Where Have All the Fowers Gone?
An Investigation into the Fate of Some Special Classification Schemes

Abstract: Prior to the OPAC many institutions devised classifications to suit their special needs. Others expanded or altered general schemes to accommodate specific approaches. A driving force in the creation of these classifications was the Classification Research Group, celebrating its golden jubilee in 2002, whose work created a framework and body of principles that remain valid for the retrieval needs of today. The paper highlights some of these special schemes and highlights the fundamental principles which remain valid.

1. Introduction
The distinction between a general and a special classification scheme is made frequently in the textbooks, but is one that it is sometimes difficult to draw. The Library of Congress classification could be described as the special classification par excellence. Normally, however, a special classification is taken to be one that is restricted to a specific subject, and quite often used in one specific context only, either a library or a bibliographic listing or for a specific purpose such as a search engine and it is in this sense that I propose to examine some of these schemes. Today, there is a widespread preference for searching on words as a supplement to the use of a standard system, usually the Dewey Decimal Classification (DDC). This is enhanced by the ability to search documents full-text in a computerized environment, a situation that did not exist 20 or 30 years ago. Today's situation is a great improvement in many ways, but it does depend upon the words used by the author and the searcher corresponding, and often presupposes the use of English. In libraries, the use of co-operative services and precatalogued records already provided with classification data has also spelt the demise of the special scheme. In many instances, the survival of a special classification depends upon its creator and, with the passage of time, this becomes inevitably more precarious.

2. Disciplines needing special treatment
Certain disciplines have always lent themselves to special treatment for a wide variety of reasons. Those with local peculiarities, such as Politics, Religion or Education are all examples. Bias is a strong element here. Despite the purists, there are occasions when bias is helpful - a Roman Catholic database is not going to favour a Protestant approach - and in religion it is extremely difficult to find a scheme that is bias-free, and it is probably not very helpful if it is. One of the earliest special schemes for Religion was the now largely forgotten Pettee classification (Pettee, 1911). Another example is the Lynn-Petersen scheme (Lynn, 1968) devised to counteract the strong Protestant bias of DDC and LCC, at least as
they appeared in the 1930s, which is now rarely used, apart from in such libraries as the Jesuit foundation Heythrop College in the University of London where it is still applied. Similar special schemes, such as those of Elazar (Elazar, 1968) for Hebraica or Ziauddin (Ziauddin, 1979) for Islam take care of those religions which receive less satisfactory attention in the widely-used general schemes.

Before the days of cataloguing co-operatives, local expansions of general schemes were a popular phenomenon. Classification schemes were expanded in-house to accommodate local requirements. Area Studies is one example. Where an approach by area, subdivided by topic is needed, a simple solution is to use a set of geographical subdivisions preceding the subject subdivisions of a general scheme. The School of Oriental and African Studies in the University of London is just one example of a library which is arranged in this way taking its own set of areas, followed by DDC subdivisions. Another popular solution is to produce an expanded schedule for the topic of interest. The Oxford Forestry Classification (IUFRO, 1990) is an instance. This classification, is an expansion of UDC's class 63, originally for use in the University of Oxford. It was then published as an authorized expansion of the UDC the erstwhile full schedules and gained widespread acceptance. Although no longer a recognized part of the UDC, and maintained in Vienna, it continues to be used across Europe.

Law is another subject where special schemes have been preferred. The reason for Law being different, apart from an ingrained preference by lawyers to prefer broad subject arrangements based on an alphabetical array of topics, is the lack of a general scheme to meet their needs until comparatively recently. In the UK and through much of the Commonwealth, where the legal system is comparable, the choice has often been the Moys classification, which last year achieved its fourth edition. But it is questionable, now that its originator has died, how long the scheme will remain viable - perhaps a decade, unless some organization has the funding and expertise to maintain it in competition with the Library of Congress Class K schedules whose classmarks now appear on all cataloguing data.

Moys' scheme was created originally for use in Nigeria, at Lagos University Library, classified by LCC, which at that time could not accommodate British or Commonwealth (or indeed any other) law. It draws upon much of the fundamental theory that was being refined in the 1950s and 60s, especially by the Classification Research Group (CRG), whose contribution will be examined later. Law is divided by legal system then legal subject (the reverse of the then DDC order) and a series of auxiliary tables is provided to accommodate many of the recurring facets. In later editions it also draws upon the work of one of the CRG's members, Jean Aitchison, by adding a thesaurus type index. A further benefit is that it provides two different types of notation, one of decimal numbers using 340, to take the place of DDC's 340 class, and one of letters and numbers, beginning with the letter K for the core subject, to fill in the gap of the then non-existent Class K in the LCC.

3. Role of the Classification Research Group (CRG)

2002 sees the golden jubilee of the Classification Research Group. Fifty years ago this group of people who were to have a great influence upon research into knowledge organization, as it is known today, first began to meet regularly and to experiment with the creation of classifications to satisfy the needs of their
particular individual working environments. It has become customary to refer to the Group as if it was, and indeed still is, a coherent whole sharing exactly the same views and opinions. Nothing could be further from the truth. The Group was assembled to devise systems for the post-war organization of information retrieval in the UK and its membership was drawn from a range of different library backgrounds. The needs of those diverse backgrounds were capitalized upon and over the course of some 20 years its members honed their conclusions into a coherent body of theory that remains both valid and important for the retrieval needs of the 21st century. Many of these people figure sparsely in the citation indexes that are taken so seriously today. They were far more influential through their work as teachers, as editors of the national bibliographies which were appearing in a flourish of post-war bibliographical activity and as compilers of special schemes to cope with the detailed materials they were having to handle in their daily work.

National bibliographies provide one clear instance of the environment in which the members worked out many of their ideas. The British National Bibliography (BNB) was founded in 1950, using the 14th edition (1942) of the Dewey Decimal Classification, as the basis of its arrangement. Its original editor was Jack Wells, a member of the CRG who was joint author of one of the first textbooks on library classification that directly reflected Ranganathan's teachings, The fundamentals of library classification (Palmer and Wells, 1951). Almost a decade later the BNB transferred its allegiance to the 16th edition of DDC, but it still found that scheme inadequate both in its American approach, and in its lack of detail for modern advances in technology, to act as an efficient retrieval tool. The classified sequence was enhanced by a chain index (invented by Ranganathan), an indexing technique widely used to complement the classified catalogues which were then standard in British public libraries.

It was decided to devise a set of special schedules (BNB, 1963), using a lower case alphabetical notation, to accommodate those concepts where DDC was felt to be wanting, or to take care of such disciplines as Politics or Education, where DDC had an unhelpfully American focus, and to provide the expanded detail needed in Technology. These expansions, which remained in use for over a decade in the 1960s and early 70s, provided a fully faceted approach. They also included a revised auxiliary table of common forms, more logically arranged than in the parent scheme, and with the additional enhancement of making provision for phase relations. This need was not then specifically recognized by any general scheme, the UDC's colon being "all things to all men" and LCC's "general special" subdivisions being far from adequate for this purpose.

Some seven years after the BNB's inception, it was decided that there should be a separate listing for music, the British Catalogue of Music, and here the DDC was found even more wanting. The majority of British libraries favoured a more detailed classification, based broadly on Dewey, known as the McColvin classification after its inventor, the City Librarian of Westminster, which in its Central Music Library housed one of the largest music collections in a British public library (McColvin, 1965). So a member of the BNB's staff, who was also a member of the CRG, Eric Coates, was given the task of devising a totally new classification (Coates, 1960). This is a fully faceted scheme, with an alphabetical notation using capital letters which did not reflect hierarchy. This conformed to the then received doctrine that the function of notation was simply to mechanize the
order, and that such extras as reflecting structure were luxuries that could not be afforded and which would not endure with the advance of knowledge and the need to insert new concepts. This is a point of view which has been discredited in more recent years, where the virtues of an hierarchical notation, as recognized by Dewey, to represent the classification's arrangement, have become evident in the use of searching via notation in a networked environment.

It was not solely in the realm of national bibliographies that the CRG exerted its influence. Many of its members were working in organizations such as the Metal Box Company, Tate and Lyle, the Aeronautical Research Establishment, the English Electric Company and similar specialized institutions, where existing general schemes failed totally to supply detail of an adequacy to provide a useful retrieval tool for the indexing of highly specialized technical materials. Even where such general schemes did have this facility, for instance the then full tables of the UDC, the emphasis was frequently not where the institution wanted it. This situation still obtains today when the specialist is seeking material, whatever source, printed or digitized, is being used. The 1950s and 1960s consequently saw a proliferation of special schemes produced in the UK for one particular institution or bibliographical listing, and designed totally with the specific needs of that organization in mind. It also saw the testing of many theories that today are taken for granted when framing tools for retrieval, but which at that time had not been widely disseminated beyond the Indian subcontinent.

Many of the schemes on which the Group expended its energies were for technical libraries, but other disciplines were not ignored. The Social Sciences were thoroughly examined by Barbara Kyle, and she was responsible for the schemes used in the 4 Unesco Social Science Bibliographies which covered Politics, Economics, Sociology and Social Anthropology. Experience with these indexing services led her on to draw up the Kyle Classification for the Social Sciences (Kyle, 1960) which was never completed before her death in 1966. This experiment also led to the use of “levels of integration” as the basis of a classification, which were later featured in other enterprises undertaken by the Group.

One specific Social Science where neither DDC nor LCC was seen to be appropriate for British requirements was Education. Consequently, many of the post-war Institutes of Education opted for the Bliss Bibliographic Classification, which they found more adaptable for the British educational system. Not so that at London University, however, where Foskett's London Education Classification (Foskett, 1974) still holds sway, though its pronounceable notation, another CRG experiment in notation, had to be abandoned in its 2nd edition. This edition was enhanced by a thesaurus form index. The CRG also produced a classification for Library Science in the 1960s which is of interest because the citation order was changed between the first and second editions. The result was that the same scheme, but with a different facet order, was used in the Library Association's library and in their indexing journal, Library and Information Science Abstracts for a number of years.

After some 10 years of experimenting with special schemes, the CRG obtained a grant in 1963 to develop a general classification, under the auspices of NATO - a prelude to the more ambitious UNISIST programme of UNESCO in the 1970s which saw the production of yet another scheme, the Broad System of Ordering (Coates, 1978). The NATO grant gave the members of the CRG an opportunity to refine their experiences with creating special schemes into a standard
set of principles appropriate for the construction of a new classification to comprehend the whole of knowledge. This they never achieved, but there are two legacies of the work that was undertaken at that time. The first is the PRECIS system of indexing (Austin, 1974), now fallen into disuse, but much promoted in the 1970s and 1980s. This was devised by the second of the CRG's two research assistants, Derek Austin, and was used for indexing the BNB for over 15 years, as well as by other institutions, such as the Canadian Film Institute. The high cost of its application rather than any unreliability of the system were its downfall - it is expensive and time-consuming to apply and requires well trained, competent indexers. The lean years of the later 1980s and the widespread introduction of computers at the same time, together with the attractions of easy searching on words in titles caused its demise. This was a disaster, since PRECIS is highly appropriate for use in computerized systems and provides the facility for clear and precise specification.

The other legacy of the CRG's work is the 2nd edition of the Bliss Bibliographic Classification, on which much of its energies over the past twenty years has been spent. In terms of the theme of this paper, the Bliss Classification is an anomaly. It has many claims to be considered the offspring of the special schemes of the 1950s and 1960s, not altogether surprisingly since it is master-minded by Jack Mills who has dominated much of the Group's thinking over the past half century. But it is a general scheme, or when completed will be one, though it is not widely used apart from enjoying a measure of popularity in the libraries of the University of Cambridge. This second edition of the classification which bears little resemblance to the first except in very broad outline, embodies many of the special schemes that were devised in those palmy days. Its table of standard subdivisions, which is by far the best in any general classification scheme, is directly derived from the old BNB schedules. Standard subdivisions are a major problem for editors of classification schemes. They tend to become set in stone, so once an arrangement has been put in place it is very difficult to alter anything, because users will have applied them right across their collections, resulting in widespread alterations which are unpopular for obvious reasons - you can now change records globally, but we have yet to devise a means of doing so on the spines of books! Consequently, many of the general schemes used today for a far greater range of purposes than the original intention of shelf arrangement, have common form divisions which originated in the 19th century and have had to be bent and twisted to accommodate the needs of the subsequent 140 years. Not so Bliss, which provides a better arrangement than that found elsewhere for commonly recurring concepts and has the facility to identify the different types of relation that occur in literature, in a manner not dissimilar to the provisions of PRECIS.

4. Lessons for today and application to the thesaurus

In many ways, the situation 50 years ago (or even 150 years ago) was not very different from that of today. The people working in the information field at that time were faced with the task of organizing great quantities of material, frequently dealing with a high level of technical detail, and had at their disposal classification schemes that were totally inadequate, so they had to improvise. It all seemed very daunting and there were no computers, or only very rudimentary ones. Now, many similar isolated attempts to produce methods of retrieval that are
appropriate to finding the material relevant to specific needs from the mass of varied data that we call the Internet are made. The difference between then and now is that today there tends to be little co-ordination of effort with a resultant diffuseness so that, if meetings such as this do not address it, a unified solution will evade us and we shall not achieve our desired goal. The CRG, in its heyday, met regularly and shared ideas and solutions to very individual problems. Its minutes enjoyed a wide circulation and generated considerable correspondence from overseas members. The Group eventually achieved a unity of structure and an agreed technique and body of theory, despite the very disparate views of its individual members. These theories were disseminated through teaching, for many of the members taught in library schools, and consequently their ideas reached a far wider range of practitioners than simply those employed in bibliographic services departments. They also wrote textbooks and many of their views are now set out in other people's textbooks as irrefutable fundamental theories on which all classificationists should proceed - the introduction to DDC is just one example of how accepted their views have become, in its recommendation of the "standard citation order" in its "Tables of precedence".

Today, we rely for the organization of our libraries and databases on standardization. This saves time and effort and above all money. Records are created once and for all, instead of hundreds of times all round the world. This clearly has great economic advantages. What is lost is attention to the needs of the specialist, and the individual tailoring that is abandoned in favour of off the peg solutions - cost efficient and excellent, in the short term. But the specialist does have special needs and much of the effort of 40/50 years ago that was put into attempting to meet these has been drowned in the overwhelming tide of information and quick-fix solutions. These special needs have always been evident in certain disciplines, as has been noted. Outstandingly, Medicine is the one that has bucked the trend. Forty years ago the majority of medical libraries in the UK used the UDC, some used Barnard's classification, but now, almost without exception, they all use the National Library of Medicine Classification - for precisely the same reason as general libraries use DDC or LCC. A similar example is the SfB (SfB, 1973) for Building, whose continued survival in architects' offices owes much to the fact that professional literature is issued preclassified by the scheme.

What has happened to the other special schemes on which so much attention, argument and discussion were spent? Have they all been totally forgotten. The answer is not entirely. Some are still in use. A sizeable number of law libraries are applying Moys classification. It has been seen that the NLM now dominates the medical scene, though perhaps for reasons other than its intrinsic theoretical perfection as a classification scheme. Coates's music classification can be discerned in the revised 780 schedules of the DDC. A comparison of the structure, not the notation, will reveal that the two are in essence one. The BNB expanded schedules have been extensively used in the 2nd edition of the Bliss Bibliographic classification, as have some of the other schemes produced by members of the CRG such as Foskett's London Education Classification. Another example of survival is Jean Aitchison's Classification for the English Electric Company. This went into four greatly expanded editions, the final one in the format which she christened Thesaurofacet (Aitchison, 1969), a format imitated by Moys in her Law scheme, and by Foskett for the 2nd edition of his Education Classification.
The Thesaurofacet format is that of a faceted classification scheme accompanied by a thesaurus, which acts as the index to the classification or can be used independently as a thesaurus. The thesaurus format has become the most popular retrieval tool of the present day. A means whereby the user can search using his or her own words, rather than having to rely upon some structure based on theories which are not self-evident to the uninitiated and which bear no resemblance to the individual's personal approach, is seen as the best solution to today's needs in a networked world. It is especially recommended if it permits searching on a mixture of the controlled vocabulary of the thesaurus and free text based on the words of a title and abstract or even the complete text of a document. A controlled vocabulary, of which the thesaurus is one example, needs to be based on a proper sound structure, and Aitchison et al.'s work on Thesaurus construction (Aitchison, 2000) has become the standard manual for those who wish to develop this form of retrieval tool.

The special classifications which were so prevalent fifty years ago have been replaced by search engines, ontologies and taxonomies devised to assist in retrieving information from the Web. The work of many librarians went towards the formation of a sound body of theory which has much to offer to those who today are seeking to make some sort of order from the chaos. The achievements of these people, and especially of those who made up the membership of the CRG in its early days, should not be forgotten. Many of the theories that were refined then remain valid, and the specialist schemes can still offer assistance when attempting to create tools to retrieve information on individual disciplines in the 21st century.

References
"Where Have All the Flowers Gone?" is a modern folk-style song. The melody and the first three verses were written by Pete Seeger in 1955 and published in Sing Out! magazine. Additional verses were added in May 1960 by Joe Hickerson, who turned it into a circular song. Its rhetorical "where?" and meditation on death place the song in the ubi sunt tradition. In 2010, the New Statesman listed it as one of the "Top 20 Political Songs".