

The Bliss Classification Bulletin

c/o Commonwealth Institute, Kensington High Street, London, W.8

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F O R E W O R D

Since the appearance of last year's Bulletin, the efforts of the BCA to establish a fund to enable a full revised edition of the BC to be made have met with sufficient success to allow the appointment of a full-time research assistant to work at the School of Librarianship, North-Western Polytechnic, under the direction of the Hon. Editor. Miss Valerie Lang, the research assistant appointed, began her work early this summer. Previously, she had been engaged for some time on the preparation of a comprehensive classification of economics for the London Graduate School of Business Studies, under the direction of Mr. K. Vernon, a one-time member of the Bliss Classification Committee.

Miss Lang's appointment is for two years in the first place, but it is recognised that the work is likely to take somewhat longer. We are, therefore, repeating our appeal to members using the BC to assist us in what must eventually prove of very considerable assistance to them. To this effect, we are publishing for the second time a copy of the letter requesting financial support for the new BC (see page 5). If this appeal meets with reasonable success we can look forward to seeing a new edition of BC published sometime in 1972.

Unlike the last six Bulletins this one contains no new schedules. It is thought that since the whole scheme is now being revised there is little point in finalising schedules for isolated subjects before the full picture has emerged of what an integrated revision policy entails. Instead, we have tried to give the users of the BC (as well as other interested readers of the Bulletin) a picture of how the work of revision is being undertaken (see page 11).

This is preceded by a copy of some notes on the preparation of the new edition, which were circulated to member at the AGM and on which discussion of policy and methods was based. The general tenor of the argument in these notes was agreed and to put matters succinctly, the updating and expansion will be comprehensive and the revision a radical one. Together, these two policies, we hope, will result in a BC which will be the best ordered, the most comprehensive and up-to-date, and the easiest to use of any existing general classifications.

How can users of the BC help in the work? The account of the method of revision is given by using as an example a reasonably straightforward subject from the Useful Arts class. It is the case, however, that a number of classes, some of them extensive ones, have already had, or are having, a great deal of work done on them by individual libraries. At the AGM arrangements were made to utilize this valuable work in certain areas (e.g., Education, Criminology) with which members concerned were present.

We now ask all users of the BC who have attempted revision of particular subjects, whether it is a large or small one, to write to Miss Valerie Lang at the NWP and inform her and, if possible, provide her with a copy of any schedules which may have been produced as a result of such work. The plan of work for the new edition allows Miss Lang to spend a regular part of her time assisting where necessary the revision of particular areas which have had some work already done on them and which the library concerned might be anxious to have completed as soon as possible and compatibly with the new edition.

J. Mills
Hon. Editor

School of Librarianship,
North-Western Polytechnic,
207-225 Essex Road,
London, N.1.

BLISS CLASSIFICATION ASSOCIATION

Minutes of the Annual General Meeting
held on 31st October 1969 at the
Library Association

Present: Mr. J. Mills (Chairman)
Mr. A. Maltby (Treasurer)
Mr. A. Horne (Secretary)

and 18 other members.

Apologies for absence had been received from Miss Sutherland.

1. Minutes of the Annual General Meeting of 25th October 1968 were approved and signed.

2. Matters arising

All matters arising would be dealt with under following items in the agenda.

3. Treasurer's Report

The Treasurer presented the account for the year (a copy is attached), which showed a generally satisfactory situation. Our contributions to the cost of the research assistant were being paid in instalments to North-West Polytechnic, and £500 had been paid so far.

A vote of thanks was passed to Eric Stone who had been Treasurer of the Association since its inception, and whose place had now been filled by Arthur Maltby. Members wished also to thank the King Edward Hospital Fund for its generous contribution of £500 to the revision fund.

4. Chairman's Report

After an outline of the work on the new edition by Miss Lang, the Research Assistant appointed by the Association, Mr. Mills outlined the way in which the Bibliographic Classification would be revised and brought up to date. (Papers attached - see page 7 of this Bulletin) The Chairman also reported that confirmation was awaited from Messrs. Butterworth that they would publish the revised scheme, but a rough estimate for a two-volume edition was £25.

Mr. Freeman had suggested a panel of experts to advise on specific sections of the classification, and the Chairman emphasised that any help would be very welcome and an appeal for volunteers will appear in the next Bulletin. Mr. Groghgen and Mr. Freeman, as Institute of Education librarians, agreed to prepare a draft revision of the Education schedules and to send this to Miss Lang for her use and criticism. The Chair-

man asked for all individual schemes, expansions and revisions, to be sent in to Miss Lang as information of this sort was urgently needed.

5. Election of Committee for 1969/1970

Mr. Groghgen proposed that the existing Committee be re-elected en bloc and this was carried unanimously.

6. Other business

Mr. Freeman reported that the Abridged edition of the Bibliographic Classification for school use had sold out of its first print of 500 copies by November 1968, and a corrected reprint of 300 copies was printed in June 1969. The price is now 50s. (37s.6d. to members of S.L.A.). The School Library Association was very satisfied with this venture.

There being no further business, the meeting was closed at 4.0 p.m.

NOTE FROM THE TREASURER

Financial position on 26.11.1969.

Credit

Balance c.f. from 1968/69	£997. 15. 8.	(as per Treasurer's A.G.M. statement)
Subscriptions received 1969/70	£188. 18. 2.)	
Donations received 1969/70	£427. 0. 0.)	- <u>Aug-Nov. 1969</u>
Bulletin sales (extra copies) 1969/70	£ 7. 10. 0.)	
Total credit	£623. 8. 2.	(for current year)
	<u>997. 15. 8.</u>	(for past years)
	£1621. 3. 10	

Debits

Paid to NWP on 16.9.1969	£500. 0. 0.
Misc. expenses	<u>22. 19. 0.</u>
	£522. 19. 0.
<u>Balance</u>	£1621. 3. 10
	<u>522. 19. 0</u>
<u>Current balance</u>	£1098. 4. 10

Copy of letter requesting financial support for new edition of BC

Bliss Classification Association,
% Commonwealth Institute,
Kensington High Street,
London, W.8.

Dear

As you may know, one of the primary aims of the Bliss Classification Association is to produce a new edition of the Bibliographic Classification. Although the Bliss Classification Bulletin has provided and will continue to provide substantial additions to the original work, especially in the area of science and technology, the cumulation of these into a new edition which would also include further additions and amendments is naturally becoming a matter of urgency to users of the system. This is particularly the case now that the original volumes published by the H.W. Wilson Company 1940-1953 are out of print. Whilst the School Library Association has recently published a special school edition of the Bliss Classification, this is only an abridgement and does not meet the need for revision of the full system.

The Committee of the Bliss Classification Association believes that the task of revising the Bibliographic Classification and preparing it for printing could be performed by a full-time research assistant under the direction of Mr. Jack Mills, an acknowledged authority on classification and Chairman/Editor of the B.C.A. This work could be carried out at the School of Librarianship, North-Western Polytechnic, London; N.1., where Mr. Mills is Head of Research, and where the advice of subject specialists in all the major fields would be reasonably available when required. We believe that the procedures for revision which have proved successful in preparing the Bulletin will enable the complete revision of the system to be accomplished in three years.

The major cost of the project would be the salary of the research assistant, to which would be added some relatively minor expenses for clerical assistance. We estimate the total sum required at £6,000, or £2,000 per annum for three years. Applications for financial support have been made to a number of grant-awarding bodies, and we have firm offers totalling £1,830. Some of this is conditional however, on evidence of support from actual users of the BC.

In these circumstances, the Bliss Classification Association is writing to all its members, and appealing for donations to enable this work to be done. All members presumably are interested in the classification, and users will agree that the need for a new edition is a matter of particular urgency. There is every chance that we shall be able to produce this in the near future, given your assistance. To get down to hard figures, we should be delighted

to hear from you that you are prepared to donate a modest amount for this purpose. Ideally, we would suggest a figure of £25 per annum for three years from every member, and would hope that everyone will agree to contribute. Of course, smaller sums will be very acceptable from smaller libraries, but we hope that these will be offset by larger donations from larger libraries.

The Committee of the Bliss Classification Association believes that the revision of the Bibliographic Classification, a major work of scholarship in librarianship, is an object worthy of your assistance. It is essential that a new edition be produced in the near future. We hope that we can count on your help.

Yours sincerely,

A. J. Horne
Hon. Secretary
Bliss Classification Association

Copy of notes distributed at A.G.M., October 1969.

Preparation of a new edition of the Bliss Classification

1 Broadly speaking, there are two more or less distinct features to consider:

1.1 Bringing BC up to date in its vocabulary - by expansion to accommodate new subjects and possible reduction to exclude or reduce obsolete ones;

1.2 Revision of BC in the sense of improving its structure and its consistency.

2 Expansion

The main issue here is one of degree - how much detail is aimed at. A number of factors need to be considered:

2.1 The whole history of bibliographical classification testifies to the desirability of a detailed vocabulary. The precision with which our shelf arrangements and our indexes can be searched rests entirely on this point. Its relevance to the use made of a scheme can be put very simply. If detail is provided, those who do not want it need not use it. If detail is not provided, those who want it have no such alternative - individual improvisation raises very serious practical problems and is inconsistent with the notion of a single common system.

2.2 We assume that the new BC should at least equal, and frequently exceed, the detail provided by DC and LC. Using as a rough guideline the literary warrant demonstrated by the cumulations of BNB since 1950 should ensure this. It will automatically take care of newly developing complexes like Space Sciences, Soil Sciences, Ocean Sciences, etc. as well as developments within existing classes.

2.3 Many users of BC have a need for special detail in some areas. Ideally, this would suggest a scheme as comprehensively detailed as UDC. This does not seem to be feasible in the circumstances.

2.4 However, we can go a long way towards this ideal by providing a structure which gives a maximum facility for extension. This can be achieved by thorough facet analysis. In all classes all the relevant facets will, of course, be clearly provided. But as far as possible all subfacets too will be at least exposed and explicitly named, even if they do not get a detailed enumeration of their constituent classes. For example, in a schedule for Clothing

Industry a subfacet Kind of clothing by season when worn might appear even if no enumeration of individual seasons follows.

3 Revision

This raises more serious problems and again a number of factors need to be considered

- 3.1 A modern classification should, for any class involving a degree of subdivision, provide the following:
 - 3.11 A helpful context for that class (i.e., the overall order of the scheme should be satisfactory)
 - 3.12 A clear and explicit display of the class's facets and sub-facets
 - 3.13 Clear and explicit rules for classifying compound classes (i.e., classes reflecting more than one facet or subfacet)
 - 3.14 An overall filing order of the subclasses which is at least as helpful as any other for the majority of users (although other orders might be as good)
 - 3.15 A notation which allows maximum precision in representing these subclasses
 - 3.16 A notation which is of maximum simplicity possible in the circumstances
 - 3.17 A thorough A/Z index to the terms in the schedule
- 3.2 BC already meets some of these criteria in many classes. However, to make the whole scheme consistently good, radical revision is needed in many classes. In accepting the inevitability of this, the following factors should be remembered:
 - 3.21 BC will have gone some 20 years without a comprehensive revision
 - 3.22 We cannot expect BC to be revised as frequently as DC or LC. So this one must look correspondingly further ahead. (By 'frequent revision' we mean publishing the complete system in a new edition, as distinct from the production of regular, but non-cumulated additions and amendments. So far as the latter goes, BC Bulletins subsequent to the new edition proposed will certainly keep BC as up to date as DC or LC.)

- 3.23 If a library has to reclassify a given class to any degree it is often the case that a complete revision would not take significantly longer.
- 3.24 A radical revision of the kind being prepared will produce a far more enduringly satisfying scheme than a piecemeal, patching-up operation
- 3.25 Moreover, a revised scheme with a clear facet structure in each class and clear rules for consistent classifying is far easier to maintain and revise than an enumerated one not enjoying these features
- 3.26 We assume that present users of BC already use a wide variety of the alternatives offered by the scheme as well as amendments and expansions of their own. As a result, whatever form the revision takes it will inevitably involve many users in varying degrees of reclassification. So we might as well make the best possible job of it
- 3.27 A number of positive steps will be taken to minimise the work involved in reclassification. The scope and definition of classes will be indicated with maximum clarity and the crucial problem of compound classes will be met by clear and explicit rules for practical classification.

Some major features of the revision work are as follows:

- 3.31 The general pattern of BC will remain as it is
- 3.32 General pattern of revision with a class:
- 3.321 If the existing facet structure is faulty (i.e., terms from different facets or subfacets are mixed up with those from others) this will be straightened out
- 3.322 Where circumstances allow it, the whole schedule will reflect this citation order in its filing order also - i.e., by 'inversion' and retroactive compounding to ensure consistent subordination and a consistent general-before-special-sequence.
- 3.33 Synthesis: any scheme depends largely on this for its ability to specify classes with precision
- 3.331 The Systematic Schedules will be retained in principle (and perhaps extended) as a particular form of synthesis. But radical revision is likely in some of them to make them clearer and more consistent; e.g., a common facet of Economic and Business aspects in industry will be developed for the SS serving the Applied Sciences & Technology, and this will not be mixed up with the technical operations facets in the same SS

- 3.332 A comprehensive synthesising facility will be built into all classes as demonstrated in the Bulletin schedules
- 3.333 There are extensive possibilities for rationalisation by allowing the repetitive use (in a 'divide like' device) of many classes not usually recognised as 'common'. For example, the various forms of information-bearing records (books, mss., microforms, films, tapes, gramophone records, etc.) occur in a number of contexts (Librarianship, Communications, Education, Publishing & bookselling, Reprography, etc.). In such a case a detailed schedule will be developed once only and be drawn on for any special application
- 3.334 Phase relations will be provided in Schedule 1.
- 3.335 Common facets: will be expanded considerably, e.g.:
- 3.3351 Schedule 1 will be revised to accommodate not merely the existing common form divisions but also the common 'subject' divisions found in the Supplementary Schedules of BNB
- 3.3352 A definite facet indicator will be reserved both for Time (History) and Place
- 3.3353 Schedule 2 will be expanded to include 'non-political place' as in UDC, BNB, etc.

3.4 Alternatives

As a distinctive feature of the BC these will be kept available where thought desirable (it is proposed to drop those in Schedule 1, for example). But they will be removed from the main schedules, which will show simply one complete, 'preferred' order, whose rationale and pattern will not be confused by numerous insertions (as, for example, by the present lengthy Psychology schedule in AI)

4 Anterior numeral classes 1/9

These are only partially consistent with the forms of presentation (used for qualifying particular classes rather than knowledge in general) in Schedule 1. It is possible that this area will be developed more thoroughly as a true generalia class, including the general notion of communication and the organisation of knowledge.

Revision of the BC - problems and methods

The notes above (on the preparation of the new edition) were produced primarily in order that members would have a clear picture of the major problems, the possible solutions, and the reasons why the Committee are adopting those we have indicated.

The notes below elaborate the picture somewhat and consider some of the problems which have arisen in the first few months of the editorial work (and some of which were reported by Valerie Lang in her report to the Committee).

1 'First order' level of classes

Based as it is on gradation in speciality, the main class order in BC is an exceptionally good one and calls for very little amendment.

Certain additions and expansions are, however, called for. Some of these reflect the development of ever-widening aggregations of existing classes of entities, such as those already mentioned (Soil science, Space sciences, Ocean sciences). Others reflect classes in which some fundamental activity has developed its own general principles, methods of study and academic apparatus as its significance is realised and its application spreads; examples here are the study of systems and their control (cybernetics), the study of ecology and environments, the study of communication and information transfer. Sometimes the two problems meet, as in Biodeterioration, which regards the whole range of reactions of living matter with materials.

As to amendment, the main problem demanding attention is that of clearer definitions at a number of points. Although Bliss gave a great deal of attention to the definition of classes and the relations between them, there are some areas (particularly where there is provision for alternatives) in which the definition and scope need review; e.g., the relation between Class T Economics and U Useful arts; the dispersal of a large integral class such as the Construction Industry in the latter; the relations between the numerous descriptive branches of Social anthropology and Ethnology in Class K; the relations between these and their massive offspring in Class L/0 Social-Political history.

2 Revision within classes

The general pattern of a modern classification of a given homogeneous subject was indicated in the Bulletin of September 1964 which introduced the policy of providing new schedules to replace existing classes of the BC where this seemed to be called for. This is presented from a somewhat different view in Section 3 of the preceding Note.

A homogeneous subject can be at any level of the classification. Notationally, it may be a main class (e.g., AM/AY Mathematics),

a group of related classes (e.g., QK/QR Social pathology) or a relatively specific class (e.g., UVC/G Clothing industry).

To demonstrate clearly how the pattern is being observed in the work of revision we will take a relatively straightforward class from UV Industries, trades and show how the existing class may be amended. The class chosen (Clothing industry) is one of a number already examined in Class U.

3 Facet analysis of an existing class

Clothing and shoe industry is located at UVC/UVG and is supplemented in its division by Schedule 21 (which is available for the subclassification of a number of other classes in U). Examination of the terms in the class and systematic schedule discloses the following facets (remembering that a facet is the set of classes produced by dividing any given class by one broad principle of division):

- 3.1
- | | |
|---------|--|
| UVC,B | Operations (e.g., Research) |
| UVC,C | Properties and processes (e.g., Chemical) |
| UVC,D | Materials (e.g., Wool) |
| | Operations (e.g., Purchase, Importing) |
| UVC,E | Agents of operations (e.g., Machinery) |
| UVC,F/M | Operations (e.g., Business organisation, Financing, Manufacture) |
| UVC,O/Q | Products (e.g., Linings, By-products) |
| | Properties (e.g., Qualities, Standards) |
| | Operations (e.g., Testing) |
| UVC,R/W | Operations (e.g., Merchandising) |
| | Agents of operations (e.g., Shops) |
| UVD/UVG | Products (e.g., Children's clothing, Shoes) |

- 3.2 We now have examples of nearly all those major facets ("categories") which can be seen appearing and reappearing with reassuring regularity and familiarity in the analysis of practically any class we can think of. We have the products in the class - the category reflecting its raison d'être (in this case, to make clothing); we have the materials of which these clothes are made: their properties, the operations performed on them in the course of producing the product and the agents of these.

- 3.3 The next step is to check this preliminary analysis against the BC itself and against other existing classifications, subject heading lists, catalogues and bibliographies in the subject. These together give a fairly clear and comprehensive picture of the size of vocabulary we need to aim for and we proceed to fill out the facets already exposed by analysis of existing BC in order to produce this vocabulary. The BNB, particularly in its large cumulations, is a great help here and ensures that the literary warrant determining the scope and content of the vocabulary is completely up-to-date.

- 3.4 As the facets are filled out, the terms are sorted further into subfacets (Ranganathan calls them 'arrays'). This means that a broad principle of division like 'Product' is no longer regarded as sufficient; specific principles of division must now be recognised, giving us subfacets in which the terms are mutually exclusive; e.g.,

Product, by sex of wearer	(e.g., Women)
Product, by Age of wearer	(e.g., Children)
Product, by Part of body clothed	(e.g., Head, Trunk & arms)
Product, by Mode of manufacture	(e.g., Knitted)
Product, by Season when worn	(e.g., Winter)

- 3.41 This stage of classification can sometimes threaten to get out of hand and the classificationist must use a certain amount of discretion as to the amount of detail to be recognised. For example, an apparent subfacet would be Product by Time when worn; but this quickly proves to be itself a too-general principle, covering several more precise ones; e.g., Time of day (e.g., Evening wear) Season of year (e.g., Winter wear) Occasion when worn (e.g., Ceremonial wear, Industrial wear)
- 3.42 Nevertheless, this stage must not be skimmed. A central objective in all library indexing is predictability; we seek an organisation of our documents and records such that we can predict with maximum confidence where to look for information of a certain kind. If there is doubt as to whether we look under Headgear or Women's wear for information on Women's hats, then this central objective is hampered. This problem occurs at every level of a classification and a good system should as far as possible leave no doubt as to where a subject goes, whatever its complexity. In practice, this calls for a clear and comprehensive statement of the citation at any given point - and this demands a prior analysis as rigorous as the one we have indicated.
- 3.43 The naming of a subfacet in the schedule does not mean that the constituent classes making up that subfacet must be enumerated. A general classification like BC inevitably provides less detail in a given class than would a special classification for the subject concerned. However, the naming of a subfacet, e.g.,

Clothing - by Time of day worn

may be sufficient, without enumeration of the specific subclasses implied. But a clear indication of the fact that the principle is operative in the literature of the subject, and of its place in the system, means that the structure of the general classification is compatible with a prompt expansion of that subject should a particular library find the need for it. This is a situation in which many users of BC find themselves and in future such expansions should be both easier to develop and consistent with the general system.

4 The order of subclasses within a class

Having developed a comprehensive vocabulary organised into its facets and subfacets, the way is clear for the sketching out of an 'ideal' schedule for the class concerned. This calls for decisions on three separate principles of order before the overall sequence of classes is fully determined. These three different types of order are citation order, Filing order and order in array.

4.1 Citation order

This is the main determinant of the arrangement in a classification, deciding what is kept together and what is scattered (distributed).

As far as possible 'standard' citation order will be observed, as it has been in all the schedules published in the last five Bulletins. In the case of Clothing Industries it gives us the following order of application of characteristics of division:

÷(1)Products ÷(2)Parts ÷(3)Materials ÷(4)Properties &
processes ÷(5)Operations ÷(6)Agents

So Fastenings for children's wear goes under Children's wear (Product), not Fastenings (Part); Fireproofing qualities of industrial clothing goes under Industrial clothing (Product), not Fireproof (Properties); Cutting machinery goes under Cutting (Operation), not Machinery (Agent).

4.11 Citation order within a facet is a problem on which work still has to be done and no really comprehensive theoretical principles have as yet been developed. Bliss's notion of consensus certainly has a part to play here; e.g., the organisation of the industry whereby shoe manufacture and hat manufacture are specialised suggests a primary facet (within the Product facet) of Part of body covered.

4.12 In the older schemes, the problem of citation order is rarely stated explicitly or the principles of division operating named. Enumeration of compound classes (those reflecting two or more different facets or subfacets) in the schedules is often used, consciously or not, to convey the information implicitly; e.g., in existing BC.

UVF Women's clothing

UVFL Gloves

implies the subordination of Clothing by part of body covered to Clothing by sex of wearer.

Enumeration of compound classes is obviously not a policy which a classification (particularly a general classification) can possibly observe to any substantial degree, since the schedules would become vastly inflated. This has been, of course, a prime reason for the development of synthetic devices in classification, introduced by Dewey a century ago and used very extensively by Bliss.

The new BC will keep enumeration of compounds to an absolute minimum; but as a reasonable corollary it will extend the facilities for explicit (as distinct from ad hoc) synthesis far beyond the present edition. This is another reason why an explicit statement of citation order will always be given, even where the likelihood of extensive compounding in the literature is relatively remote.

4.2 Filing order between facets

Citation order decides the order of the elements in a single subject description; it determines whether, e.g., Cutting & fitting men's clothes goes under the Operation (Cutting & fitting) or the Type of clothing (Men's). Citation order says nothing about whether the Operations facet (i.e., all the classes making up this facet) should file before or after the Type of clothing facet. This is decided by filing order which decides the order of these individual descriptions. The situation may be compared with the arrangement of the telephone directory. Citation order refers to the order of elements in a single name (basically, Surname - Forenames or initials) whereas filing order refers to the order of the individual names (basically, blank to Z, or nothing-before-something plus A/Z order).

- 4.21 Subordination of the special to general is one of Bliss's main principles. If an order of general-before-special is to be maintained consistently the filing order of facets must be 'inverted' - i.e., the primary facet files last, the secondary facet files next to last, and so on:

<u>Filing order A</u>	<u>Filing order B</u>
1 Clothing industries	1 Clothing industries
2 Cutting & fitting	2 Men's clothing
3 Men's clothing	3 Cutting & fitting
4 Cutting & fitting	4 Cutting & fitting

Here, the citation order is the same in each case - the Operation is subordinated to the Type of clothing. But in Example A the filing order which is 'inverted', observes general before special throughout (i.e., 1 before 2, 1 before 3, 2 before 4, 3 before 4) whereas in Example B the filing order, which is 'uninverted', observes general before special only some of the time (1 before 2, 1 before 4) - but 4 follows its subclass 3.

- 4.22 Whether or not 'inversion' is practised, filing order should consistently reflect citation order so that the practical work of classifying is made easier as well as more consistent; e.g., if the schedule we are considering is inverted and ends up like this:

Clothing industries
Cutting & fitting
Men's clothing

then it is automatically understood to be the intention of the

