Report and Communications

Attention please, for BC2!

1. What is the New Bliss Classification (BC2)?

It is a new general bibliographic classification — i.e. of information found in documents and records of all kinds. It is based on A Bibliographic Classification, by H.E. Bliss (New York, H.W. Wilson Company, 1940–1953). Although the same in outline as BC1, BC2 is so radical in its internal revision and so greatly expanded that it is generally regarded as a new system.

It is the only general classification in the world to combine the following advantages:

1. A carefully thought-out main-class order. The theoretical and practical virtues of the original BC1 main order based on gradation in speciality, or levels of organization, are widely acknowledged. The order may be summarized (classmarks on the left):

2	Generalia
4	(Phenomenon classes)
	*For works reflecting a multidisciplinary treatment of anything.
	(Discipline classes)
A	Philosophy, Logic, Mathematics, Statistics
B/D	Physical sciences: Physics/Chemistry/Space sciences/Earth sciences
E/G	Biological sciences: Biology/Microbiology/Botany/Zoology
H/Z	Human sciences & human studies
H/I	Human biology, Health sciences, Psychology & Psychiatry
J/Z	Social sciences & Humanities
J	Education
K/O	Society: processes, structures, History & description
P/Z	Special social sciences & humanities
P/Q	Religion, The Occult, Ethics/Social welfare, Applied social ethics
R/T	Political science/Law/Economics/Enterprise management
U/V	Technology, industries, services, useful arts
W/Z	Recreative arts/Fine arts/Language & literature

2. A completely faceted structure within each class. This observes rigorously the classical rules of logical division as implemented for documentary classification by the theory of faceted ('analytico-synthetic') classification.

3. A comprehensive set of rules for consistent classification. A document whose subject involves a number of different elements is theoretically classifiable in many different ways and this is the central problem in all information handling. BC2 rules will locate it consistently and predictably in one definite class. Such rules are only feasible with a faceted structure. This allows, e.g. formu-

lation of a rule for analyzing the subject of any medical document as follows: *Person — System, organ, part — Process — Action – Agent.* Interpreted in concrete terms, this gives an index description for a specific subject such as: *Heart — Valves — Stenosis — Investigation — Radiography.* This reflects an *agent* (radiography) used in the *action* of clinical investigation of the pathological *process* of stenosis, in the heart-valve *organ/part* of the cardiovascular *system.*

4. A carefully designed notation, providing classmarks for specific subjects which are exceptionally brief and simple relative to the exactness with which they represent the subject. A simple subject gets a simple classmark (e.g. Heart HUH; Social work QD) whereas a less simple one gets a less brief one (e.g. HUH XKB FK for Radiographic investigation of subvalvular stenosis of the heart). The complicated subjects of modern documentation can be described with a precision and a predictable location unmatched by other systems; e.g. the index-description (classmark QLR MOH ABS GI) of a document on the psycholog of black teenagers adopted by white parents specifies exactly all the concepts involved — psychology, of persons of a certain race and age, adopted by persons of a different culture — and what that difference is.

5. A built-in flexibility in the form of numerous alternatives. These are designed to meet the different needs of different collections; e.g. in Class J Education, one may divide by *Subject taught* before *Person taught* (to give Foreign languages — Primary schools) rather than vice-versa (to give Primary schools — Foreign languages).

6. All the above features are *applied to vocabularies of considerable depth.* Except for Class U Technology, all classes exceed full UDC in vocabulary size (as well as providing a rational, consistent and predictable structure which older systems cannot provide).

7. Each volume has its own *detailed A/Z index,* constructed economically by chain procedure. Every key word appearing in the classification appears here in its alphabetical position.

2. Why we are seeking your help in completing BC2

1. Although libraries and information centres and departments of all kinds play a valuable part in modern society they rarely receive any degree of priority in financial provision. BC2, just because it is so wide in scope and cannot appeal specifically to a narrow subject interest, shares this general disadvantage.

2. The library and information profession badly needs a well-designed, rationally organized and detailed classification for information retrieval.

At whatever level information stores and files are searched (on library shelves, in library catalogues, in published indexes and bibliographies, in computer files of everincreasing size) the operation inescapably involves classification. *All* searches match a class defined by the searcher's information need against the multifarious classes of information in the file or information store.

3. Use of BC2 is far from restricted to organizing general collections. Most specialized information systems need to draw extensively on a much wider range of subject matter than that defined narrowly by their speciality.

4. Existing general classifications, although they have contributed most valuably to the problem of retrieval over the years, are now, it is generally recognized, quite inadequate to present and future needs. BC2, on the other hand combines the fruits of extensive research into information classification over the past four decades with a completely up-to-date and detailed vocabulary. To quote one reviewer:

"Without doubt BC2 appears as a major bibliographic classification soundly based on literary warrant and reflecting modern classificatory principles and practices to an extent which renders it technically superior, at all levels, to its main competitors, the Dewey and Library of Congress schemes, and probably in most respects to the Universal Decimal Classification" (Norman Roberts, *Catalogue and Index.* Autumn 1977, p. 5)

The School and BCA believe strongly that the production of such a classification provides the library and information community with a powerful and flexible instrument for organizing information stores and files of all kinds.

5. The combination of theoretical soundness and practicability is demonstrated by its adoption by numerous libraries and information departments even in its present uncompleted state (which is normally a serious deterrent to a library wishing to adopt a system). These libraries are performing a valuable public service. They are pioneers in the establishing of new and improved methods of information-organization which will eventually benefit many other libraries and centres. *Their natural anxiety that BC2 be completed as soon as possible is itself a strong reason for this appeal.*

The following examples of users demonstrate the range served by BC2 both in type of organization served and in subject coverage. The Department of Health and Social Security is a very large government department; the Office of Population & Census is a smaller and more specialized one. Other organizations in the general field of health sciences and human biology are the Kings Fund Centre (formerly the Hospital Centre), the Scottish Health Services Centre and the Tavistock Joint Library (serving the world famous Tavistock Institute, with a unique collection in the field of psychology and psychiatry).

In the academic field users range from libraries with general collection, such as S. Martins College, Lancaster; Kings College, Cambridge; Fitzwilliam College, Cambridge; Bishop Grosseteste College, Lincoln and school libraries such as Haberdashers' Aske's School and Priory Upper School, Lewes, to ones with more specialized interests, such as the Balfour Library, Cambridge and the Haddon Library, Oxford.

Another category, particularly deserving of support, consists of libraries and centres in the social welfare field; these include Barnordo's, the National Council for One-Parent Families, the National Council for Voluntary Organizations and the National Institute for Social Work.

6. BC2 is also a valuable source of finely organized and highly detailed vocabulary for any organization seeking to develop a specialized system of its own. This includes the production of thesauri to assist search programming in computer-held files. An example of its

potentialities here is the recent decision of a Unesco-funded study to adopt it as the 'master classification' underpinning a proposed international Integrated Thesaurus in the Social Sciences.

3. Why BC2 needs help in completing

1. *Present position and work remaining to be done.* BC2 began publication in 1977 (Bliss Bibliographic Classification, Butterworth, 1977 –, *in progress.*) The complete work will consist of 19 parts. Six of these have been published, one is in the press. Eight parts are in an advanced state. Four of them still need a great deal of detailed elaboration.

The table below summarizes the position. The abbreviations in the right-hand columns should be interpreted as follows: (1) Publ. = Published. (2) PEN = Penultimate draft — a near-to-final draft already circulated to librar-

Vol. no.	Class mark	Subject class	Publ.	PEN	Adv. dra.	Outl.
1		Introduction & Common Auxiliary Schedules				
2	2	Generalia				
	4	Phenomena *Selection extracted from full schedules.				
	7	Knowledge, information, communication Data processing, Documentation & book trade etc.		Part		
3	A	Philosophy Logic, mathematics, statistics, systemology		Part		
4	B	Physics (with *alternative* for some technologies)				
5	C	Chemistry (with *alternative* for some technologies)				
6	D	Astronomy & Space sciences, Earth sciences		Part		
7	E/G	Biology (incl. Microbiology, Botany, Zoology) (with *alternative* for some technologies)				
8	H	Human biology & health sciences				
9	I	Psychology & Psychiatry				
10	J	Education				
11	K	Society (incl. sociology, social anthropology, customs & folklore)	In press			
12	L/O	History & description				
13	P	Religion, The Occult, Ethics				
14	Q	Social welfare, applied social ethics				
15	R/S	Political science, Law		Part		
16	T	Economics, Enterprise management				
17	U/V	Technology		Part		
18	W	Recreative arts, Fine arts, Music				
19	X/Z	Philology, language & literature				

ies, subject experts, etc. for comment and testing. (3) Adv. dra = Advanced draft not yet notated and distributed for comment. (4) Outl. = Outline – a draft, which is not advanced (but is usually more than a mere outline). In a column, 'Part' = Some parts of the class.

2. The work involves conceptually analyzing in depth the fine structure of different classes over the whole spectrum of knowledge. For each subject, the detailed vocabulary must be classified rigorously in schedules to meet the demanding criteria of modern documentary classification. This work is difficult and extremely time-consuming.

3. So far, it has been done chiefly by the Editor (Mr. J. Mills) assisted for a number of years (but no longer) by a full-time researcher (Valerie Lang, then Vanda Broughton). He receives invaluable assistance from an eminent consultant (Mr. E.J. Coates) and generous, unpaid help in discussion, comment and advice from colleagues at the Polytechnic of North London, from other Schools of Librarianship, from many practising librarians, from subject specialists and from the Classification Research Group, London.

4. For the past 18 months, the Editor, who is Reader in Information Studies in the School, has worked virtually full-time on BC2 and will continue to do so until his retirement in late 1983. It is this last event which is the immediate reason for this appeal and gives it particular urgency.

5. The School acknowledges its responsibility to complete the massive task it has begun. Other members of staff on the indexing and classification side are already actively assisting in the preparation of schedules to this end. But the resources of the School are under considerable strain. In common with all departments of the Polytechnic, sharply contracting resources make it necessary to find external funding to support research and development on the scale of BC2.

6. The *Bliss Classification Association* is a non-profit making, registered charity. All royalties from BC2 sales and all subscriptions to the BCA go towards the maintenance of the system. User libraries initially contributed to a fighting fund to help produce BC2. This fund is now exhausted and the income designed primarily for future maintenance is being eroded by the expenses incurred in completing BC2.

7. BCA is responsible for maintenance of BC2 which involves four main factors.

7.1 The more thorough and painstaking BC2 is, the easier will be the task of future maintenance and revision. The facets (conceptual categories) at the base of its organization are remarkably stable concepts. New knowledge is rarely *sui generis*. Incorporation of new concepts and new vocabulary will be primarily a matter of recognizing the existing facets and subfacets to which they belong.

7.2 Publication in parts greatly facilitates revision of particular classes.

7.3 BCA publishes a regular *Bulletin* of additions and amendments.

7.4 Small subject panels are being established, responsible for overseeing the maintenance needs of particular broad/ areas. One is already functioning for the social sciences (the area nearest to completion so far).

8. *Resources needed to complete BC2.*

8.1 Three man-years of full-time researcher(s) to assist editor in preparing and testing draft schedules for comment and for further testing and finalizing of these for publication.

8.2 Payment of honoraria to consultants. In particular, the production of the massive Technology class could be greatly accelerated by this.

8.3 Clerical expenses of preparing draft schedules, reproducing them and distributing them to cooperating libraries, subject-experts, ect. for testing and comment.

8.4 Expenses of automatic computer production of A/Z indexes from completed classification schedules (held in computer).

8.5 Expenses of computer production of final camera-ready copy of schedules and A/Z indexes.

8.6 We estimate that the sum needed to meet the above expenses is approximately £50,000 and this is the target we are hoping to achieve.

Jack Mills
The Polytechnic of North London
School of Librarianship and Inform. Stud.
207–225 Essex Road, Islington
London N1 3PN, England

Appendix 1

Specimen page from Class Q Social welfare of *Bliss Bibliographic Classification.* 2nd ed. by J. Mills & Vanda Broughton. London, Butterworths, 1977. (xxiii, 36 p.).

[Consumers' viewpont, actions]

   [Clubs]

QDW	Institutionalisation
QDX	Access (to inmates of institutions, etc.)
QDY	Offences
QDYS	Abuse of system
T	Assault
U	Riot
V	Absconding, excape
QE	SOCIAL SERVICES, WELFARE ACTION AND SERVICES

* Types of aid, relief; what is given. Includes personal social services as distinct from impersonal ones such as sanitary services.
* A welfare action concept may act as a specifier of Persons in need – i.e., it can be used to define a species of such persons; e.g., Institutional care gives rise to concepts such as Persons in care, Families in care, Children in care. Under any given type of person it is desirable to keep together the literature on a particular welfare action and persons defined by their receipt of it.
* In order to allow this, the letter 'G' (from QG) is used to represent the specifier when it is feasible to distringuish between action and recipient; e.g.

  QL   Children
  QLE 1   Institutional care (Action)
  QLE LG Children in care (Person defined by the action)
  QLE LGI   Psychology (from QGI)
  QLE LGK Family (from QGK)

* This entails 'building forward' in that QG files *after* Welfare actions in the schedule and would normally by cited *before* them. In principle, the notation in QE/QF allows this to be done by direct addition – i.e. letters A/G are reserved for such addition under each class (e.g. as demonstrated above).
* On the few occasions where G is not reserved for such addition, use the intercalator 'A' – e.g. Psychology of persons on social security QFA GI

* One consequence of this amendment is that in QE/QF the usual retroactive rule for class-marks sharing the same *two* initial letters cannot be applied. The rule is that *both* the shared letters can be dropped when synthesising; but now, in the case of classes QE and QF, only the initial letter can be dropped; e.g. Institutional care in deprived areas would normally be QEL J (dropping the *QE* of QEJ); but now only the initial 'Q' can be dropped, giving QEL EJ.

See the notes at QG

QEE	Care, comfort (in general)
QEE P	Positive discrimination
	* Especially favourable treatment of persons in need
	(By time when given)
QEF	Daycare
	See also QEL R Day centres; QEN Noninstitutional care
QEF L	Day and night
	{Care, comfort (in general)}
	[Day and night]
QEF N	Night
P	Seasonal
Q	Winter
QEG	Emergency services
	(By environment where given)
QEG N	Neighbourhood
	Industrial areas
R	Residential areas
T	Retirement areas
V	Housing estates
X	Special types of residence, A/Z (e.g. High rise flats)
QEH	Towns, urban areas, urban social services
QEH J	Inner cities, central urban areas
L	Suburbs
N	Overspill areas, dormitory
P	New towns
R	Country, rural areas
QEJ	Deprived, depressed, high risk areas
QEJ AL	(Government aid)
HAL	Urban aid
K	Ghettoes
L	Developing areas
N	Indoor
P	Outdoor
S	International aid, international social services
QEK	(By receiving country)
	Add to QEK letters A/Z from Schedule 2
QEL	Institutional, residential care
	(Types of institution)
QEL N	Assessment centres
P	Reception centres (general)
	See also QEH M
Q	Walk-in centres
R	Day centres
S	Short stay
T	Long stay
QEN	Non-institutional, non-residential care, community care
	* For housing as accommodation *see* QH
	Day care *see* QEF
QEN P	At school, educational welfare
	Alternative (not recommended) to locating in Class J Education
R	At work, industrial welfare
T	At clubs
V	Elsewhere (other than home)
W	Detached work
QEO	Home, domiciliary care
QEO Q	Boarding out (in private households)
V	Other
QEP	Information services
QEP R	Interpreting forms, regulations, etc.
T	Publicity
V	Directed at particular groups, A/Z (e.g. Children)
W	Directed at the hazard, A/Z (e.g. Anti-smoking, Health Education)
X	Libraries (in institutions, etc.)

Appendix 2
Specimen page from Class H of *Bliss Bibliographic Classification* 2nd ed. by J. Mills & Vanda Broughton. London, Butterworths, 1980. (xl, 326p.).

H ANTHROPOLOGY, HUMAN BIOLOGY & HEALTH SCIENCES

HP	DISEASES & PATHOLOGY
HP3Q	(Statistics)
	* For vital statistics see Demography Class K.
	(Properties)
3QC	Rate
3QD	Trends
3QE	Rate of change
3QN	Deaths, mortality
3QNN	Causes & incidence
3QO P	(Particular causes & types of persons)
	Alternative (not recommended) to subordinating to cause or person. If the option is taken:
	Add to HP 3QO letters P/Y following H in HP/HY
3QP	Diseases, morbidity
3QP C	Death rate
3QP P	(Particular disorders or persons)
	* *Alternative* (not recommended) to subordinating to disorder or person. If the option is taken:
	Add to HP 3QP letters P/Y following H in HP/HY
HPA	Pathology
	* Nature, causes & development of abnormal conditions − the scientific basis of clinical medicine.
	* For spedific conditions (manifestations) & causes see HPN/HY below.
	* For the pathology of specific parts, organs, systems or persons see the parts, etc.
HPAAL	(Schools of thought)
	Specific, A/Z (e.g. Humoral pathology)
B	Classification of diseases, nosology
	* For identification of disease *see* Diagnosis HNH.
C	(Research)
C HR	Models
C HS	Animal models
M	(Experimental & practical)
	See Clinical medicine HN; for clinical pathology narrowly *see* HNI
N	Aetiology
	* Conceptually there is a difference between causes *per se* & disorders characterised by those causes. It is not feasible, however, to maintain this distinction in the literature at HQT/HSV.
	See also Mortality & morbidity statistics HP 3QN
O	(Influencing factors)
	Add to HPA O letters B/D following H in HB/HD
P	Diathesis, disposition to disease
	* For accident proneness *see* Safety technology UN.
Q	Idiopathy, autopathy
	* Without apparent cause. For spcific forms of autopathy *see* causes (e.g. Autointoxication).
Q R	Autoimmunity
Q S	Self-generating disease
	(Acquired disease) *see* HSF Y
R	Epidemiology (general)
	* For epidemiology of communicable diseases, *see* HRI AR
HPAS	Of non-communicable diseases
HPB	Physiological & anatomical pathology (general)
	* For the specific structural changes & physiological dysfunctions of disease *see* classes HPK/HY below.

HPB J	Morbid physiology, physiological pathology (general)
HPDP	Morbid anatomy, anatomical pathology (general)
	* Study of organs & tissues removed for biopsy or autopsy.
	* For the operations of autopsy *see* HPK T (Biopsy) *see* Investigative methods HNL W Surgical pathology
HPE	Morbid cytology & histology (general)
HPF	Reactions to injuries, attack
	See also specific sites & processes – e.g. skin, blood coagulation.
HPF H	Defence mechanisms, resistance (general)
K	General adaptation syndrome
	* Non-specific reactions to disease or injury: alarm reactions, resistant & adaptive reactions, exhaustion.
L	Inflammatory response
	* For inflammation as a pathological condition susceptible to therapeutic action *see* HPY.
M	Histamine liberation
P	Leukotaxine liberation
R	(Special to particular parts, organs, etc.)
HPG	Immune reactions, immunology, immunity
	See also Immunologic diseases HSU; Blood groups HUO N; Infectious diseases HRI
	(Biochemistry)
HPG BP	Immunochemistry
H	(Special immunological processes, interactions)
J	(Agents) Adjuvants
KD	Transfer factors
KF	Immune response
KH	Specificity
KJ	Organ specificity
KK	Species specificity
KL	Immune tolerance
KM	Radiation chimera
KQ	Susceptibility
KR	Immunologic memory
V	(Systems elements)
	* A limited number of these factors are of exceptional importance in immunology & are enumerated here for convenience.
	Add to HPG V letters L/Q following HUL
	A brief selection is given here for convenience, with a few additions:
VN	(Leukocytes)
VNR	Granulocytes, polymorphs
VNT	Eosiniphils
VNU	Basophils
VNV	Lymphocytes, lymphoid cells
VOF	Monocytes
VQ	(Reticulo-endothelial elements)
VQT	Macrophages
	(Mast cells, labrocytes) *see* HPJ GW
	(Plasma cells, plasmacytes) *see* HPJ GX
HPH	Antigenes & antibodies
HPHGH	(Interactions) Antigen-antibody reactions

The Classification Society, NAB. Call for Papers

The Annual Meeting of the North American Branch of The Classification Society will be held May 29-31, 1983 at Philadelphia, PA. Titles and abstracts of papers (maximum 500 words) are due by April 1, 1983 with indication of required time, generally 15-20 minutes. The person to contact: Prof.Frank J. Carmone, Jr.,

Drexel University, Department of Marketing, Matheson Hall Philadelphia, PA 19104.

Because of a major change in his work situation, Dr. Vic Kane, the Secretary Treasurer had to resign by the end of 1982. Mr. George W. Furnas of Bell Laboratories was appointed to fill the remainder of Mr. Kane's term. In 1984 the North American Branch expects to begin publishing its own journal. Dr. Phibbs Arabie was said to be its editor designate.

Joint European Meeting on Numerical Taxonomy

As already announced on the inside back cover page of Int.Classif.1983-3 a Joint European Meeting of Psychometric and Classification societies will be held July 6-9, 1983 at Jouy-en-Josas (near Paris), France. Abstracts of papers (maximum 500 words) can still be submitted (until April 1) to the following address: Prof.Michel Jambu, CNET-PAA/ATR/MTI-D-017, 38-40 Rue du Général Leclerc, F-92131 Issy-les-Moulineaux, France.

The meeting is sponsored by the Centre Nationale de la Recherche Scientifique, Societé Francophone de Classification, The Classification Society, The Psychometric Society, Association des Statisticiens Universitaires, Gesellschaft für Klassifikation eV.

The following topics have been indicated in the announcement: Measurement theory, mathematical models, data analysis, statistical methods, clustering, optimization, data analysys, taxonomy, software, all types of applications.

LEXeter 83: International Lexicography Conference at Exeter

Work is in progress in England toward the organization of the LEXeter Conference "on all aspects of lexicography". It will be held from 9-12 September 1983 at the University of Exeter. The following five sections are foreseen to take place in parallel:
(1) The historical dictionary, (2) the bilingual dictionary, (3) The Learner's Dictionary, (4) Terminology standardization, and (5) Computer-aided lexicography.
For the plenary sessions the following papers were proposed:
J.SINCLAIR (University of Birmingham): Lexicography as an academic subject.
L.ZGUSTA (University of Illinois): The bilingual dictionary.
A.COWIE (University of Leeds): The learner's dictionary.
F.KNOWLES (Aston University): Computer-aided lexicography.
J.SAGER (University of Manchster): Terminology and the technical dictionary.
H.E.WIEGAND (University of Heidelberg): On the structure and contents of a general theory of lexicography.
There is interest to combine this conference with the foundation of a European Association for Lexicography, called EURALEX.
For information contact: Dr.R.R.K.Hartmann, The Language Centre, University of Exeter, Exeter EX4 4QH, Devon, U.K.