' arts.. |
| | **. .** | (By representation)  Abstract.. Figurative.. |
| | **. .** | *(Artforms by medium)* |
| WC | **. . .** | **Visual arts** |
| WC3  7K | **. . . .** | (Operations)  Manufacturing.. Aesthetic.. |
| BY | **. . . .** | (Materials)  Substrates.. Marking materials.. |
| WC9 | **. . . .** | *Kinds of visual arts by place* |
| | | \* Notation modified to give shorter classmarks for large literature on art history by place/time.  WCC/Z is Western (as W9C/Z), WDM/Z is Non-Western (as WAM/Z). |
| WEC  M | **. . . .** | (By special categories of persons)  Children's arts |
| WEE | **. . . .** | (By representation)  Abstract.. Figurative (subject).. |
| WF | **. . . .** | **Applied arts, design arts** |
| WFG | **. . . . .** | Graphic design |
| | | \* For graphic fine arts, <u>see</u> WIT Y. |
| WFI | **. . . . . .** | Calligraphy.. Illuminated manuscripts.. |
| WFK | **. . . . . .** | Print design.. Illustrations.. Books.. Press.. |
| WFQ | **. . . . . .** | Commercial art.. Advertising.. Maps.. Signs.. |

*The Arts  W*
*. Art product  W3E*
*. . (Artforms by medium)*
*. . . Visual arts  WC*
*. . . . Applied arts  WF*

| | | |
|---|---|---|
| WGB | . . . . . | **Decorative arts** |
| WGC | . . . . . . | Arts & crafts, craftwork, handicrafts |
| WGC H | . . . . . . | (Kinds by minor utility)  Objets d'art.. |
| WGD | . . . . . . | (Kinds by material)  Stone.. Metal.. Ceramic.. |
| WGT | . . . . . . | Textiles.. Printed.. Tapestry.. Carpets.. |
| WHB | . . . . . | Dress design, costume design, fashion design |
| WHH | . . . . . | Industrial design, product design |

       * Aesthetics of manufactured objects.

| | | |
|---|---|---|
| WHL | . . . . . | Interior design.. Colour schemes.. Furniture.. |
| WHN Y | . . . . . | **Environmental & landscape design, built environment** |

       * Aesthetic considerations only; main class is UO/UY Technology.

| | | |
|---|---|---|
| WHO | . . . . . . | Design of built environment |
| WHQ | . . . . . . . | Civil engineering structures.. Bridges.. |
| WHS | . . . . . . . . | Architecture, buildings design |
| WHS 3R | . . . . . . . . | *Styles, movements* |
| 77 | . . . . . . . . . | *Kinds by period & place* |
| OB | . . . . . . . . | (Parts of buildings)  Fronts.. Columns.. Arches.. |
| WHT VA | . . . . . . . . | (Kinds of buildings)  (By construction)..(By use).. |
| WHV | . . . . . . | Landscape & garden design |
| | . . . . . . . | Spaces.. Public.. Private.. Industrial.. |
| WHV Q | . . . . . . . | Residential.. Gardens.. Parks.. |
| WHW | . . . . . . | Environmental planning design |
| | . . . . . . . | (By scale)  Regional planning.. Local.. Urban.. |
| WHW R | . . . . . . . | Urban.. Cities.. Grid plan.. |
| WHY | . . . . . | Lives of designers, A/Z |
| | | |
| WIT | . . . . | **Fine arts** |
| WIV | . . . . . | **Pictorial art, two-dimensional art** |
| WIX | . . . . . . | Graphic fine arts |
| WJ | . . . . . . . | Drawing, freehand drawing.. Printmaking.. |
| WJW | . . . . . . . | Photography.. Composition.. Light & shade.. |
| WK | . . . . . . . | Painting.. (By materials)  Murals.. Fresco.. |
| WKM | . . . . . . . . | Oils.. Watercolours.. |
| WKV | . . . . . . . . | Painters, A/Z |
| | . . . . . . | Other two-dimensional fine arts.. Stained glass.. Tapestries.. |
| WKY | . . . . . | **Three-dimensional fine arts** |
| WL | . . . . . . | Sculpture.. (By materials).. (By form)  Relief.. |
| WM | . . . . . | **Multimedia art**, intermedia, mixed media art |
| WMM | . . . . . . | Video.. Installations.. Happenings.. Performance.. |
| | | |
| WOY | . . . | **Performing arts & music** |
| WP | . . . . | **Music** |

       * Classes WP/WR to be published  separately.

| | | |
|---|---|---|
| WS | . . . | **Performing arts** |
| WT | . . . . | Theatre, theatrical arts, drama theatre |
| WT3 E | . . . . . . | Theatrical productions, drama, the art object |
| | . . . . . . . | Special creative elements in theatre art |
| WTC P | . . . . .. . . . | Theatrical companies.. Acting.. |
| | . . . . . . . . | Actors.. |
| WTE D | . . . . . . . . | Design.. Producing.. Directing.. |
| P | . . . . . . . . | Playwriting.. Plots.. Dialogue.. |
| | . . . . . . . . | *Kinds of productions by various factors* |
| WTO | . . . . . | Dance theatre |
| | . . . . . . | (Special creative elements)  Choreography.. |

*The Arts  W*
*. Art product  W3E*
*. . (Artforms by medium)*
*. . . . Performing arts  WS*
*. . . . . Dance theatre  WTO*

| | | |
|---|---|---|
| WTP | . . . . . . | Ballet.. Modern dance theatre.. |
| WTQ  D | . . . . . | Variety theatre, vaudeville.. Miniature theatre.. |
| WTR  B | . . . . . | Spectacle theatre.. Circus.. Pageants.. |
| WTT | . . . . . | Film performing arts, cinema |
| | | * Divided as WT2/WTL Theatre (adjusted). |
| WTT  KC | . . . . . . | (Special objectives)  Newsreels.. Documentaries.. |
| WTU | . . . . . | Broadcasting |
| | | * Divided as WTT (adjusted). |
| | | * As communication medium, <u>see</u> Class 4. |
| WTU  KC | . . . . . . | Reportage.. News.. Talks.. Interviews.. |
| WTV | . . . . . . | Radio |
| | | * Divided as WTU Broadcasting |
| WTW | . . . . . . | Television |
| | | * Divided as WTU Broadcasting |
| WTW  T | . . . . . | Electronic theatre.. Interactive.. Web Theatre.. |
| | | |
| | . . | History of the arts |
| | | * Alternative (not recommended) to citing after Medium. <u>See</u> Appendix 3 for details. |
| WU | . . . | Art by period.. |
| WV | . . . | Art by place.. |

*Notes by the Editor of the Bulletin:*

This is not a facsimile : the published volume will follow the normal BC2 layout with the schedules printed in two columns.  The standard practice of compressing the carry-overs at the heads of the columns will also be maintained, in order to reduce the degree of indentation required.  Here, with the full width of the page available, the indentations (subordination) have been shown in one sequence from beginning to end.

The references to "Appendix 3" herald a change in our practice.  Alternative locations and arrangements have always been a major feature of the scheme, providing for the genuine needs of users with different viewpoints and priorities.  However, these have undoubtedly added greatly to the complexity of the schedules and too often obscured the steady progression of the preferred standard order of the classification.  In the Arts class the alternatives – there is a good number of them – are indicated at the approp-riate points in the schedules, but their detail and the instructions for their use have been relegated to an Appendix.  It is hoped that this will be welcomed by all users.

Music, as one of the performing arts, has its logical place in this sequence.  It has obvious affinities with Theatre (through Opera) and Ballet.  Several of the basic prob-lems in classification appear again, for example, the definition of styles and their position in the citation order.  Nevertheless, as previously announced, Music will be published as a separate volume, for practical reasons.  This one will also break new ground : we plan to include a complementary thesaurus with the classification.  If the problems (doubtless many!) can be solved and the publication is considered to be a success, then this will be adopted as the pattern for the remaining volumes and all subsequent revised ones in their turn.

*A.G.C.*

BC2 LIBRARIES : GTCE

# Bliss at The General Teaching Council for England

## *Clare Swanson with Nicola Hunt and Helen Wade*

### *Introduction* – What is the General Teaching Council?

 **"The General Teaching Council for England, as the professional body for teaching, provides an opportunity for teachers to shape the development of professional practice and policy, and to maintain and set professional standards**."

Established in September 2000, The General Teaching Council for England exists to support teachers' professional efforts to offer children and young people high quality teaching that meets their needs and enables them to learn and thrive.  As the professional body for teaching in England, GTC is committed to securing the best possible standards of learning and achievement for young people.

The GTC has three principal functions:
- to maintain a register of qualified teachers in England (all teachers in maintained schools and pupil referral units, and also non-maintained special schools have to register)
- to enable the teaching profession to regulate itself
- to provide advice to government and other agencies on key issues affecting the quality of teaching and learning.

For more information about the key functions of the GTC please refer to our website. [4]

A key part of the GTC's role is to advise government and other education partners on issues affecting standards of teaching and learning, based on research evidence and teachers' views and expertise. Examples of these areas of work are CPD for teachers and the Teachers' Professional Learning Framework (TPLF) which helps teachers map and plan their own development and also the Teacher Learning Academy which offers public and professional recognition for teachers' learning, development and improvement work.

GTC also promotes teaching as a research-led profession.  *Research of the month* contains examples of how research can contribute to effective professional practice.  The GTC sponsors research, often in partnership with other education interests.  Current projects include participating in a long term study into the status of the teaching profession and work with Christchurch College, Canterbury, on ways of retaining more experienced teachers.

### The Information Service at GTC

When GTC was set up in 2000 it was not planned to have an internal information/library service. Staff managed their own book and journal purchases and searched for their own information sources. As the organisation grew it was recommended that a librarian be appointed to centralise this work and support staff in their information searching and management.  An Information Service was created and has grown from strength to strength over the last five years.

Today the Information Service (IS) exists to support the information needs of all GTC staff and Council members, but is not open to the general public or teachers.  The IS aims to provide access to relevant internal and external information to support the aims and objectives of the GTC and to ensure that staff and Council Members have access to information and evidence they require to carry out their role at the GTC.  IS is responsible for ordering, managing, disseminating and providing

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[4] http:// www.gtce.gov.uk

access to information in an effort to avoid duplication and to streamline information requirements and budget spend.

All GTC teams ranging from Human Resources to the Legal Team use the Information Service as they all have information needs. Most of our users are based in the London office, where Information Services is based, but we also support the information needs of staff in our Birmingham office and remote users such as Council Members and Link Advisors who work closely with teachers and local education authorities. Our main users within the organisation come from within the Policy and Research Team.

A key element of our service is providing staff with up-to-date information and much time is spent searching websites and databases to ensure that our staff have the most current information and evidence to base their work upon. IS provides GTC staff with a current awareness bulletin every fortnight that highlights relevant information from the world of education. IS also spends a great deal of time undertaking literature searches for staff using databases such as the *British Education Index* and the US and Australian equivalents which result in many interlibrary loan requests.

With this in mind it is perhaps not surprising that our hard copy collections are relatively small, as much of our work is done using the internet, online databases and partner organisations such as the National Foundation for Educational Research, the Institute of Education and the British Library. Our philosophy is that we may not hold the item or piece of information required, but we know where to get it!

We hold roughly 2500 books and reports and subscribed to over 50 journal titles. Items are requested by staff, who have to put forward a case for purchase. If the item is too expensive or will only be used for a short timeframe, it will be borrowed from the British Library or Institute of Education. However, if it meets our collection criteria, the item will be purchased and added to our collection.

**Resource Classification**

Reports are grouped by organisation and are classified using an in-house scheme – organisation acronym and first letter of title. When the book collection was being created and catalogued on our Heritage LMS it was decided that Bliss Class J would best meet our collection needs. We also use Class T to classify a small number of management and HR related resources that we hold.

As our collection is very small we have been able to use relatively broad classification. For example we have on our shelves 14 publications relating to education research methods – all of these are given the class mark of J6C followed by the first three letters of the principal author's surname in brackets. This works well for our small collection and enables us to catalogue and classify resources quickly and easily. It is important that resources can be found, but our collection is not generally browsed by staff. The culture is one where either we are emailed for a list of what we have on a specific topic, or an exact title is requested. We then search the Heritage LMS and locate resources on the shelves and this level of classification works perfectly well for this type of service.

One problem that we have come up against is the rapid turn over of 'terminology' in the world of education. One month Initial Teacher Training will be the preferred term, then the next Initial Teacher Education will be in vogue. Similarly, new terms are always cropping up and old ones disappearing. With the move towards integrated children's services following the publication of the *Every Child Matters* [5] document by DFES we are increasingly reques-ting and collecting material from outside of our original education and teaching remit, but which still relate to children and the work of the GTC. This will in the future cause us more problems and we may have to look at other classes of Bliss to meet this need.

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[5]      http://www.everychildmatters.gov.uk

Due to the ongoing problem of changing terminology we made an early decision not to use the Bliss scheme as a basis for our thesaurus. Instead we chose to use one developed and regularly updated by the National Foundation for Educational Research's library. We sup-plement this with terms from the British Education Index and the Library of Congress to ensure that we have an index list in our LMS that is current and relevant to the needs of the GTC.

**The Information Services Team**

Over the last year GTC's information service has undergone many changes with staff going on maternity leave and returning to work job-share, staff leaving and new staff starting. We lost our Assistant Librarian who was responsible for cataloguing and classification, meaning that other staff, not so familiar with Bliss, had to take the reins. This has highlighted the fact that the IS team now needs to be retrained on the best way to use Bliss in our small library and information service.

The team is currently made up of two permanent posts – Information Services Co-ordinator and Information Officer.

### Clare Swanson - Information Services Co-ordinator (job-share)

Prior to my challenging role at GTC, I worked in numerous education establishments including an FE College library in Newham, East London, and running a school library in an International School in Tanzania, East Africa. I gained much experience of using classifi-cation schemes at the Qualifications and Curriculum Authority (QCA) where I ran their Information and Knowledge Centre. The Centre's collection concentrated on education and the curriculum and was classified using an in-house classification scheme that was out-dated and cumbersome. The decision was taken to reclassify all the book stock (about one third of the collection) into Dewey. We had reservations about using Dewey as we feared that many items would come under the 370 class mark. However, we decided to use the scheme broadly and put curriculum materials in their broad subject class first rather than using the 370s. The result was that there were many resources still in the 370 area, but others were spread across the whole range making the collection quite accessible.

When I arrived at GTC, the organisation was only one year old. A number of resources had been collected and I was tasked with purchasing a library management system, and cata-loguing and classifying these resources. My year at Loughborough University had instilled in me the importance of getting this right and I did not want to make a rash decision that I would regret later. I thought long and hard about using Dewey again, but the collection was much more education and teaching focussed that the resources at QCA. I spoke to colleagues at a number of different education-focussed organisations and was pointed towards Bliss by staff at the National Foundation for Educational Research library who use the scheme. After much investigation the decision was made that Bliss would suit our needs best and training was rapidly organised.

Other than the problem areas mentioned above, Bliss has proved to be a suitable classification scheme for our specific needs. However, due to the diversity of my job and being so busy with enquiries, I often have to put classification jobs to the bottom of a large list. This means that I don't get much chance to do it, and quite quickly forget what I have learnt, especially after being off on maternity leave for a year. This is why I am keen to have more training to refresh my skills and ensure that I am using it to its full potential.

### Nicola Hunt - Information Services Co-ordinator (job-share)

As Clare's job share partner I have only worked at the GTCE for 4 months. Cataloguing and classification is very much one of the core skills needed in the post in order to deal with the steady flow of books, journals, reports, electronic publications and other ephemeral educational materials that are acquired by Information Services. Although it is possible to pick up classification schemes by learning on the job I would certainly value formal training in the Bliss scheme in order to be able

to understand the terminologies used and hierarchies involved in order to be able to apply them correctly. Although we are chiefly using Class J (education) to organise our stock we are increasingly making use of other schedules such as T in order to cover items on management, human resources and training, and information management.

My background in library and information work is varied and includes working in public libraries followed by my first qualified library post at the British Library. In both of these environments the Dewey Decimal Classification scheme was used to suit libraries that carried stock on a broad subject area. I later moved on to working in the Tate Gallery Library where Universal Decimal Classification was used for the book collection – this was thought to be the best scheme in dealing with art, artists' books and art history. An in-house scheme was used to deal with the many exhibition catalogues that the library received regularly. Whilst at the Tate I began a three year term as Chair of the ARLIS (Art Libraries Society) Cataloguing and Classification Committee. Through this work I really began to appreciate the importance of using standardised classification schemes for organising stock and indeed for exchanging records particularly in the case of large national and academic library collections. Being able to exchange knowledge and to provide guidance to others in the field, particularly in terms of cat and class training events and publications was a valuable and rewarding part of the Committee's work. More recently I worked on a retrospective catalogue conversion project in the library of the London School of Economics. The LSE Library used the Library of Congress classification scheme for its collections – this seemed to work well both for the students in terms of finding items and in dealing with the social sciences as a broad subject area. After the LSE I returned briefly to public libraries with a stint at the Guildhall Library, London using Dewey once again before starting at the GTCE.

### Helen Wade - Information Officer (part-time)

Following on from an English degree I worked as a proof reader for a small publishing company, and then as production manager for a weekly magazine. However I then decided to make the break and change career. A love of libraries and an instinct towards organisation, led me to the library and information profession. I worked for the British Architectural Library at the Royal Institute of British Architects (RIBA) as my graduate trainee position. My year at this busy academic library gave me a great start, and a glimpse of the workings of UDC as my induction to classification. I followed this with a year of full time study for the MA in Library and Information studies at UCL. This course gave me excellent foundations in cataloguing and classification, as at UCL the importance of an understanding of both is still recognised.

After completion of the course last year I held a temporary contract at the British Dental Association (BDA), before taking up my current position as Information Officer at the GTC. My UCL course had given me a brief introduction to Bliss classification, but I had no practical experience of it until coming to the GTC. As my two colleagues have previously stated, refresher training is required to ensure that we all use the Bliss classification scheme correctly and ensure the integrity of our collection.

### *Contact details*

*Clare and her colleagues will be very glad to hear from BC2 members about classification, indexing and related matters and generally participate in Bliss networking.*

*E-mail:*     clare.swanson@gtce.org.uk     *phone:* 020 7023 3921 (direct line)
*Address:*     GTCE, Whittington House, 19-30 Alfred Place, London, WC1E 7EA

BC2 LIBRARIES : ST PETER'S COLLEGE, OXFORD

## Pursuing Bliss : Oxford ramblings on the introduction of new classification schemes

*David Johnson*

On 23 February 2006, *The Guardian* newspaper published an article which discussed the proposal, by Google, to make available electronically the texts of a range of published works.

It sometimes seems that those working in libraries, and in information provision generally, spend all their time thinking about issues suggested by the growth in electronic resources.  A number of these were raised in this article.  Of interest to us here is a matter mentioned in the first paragraph where the author noted that:

**'How to generate the results [in a search for information on a given topic] is a challenge in itself.  For example, Sebastian Faulks's *On Green Dolphin Street* isn't about dolphins, streets or the colour green; it's about alcoholism, infidelity and jazz.'** [6]

Readers of this *Bulletin* might well have some answers for this problem, or might suggest ways to frame it in a more useful form.  They have perhaps considered it before, although not necessarily in the context of electronic resources.  What is interesting is not this question itself, but the fact that it was asked and that the newspaper could suggest no response.  (It may be noted that Google has no answer either.  The only way to search their site is to look for single words, or strings of words, which may appear in the texts or titles of books). [7]

All of this provides a salutary reminder, if one were needed, of the fact that those with even a basic understanding of information retrieval techniques comprise a small minority.  Such is the lack of knowledge of possible approaches to the retrieving and organising of information that, in almost any context, it is necessary to preface a discussion of the subject with a description of basic methodology.  This generally remains true even when that discussion takes place amongst the academic community, which uses libraries and other information resources most intensively.  Thus, when it came to discussing the need for a new classification system at St Peter's College, the first requirement was to describe different classifications and how they would differ in practice to the members of the College who would make the eventual decision.

I was first appointed to St Peter's some three years ago.  The College was then anxious for its new Librarian to make a series of improvements ranging from the implementation of a new security system, to the introduction of an improved method of organising its collections.  It had already been concluded that a new classification was needed; but no decision had then been taken on how to proceed.

The origins of the Library's existing classification scheme are unchronicled.  Most probably, it was developed during the College's earliest years in the 1920s.  Almost certainly, the aims of those who devised it were limited to providing a way of maintaining a shelving-order.  Since that time, both the

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[6]     Charles Arthur, 'As long as Google sells ads, publishers be damned', *The Guardian,* 23 Feb 2006.
[7]     *See* the Google Book Search website at http://books.google.com/ (accessed 1 May 2006).

Library and the scheme had grown out of all recognition. (The collections now number about 45,000 volumes). No previous attempt had been made either to replace, or improve, on the existing arrangement in any systematic way.

None of this is unusual amongst Oxford colleges. At the time St Peter's was considering reclassification, some research suggested that approximately 40% of Oxford colleges used 'home-grown' classification schemes. Three quarters of these desired to change to a published scheme. Since a number of those colleges which do use published schemes are using either significantly amended, or considerably outdated, versions, the initial picture these figures present is perhaps unduly sanguine.

The 'home-grown' schemes used by different colleges vary considerably in character. At St Peter's, there are wide variations even between different parts of the same scheme. Moreover, the notation has been used so inconsistently as to become itself a source of confusion. The level of detail attempted in different classes varies markedly. Some areas, such as European History, and most areas of Literature, have been classified closely, if not always consistently. Other main classes, such as Philosophy, were not at all further subdivided. The filing order in many areas of Literature will, in practice, differ little once reclassification is complete. In disciplines such as Philosophy, and much of the Sciences, the change will be most radical since these areas are, in effect, being classified for the first time. Materials had also been assigned to individual main classes on the basis of which budget had funded their purchase. Thus, books on the Philosophy of Religion have been classed with works on Theology if bought from the Theology budget, and with books on Philosophy if purchased with funds allowed for Philosophy.

Like St Peter's, most college libraries are minimally staffed. Generally their librarians are now qualified. But this is often a recent development and it is unusual to find more than one qualified member of staff in each institution. In such a context, the additional work neces-sitated by reclassification is a major disincentive to action.

The College's discussion of classification was prefaced by a paper from the Librarian seeking to highlight some of the differences between an enumerative and synthetic approach, and drawing attention to the main available alternative schemes. It should be said that I suggested that LCC would prove too extensive for a collection of the size of that at St Peter's. The chief alternative to Bliss was therefore seen to be Dewey, which is already widely used in Oxford libraries. Although convinced of the need to replace the existing classification scheme, the College Library Committee was concerned that its replacement should not be more than necessarily expensive to implement. The idea of 'copy classification' was for this reason seen to provide an attractive option. However, although records with Dewey classifications were shown to be widely available from within Oxford and elsewhere, it was easily demonstrated that different libraries followed their own local practices, and that, even if Dewey classifications from elsewhere were consulted, the librarian would still need to make his own decision. This and the perceived advantages of Bliss, persuaded the Committee in favour of the latter scheme. It is difficult to say what was regarded as the most significant of these advantages, but perhaps key to the Committee's decision was the flexibility of the scheme, for example in allowing the collocation of books in Geography, an important subject in the College.

Beyond the colleges, Oxford's libraries more generally are in a state of upheaval. Most libraries funded by the central University, as opposed to those maintained by individual colleges, are in the process of amalgamation. Some of these collections have previously been arranged using published schemes. But, frequently, they too have been classified using 'home-grown' classifications, with different institutions developing their own schemes for their own collections. It is obviously

essential, if libraries are to be amalgamated, to reclass-ify books using a single scheme. To this end, shortly after St Peter's decided to adopt Bliss, the University adopted the Library of Congress Classification (LCC) as the new standard for its collections.

The effect of this on future decisions on classification by Oxford colleges is difficult to calculate. Inevitably, it will create a strong additional pressure in favour of LCC. The question of which scheme was already most familiar to readers was regarded as a significant factor at St Peter's. When the College took its decision, no classification scheme was common to the libraries which members of the College used. Once the Oxford University Library Service (OULS) decision is implemented, all members of the University will also be members of libraries which use LCC. Had that been the case when St Peter's made its decision on classification, it is doubtful whether further pressures to choose LCC could have been resisted.

Although their ultimate conclusions were different, and despite the massive difference in the scale of their collections, the issues which both College and University had in mind were similar.[8] The particular factors which the OULS noted as instrumental in choosing LCC were:

(i)        LCC class marks are most likely to be already included in bibliographic records downloaded from external sources, thus facilitating 'copy classification';
(ii)       LCC class marks are easiest for suppliers to add to books, thus making it easier to obtain 'shelf-ready' copies;
(iii)      LCC is the most extensive scheme;
(iv)      LCC is well supported and has a mechanism for regular updating.

The first two points represent different sides of the same coin. Neither relates to the characteristics of the classification scheme *per se*; both are factors of cost. This was also a major concern at St Peter's. The College's decision was made despite the fear that it was thus eschewing the chance to copy Dewey or LCC classifications from elsewhere, and perhaps thereby save money.

Of course, the sizes of the University's and College's collections are in no way comparable. Hence, the College was freer to take what might seem a greater risk. It is a sign of the times that, amongst the College's chief worries, was the fact that classifying with Bliss was felt to be more intellectually demanding. More thinking would take more time, and that would increase costs.

Reclassification to any new scheme is expensive in terms of staff time. The possibility of reducing the amount of time required is, therefore, likely to be attractive to those responsible for funding. Such arguments purely on grounds of finance might seem pusillanimous. But, when libraries of all kinds are under financial pressure, they inevitably become pressing.

St Peter's first step towards implementing the new classification was to re-shelve the collection so that the main classes of the existing scheme filed roughly in the same order as in Bliss. This was done over a fortnight, with the help of a team of undergraduate volunteers. The result, at the end of the first week, was chaos. With books scattered over every desk in the Library, and most of those which remained on the shelves still in the wrong sequence, I confess to a momentary loss of faith that order would ever be restored. Largely due to undergraduate enthusiasm, it was.

It is similarly true that, once the process of reclassification had begun, it became clear that I had miscalculated the time required for the 'clerical' or 'manual' tasks which are an essential part of the

reclassification process.  The time required for the re-labelling of books, and the changing of classifications on the OPAC, is more than I had estimated.  Such jobs would, however, be similarly time-consuming whichever scheme was used.  Time could be saved on new books by purchasing 'shelf-ready' copies, classified using one of the other major schemes.  This was a factor in the OULS decision to choose LCC.  But, by denying the institution any intellectual input into the classification process, it undermines its usefulness to readers, and suggests a significant downgrading of the importance of classification.

At St Peter's, our methodology is being moderated by experience.  The first area to be tackled was Philosophy.  Even I was surprised to discover into how many other main classes, books from this class will eventually be relocated.  This has, for example prompted a major unex-pected diversion into Politics, where a significant amount of material is being relocated.  The orderly progress through the disciplines once envisaged is proving impossible.

Since we are still at an early stage of reclassification, it is difficult to say anything worthwhile concerning the intellectual challenges encountered.  It has been my experience that the most taxing element in classification is deciding on the subjects of the book.  The experience of the last few months has only confirmed this view.  Again, this is not a factor of any one classi-fication scheme.

Nor is it true to say that the Bliss classifier cannot draw inspiration from elsewhere.  The Cambridge colleges which use the scheme obviously have much in common with St Peter's.  Often, we have not simply *copied* classifications in the way that is frequently done by those using LCC or Dewey because we have chosen different alternatives or specified different levels of detail.  It is perhaps the range of alternatives in Bliss, rather than the fact that the scheme is a faceted one, which makes copying that much more difficult.  However, the practice of other institutions is useful.  If it is agreed that the most difficult element in classifying a book is that of analysing the different facets represented in it, then another view of what those facets may be, whether one agrees with it or not, is valuable.  It is too early to say whether our experience will support the perception that classification using Bliss is, overall, a more time-consuming process than would be the case using one of the more widely used enumerative schemes.  But our experience so far does not tend to support that view.

It is, of course easier for a small College, which, unlike the OULS, does not have holdings of international importance, to take what seems the greater risk of choosing Bliss.  It is also true that the second edition of the scheme has already proved its worth in similar institutions at Cambridge, but has not been used in a collection such as that held by the OULS.  Fundamental to the different choices made is the importance given to classification *per se*.  If that is admitted, worries about the cost of implementing the scheme, which are in any case unproven, will more readily be accommodated.  But, until the day when the importance of classification is more generally accepted, might it not be worth considering the question of whether it really is so much more expensive to classify using Bliss?

### Contact details

*E-mail:*      david.johnson@spc.ox.ac.uk
*Phone:*      01865 278882 (direct line)
*Address:*      Dr David P. Johnson, Librarian, St Peter's College, Oxford, OX1 2DL

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## *Classification in British librarianship and information work, 1991-2005*

Some readers may remember the series *British librarianship and information work,* published by Library Association Publishing, but which ceased in 1990. It provided a valuable documentary record of events and developments in various library sectors and fields of professional practice, and its demise was regretted by many.

Despite some encouragement from staff at the School at UCL, Facet, the successor to L. A. Publishing, was not enthusiastic about a re-introduction of this title, mainly because its target is the student and practitioner market, and it has no real interest in reference publishing.

However, Ashgate publishing (which incorporates Gower) was interested, with the happy result that two new volumes in the series, edited by John Bowman, will appear shortly. The first of these is a 'catch-up' volume covering the period 1991-2000, while the second resumes the established five-yearly cycle, dealing with 2001-2005. The books consist of a number of chapters, contributed by various authors, on such topics as national libraries, public libraries, music libraries, the Internet, the book trade, preservation, cataloguing, and, of course, classification.

There were a number of important and interesting developments in classification theory and practice during the fifteen years. 1991-2000 saw radical changes at the British Library, with the abandonment of PRECIS and subsequently COMPASS, and the introduction of Library of Congress Subject Headings in the *British National Bibliography*; this prompted much wider use of LCSH especially in the academic sector. There was evidence of closer communication between the general schemes with cooperative ventures involving DDC and UDC, and UDC and BC2. The decade was a particularly productive one for BC2, with the publication of a number of new classes, and much interest in the BC2 terminologies. At the end of the decade, projects such as HILT (the High Level Thesaurus project) began to address very real concerns about the question of subject organization of, and access to, digital materials.

At the beginning of the twenty-first century it was much harder to get a sense of classification practice in individual libraries and systems, but there was a strong feeling of renewed interest in the conceptual basis of subject retrieval, and a growing awareness of facet analysis. New subject tools – the taxonomy and the ontology – made their appearance, and thesauri, however that term is understood, sprouted like mushrooms, on all topics from Asian vegetables to waterways objects. The publi-cation of the first parts of a new British Standard for controlled vocabularies showed some convergence between different types of vocabularies, and hints of a common underlying theory. *[See the following article – Ed.]*

Overall, one can say of the period that, while the large American systems continue to dominate, there is a very lively current interest in classification theory, and partic-ularly in facet analysis, that bodes well for the future. The chapters in both volumes contain substantial sections on BC2 and a large number of references to the literature on the classification, and on facet analytical theory. The volume for 1991-2000 went to press at the end of June, and should appear in a bookshop near you by the end of the year, with the 2001-2005 volume to follow shortly after.

*Vanda Broughton*

## *New British Standard for structured vocabularies*

**Structured vocabularies for information retrieval – Guide** / British Standards Institution. – London : BSI, 2005.

- **Part 1: Definitions, symbols and abbreviations** – 9p. ; 30cm. – (BS 8723-1:2005) – ISBN-0-580-46798-8.

- **Part 2: Thesauri** – 59p. ; 30cm. – (BS 8723-2:2005) – ISBN 0-580-46799-6.

Modern computerised systems provide very powerful functions for the retrieval of information. Though many of them are designed to work with unindexed data, there is a growing recognition that indexing and classification have an important role to play in improving the ease and effectiveness of searching. Despite indexing being called "metatagging" and classification schemes being called "taxonomies", the principles that have been developed in the library and information world over the past half-century are being re-discovered and applied.

It was therefore appropriate that the relevant British Standards setting out these principles should be updated to take account of the new environment, and Stella Dextre Clarke initiated and convened a BSI working party of four consultants to do this, comprising herself, Ron Davies, Alan Gilchrist and Leonard Will. The two parts listed above are the first outcomes of this work, and will be followed by a further three parts: *Part 3: Vocabularies other than thesauri; Part 4: Interoperability between vocabularies; Part 5: Interoperability between vocabularies and other components of information storage and retrieval systems*. Parts 1 and 2 replace the existing standard BS5723:1987 for monolingual thesauri and Part 4 will replace BS 6723:1985 for multilingual thesauri. We hope that eventually BS8723 will be adop-ted as a replacement for the corresponding international standards, ISO2788-1986 and ISO5964-1985. The corresponding United States national standard, ANSI/NISO Z39.19-2005, was also updated last year[9]. Although there was some exchange of correspondence and drafts between the two working parties, the UK and US standards still show some significant differences.

BS8723 Part 1 is largely a glossary of terms used in discussing structured vocabularies. It covers general terms and terms used in Part 2, and it may be revised and re-issued to cover the whole standard when the other parts are complete. We hope that it will help to avoid confusion in discussion, though I fear that in some cases the battle is already lost. "Facet", for example, is used in the literature with many conflicting meanings, from a characteristic of division to a field of a catalogue record, such as "author", which Z39.19 describes as a "facet of a content object". BS8723 defines facet as a "grouping of concepts of the same inherent category", with the note *"Examples of categories that may be used for grouping concepts into facets are: activities, disciplines, people, materials, living organisms, objects, places and times"*. This is at least in accordance with the interpretation used by one major US product, the *Art and architecture thesaurus.*

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[9] *Guidelines for the construction, format and management of monolingual controlled vocabularies* ANSI/NISO Z39.19-2005. 172p. ISBN 1-880124-65-3. A pdf version is available online at http://niso.org/standards/resources/z39-19a.pdf

Before submitting the draft standard to the BSI for publication we put many glossary terms and definitions on a web site. I have added terms, examples and expanded definitions which do not occur in BS8723 to the on-line version and as a result the site does not have the authority of the BSI, but I hope that the definitions there are still consistent with those in the standard[10]. Unfortunately, BSI does not allow us to put any of the official standard on the web, for copyright reasons (contrary to the NISO practice).

Part 2 retains a full discussion of the traditional thesaurus relationships (equivalence, hierarchical and associative) and attributes such as notes and dates. It now includes new examples and clarification of the recommendations on when to retain compound concepts in the thesaurus and when to split them into their constituent simpler concepts. There is a discussion of the application of facet analysis in thesaurus construction, and examples show not only simple alphabetical and hierarchical displays but also how concepts may be grouped by facets within subject fields, thus pointing the way towards linking a thesaurus to a faceted classification scheme, as pioneered in *Thesaurofacet,* compiled by Jean Aitchison et al. (*Whetstone, Leicester : English Electric Company Ltd., 1969*).

New features, containing important discussions, advice and checklists, are *11. Thesaurus functions in electronic systems; 12. Management aspects of thesaurus construction; 13. Updating; and 14. Requirements of thesaurus management software.* These sections not only recognise that thesauri are now maintained and used in computer systems, but also give added emphasis to the idea that thesauri, like libraries, are what Ranganathan called "growing organisms". They need to be nurtured and developed if they are to continue to be useful, but in a distributed environment there are many problems in implementing and disseminating changes, especially once a body of material has been indexed using an earlier version.

Part 2 includes an index to Parts 1 and 2, prepared by Janet Shuter, chair of BSI Subcommittee IDT/2/2 : Indexes, filing and thesauri.

*Leonard Will*
2006-05-29

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# ✂ Snippets

While necessarily concentrating on the immediate problems of production and publication of the outstanding schedules, the Committee has also been considering the longer term future for BC2, particularly in the digital age. We are not alone in this : the Information Environment Service Registry[11] report of 2003 contains in its "Stakeholder analysis" the JISC comment *"We would be keen to explore ways of making the Bliss Bibliographic Classification (2nd ed.) more widely available in electronic form, for possible use as a tool for organising subject metadata. BC2 is the only available general universal classification based on faceted principles. BC2 is a potential service for those interested in alternative approaches to subject terminology"*.[12]

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[10]      *Glossary of terms relating to thesauri and other forms of structured vocabulary for information retrieval*. Willpower Information. http://www.willpowerinfo.co.uk/glossary.htm
[11]      Information Environment Service Registry (IESR) : http://iesr.ac.uk/about
[12]      http://iesr.ac.uk/stakeholderrep.html

## Solution to Blissword Puzzle the Sixth and Last

|   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ¹R | O | ²B | B | ³E | R | ⁴Y | ■ | ⁵H | O | ⁶S | T | ⁷I | L | ⁸E |
| I | ■ | A | ■ | G | ■ | A | ■ | O | ■ | P | ■ | S | ■ | A |
| ⁹F | E | V | E | R | ■ | ¹⁰W | I | T | N | E | S | S | E | S |
| T | ■ | A | ■ | E | ■ | N | ■ | B | ■ | C | ■ | U | ■ | T |
| ■ | ¹¹C | R | O | S | S | E | X | A | M | I | N | I | N | G |
| ¹²M | ■ | I | ■ | S | ■ | R | ■ | T | ■ | A | ■ | N | ■ | A |
| ¹³Y | E | A | R | ■ | ■ | ¹⁴T | H | E | L | E | G | A | L |
| A | ■ | N | ■ | ¹⁵P | ■ | ¹⁶G | ■ | S | ■ | S | ■ | P | ■ | W |
| ¹⁷P | I | A | N | O | L | A | S | ■ | ■ | ¹⁸R | O | M | A |
| O | ■ | C | ■ | S | ■ | N | ■ | ¹⁹M | ■ | ²⁰V | ■ | L | ■ | Y |
| ²¹L | A | C | K | I | N | G | M | E | L | A | N | I | N | ■ |
| O | ■ | O | ■ | T | ■ | R | ■ | T | ■ | L | ■ | C | ■ | ²²T |
| ²³G | E | R | M | I | N | E | A | R | ■ | ²⁴L | O | I | N | S |
| I | ■ | D | ■ | O | ■ | N | ■ | E | ■ | E | ■ | E | ■ | A |
| ²⁵A | B | S | E | N | C | E | ■ | ²⁶D | A | Y | U | S | E | R |

The answers are all words, single or in combination, suggested more or less closely by the meanings of BC2 classmarks. They do ***not*** try to reproduce the captions in the BC2 text exactly. 'Of', 'in', 'by' etc., may have to be taken as read! Some lateral (or maybe bizarre) thinking may be required, especially in 17 ... Numbers in [ ] refer to Auxiliary tables 1-4.

**ACROSS**
**1** QSQ U *(7)*
**5** *(see 11)*
**9** *(see 1 down)*
**10** *(see 11)*
**11, 5, 10** S9B SAG *(5-9,7,9)*
**13** [4C, T2] YX *(4)*
**14**, **15 down** S9F P *(3,5,8)*
**17** AM9QY, KSGML, [1A] X, [2] YWS 59 *(8)*
 *(in desperation – couldn't wait for WV...)*
**18** KPF PHG *(4)*
**21** HUC OXH VOK B *(7,7)*
**23** HVF NI *(4,2,3)*
**24** HTGY *(5)*
**25** QFB CQS *(7)*
**26** QEF DD *(3,4)*

**DOWN**
**1, 20, 9** HRP ET *(4,6,5)*
**2** SVK AXT KJ 9QV *(8,7)*
**3** RDO RB DW *(6)*
**4** HPW W (or just IFG K??) *(6)*
**5** HNT RV *(3,5)*
**6** QPL R *(8)*
**7** THE *(7,8)*
**8** [2] EYR 56 *(4,6)*
**12** S8Q 59F (not SBG NV9 PH!) *(2,8)*
**15** *(see 14 across)*
**16** HQA V *(8)*
**19** HID N *(6)*
**20** *(see 1 down)*
**22** RTN MCJ K *(4)*

 E. & O.E. !

The first of these puzzles appeared in 1987. The idea was not original. I think it was tried, using DDC numbers, in a London borough library's magazine (Camden's?), and its compiler may have borrowed the idea from yet another source before that; who knows?

It's time to call a halt and say goodbye. Compilation is *exceedingly* time-consuming, and the solutions assume that our readers have access to all the published volumes – and have nothing better to do with their time! I hope you have enjoyed the puzzles, nevertheless.

*Antonio*