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SYSTEMATIC BIBLIOGRAPHY IN ENGLAND: 1850-1895

by W. Boyd Rayward

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INTRODUCTION

Ever since man began to write books, bibliographies have been compiled to enable him to record and so control for continued and systematic use these material evidences of the creative working of his mind. The problem of bibliographic control, which existed of course before the advent of printing, only became acute because of it--but not directly because of it, for printing itself not only helped to produce a new cultural awareness, but also was at the same time a result of it. Without the awakening we call the Renaissance, the gradual development of a cultural momentum away from the relative stagnation of the Middle Ages, printing presses would have lain idle.

The invention of printing, indeed, poses in a different form the old nagging question of philosophers about the precedence of the chicken or the egg, and embodies the historians' dilemma over the Great Man and historical readiness for him. However the question is answered and the dilemma resolved, there can be little doubt that technology as both cause and effect is a primary instrument of cultural development; and the arts, which we use to help us characterize and describe stages in cultural development, are in effect merely efflorescences of them, though often not without influence on what follows. Art is the mirror of an epoch for the physical creation and maintenance of which a technology is largely responsible.

Description or explanation of a given historical phenomenon should show itself sensitive to those technological changes which serve to distinguish one historical moment from the next. This is particularly necessary in any consideration of bibliography because, given as a constant factor urgency of desire or need to solve the bibliographical problem, there is a direct relation between technological advances and the changing methods of attempting to achieve bibliographical control.

In the fifteenth century, then, one of the most significant technological developments in the history of man took place, the invention of printing from movable type, and refinements in this invention during the following centuries have continued to have important cultural effects. By the time of its invention, men's minds had grown restless in the medieval world. They wanted to re-think old verities, and to cast off the stifling encumbrance to free thought of old unquestioned authority. They wanted to learn, and to learn they had to learn to read. And they also wanted to write, to set down the results of their experiments, the discoveries of their voyages, in order that others might be informed of them. The printing press was the instrument by which their desires were satisfied. Printing permitted literature to carry learning from the confines of the cloisters into general society. It destroyed along with the custody the control of it by the Church, and the prerogative in it of a priestly few. Printing presses permitted the independent production and distribution of whatever books, whether old or so freshly written their ink was scarcely dry, in whatever quantities society demanded. Nor was the art of printing limited to Germany where it began. It soon spread all over the Western world. Printing presses were set up in every country which had or has developed a modern civilization. What began as a trickle towards the end of the fifteenth century soon grew into a stream, and with the passage of four hundred years into a veritable bibliographic flood.

Indeed, one might seek a bibliographical parallel to the Biblical story of Noah, for the bibliographical flood has never diminished, but, on the contrary, has grown to such proportions that gloomy prophets forecast the ultimate submergence beneath it of the entire learned world.¹ Nevertheless, like the Biblical story, the bibliographical story has its element of optimism in a context of pessimism and despair. It has revealed further evidence of a flaw in man, and in that most delicate and flexible instrument his mind, by making us aware of the existence of bibliographical excess, to which he has abandoned himself. In this indulgence he has never given, nor yet gives, evidence of penitence, or of anything more than hypocritical continence. There has, however, never been entirely dormant in him the means of his bibliographical regeneration, for from the beginning of printing men have been aware of the need to control the licentiousness of the presses. This is not a problem of censorship, but of keeping some record of all that is published, arranging it in some way for reference, especially by printing it, so that it can become as useful as possible. Bibliography has always been regarded as an indispensable, though sometimes slatternly and exasperatingly inefficient handmaiden to scholarship. The development and the organization of libraries may be regarded in the present context as one kind of enlightened response to the bibliographical problem--as an exercise in what Irwin calls "applied bibliography."²

THE BIBLIOGRAPHIC PROBLEM
BEFORE THE NINETEENTH CENTURY

One of those who were led to exclaim against the proliferation of books was Barnaby Rich. In 1613 he declared that "One of the diseases of this age is the multiplicity of books; they. . . so overcharge the world that it is not able to digest the abundance of idle matter that is. . . brought forth."³ Also in the seventeenth century, Martin Despois, a French scholar, "dismayed by the prodigality with which the new art of printing had increased the size of libraries," penned a dolorous Latin complaint on the subject "too many books." His poem was inspired by the publication of the *Elenchus* of Clessius, and though it rested quietly obscure in manuscript for two hundred years, inevitably became part of the flood it lamented when it was edited and printed in 1875. The poem is interesting in that it shows an awareness of the futility of bibliographical control without some matching effort to insure that what is recorded is preserved:

"Their labours have been in vain, they are forgot.
Their books have perished; nought remains
Except their titles in a catalogue."⁴

Other cries of alarm went up in the eighteenth century over the growth of literature in various subject fields. But more significant than any complaint, in indicating a vital awareness of the bibliographical problem, were actual attempts to provide a solution to it. Many of the first attempts were ambitious. They were directed towards recording not merely the literature of specific subjects of particular interest to the compiler, but of all literature on all subjects. That is to say, very early in bibliographical history emerges the general or universal bibliographer whose interest is not primarily that of a subject specialist, but of one interested in bibliography itself as a subject of general concern, with a thralldom and a fascination of its own.

Perhaps the most important of these general bibliographers was Conrad Gesner whose main works appeared between 1545 and 1555. Besterman remarks that "When his work is looked at in perspective it is seen that he was not only the first universal bibliographer: he was also the last whose efforts of achieving universality had a chance of being reasonably successful." There were others, however, who attempted the impossible task, amongst whom were Justianius, Lipennius, and the Englishman, John Hartley, whose eight-volume *Catalogus universalis*, of 1699, Besterman dismisses as "of little value." A "noble fragment" of what might have become "one of the most splendid monuments of systematic bibliography" and the first genuine universal bibliography after Gesner, also appeared in 1699: Hendreich's *Pandectae Brandenburgicae*.⁵ Perhaps the last of these attempts was that of Robert Watt, a Scot, whose *Bibliotheca Britannica* appeared in 1824. Henry Wheatley considers Watt to stand "alone among bibliographers...as having produced a general subject index of universal literature on a large scale," but observes what we may feelingly echo, "It is really appalling to think of the enormous labour

which he undertook." Before Watt, little was done in England "of general bibliography."⁶ Watt's contribution to the art of bibliography was enormously important, but though his work "was greatly appreciated as an index and had influence on indexing methods," it appears, however, "to have been before its time in method, the significance and peculiarity of which does not seem to have been fully appreciated then, or since."⁷

After Gesner, then, any attempt at general inclusiveness in a bibliography was doomed to failure. Gesner, working a hundred years after the introduction of printing, was just able, so to speak, to stop the trickle from the dike. Later, however, books and other printed materials cascaded from the press in such increasing profusion that by the seventeenth century it was no longer possible for any one man to stop the flow, or even to have any appreciable effect on it. "The bulk of the material was beyond the reach of a single man," and individual bibliographers "were compelled to select, to limit, to compromise. Hence it is that their works are of no value to us, for their principles of selection and compromise are totally different from ours."⁸

But this did not mean that by the eighteenth and nineteenth centuries, effort to achieve bibliographical control was abandoned. Instead, as it became apparent that one man was comparatively powerless to gain the desired end of general control, speculation began as to whether men in co-operation could effect together what no individual could do. By the nineteenth century many learned societies, insitutions and associations had sprung up in order to facilitate the advance of various subject fields. Many of these served simply as a means by which exchange of information could take place. Many developed programs of publication and issued proceedings, journals, and transactions so that there were in Europe by 1790 at least 139 societies publishing at least 272 periodicals of one kind or another, there being 15 societies in England responsible for 39 periodicals.⁹ In addition to these societies there were by the beginning of the nineteenth century public and semi-public institutions, such as national or state supported libraries, which represented co-operation, corporate existence, a pooling of resources. All of them were involved somewhere in the bibliographical chain, either producing and distributing, or seeking and using information. It was to these associations and institutions that the burden for general bibliography was passed, and the unit of control became not the individual but a number of people, either loosely organized together, or incorporated by law for purposes to which bibliographical control was at first secondary.

The difficulties facing any one man or any association of men had become by the eighteenth century not simply those deriving from sheer bulk of material alone, but also from an increasing complexity in the bibliographical record, for the late eighteenth and especially the nineteenth century saw the maturing of a new form of publication--the scientific and technical periodical. With its advent and the setting up of scientific and learned societies, scholarship forged ahead by leaps and bounds. The complaints that there was too much to be known by any one man even if he were to limit his study to a single fairly broad subject field took on new meaning as learning became increasingly specialized, and science, using "the device of the learned

paper--one of the most distinct and fundamental innovations of the Scientific Revolution" assumed its now quite familiar "strongly cumulative character."¹⁰

The development of periodical publication and the "device of the learned paper" may well be the first of those events in the history of printing which have had considerable bibliographic reverberations. It added a whole new dimension to the bibliographical problem, for the contents of journals are separate, usually independent entities arbitrarily joined together under paper covers. Each separate entity has to be displayed or indexed. So, not only were books tumbling in breathtaking quantities from the presses, but now periodicals gradually increased in number, making ever more pressing the need for adequate bibliographies and indexes. Journal publication grew relatively slowly during the first half of the eighteenth century, but even so, "there were statements in the literature that the journal was beginning to dominate publishing."¹¹ What was a major difficulty then, became critical during the nineteenth century.

Elements of control were intrinsic in the new development. Most periodicals soon were furnished with an index, and a number of bibliographers indexed periodicals in their bibliographies. Gesner did this and there were also published a number of collective indexes to periodicals, by Beughem, Ersch, and Reuss, for example.¹² During the eighteenth century, too, there emerged bibliographical guides and handbooks. But above all, the abstracting and review journal appeared as a major kind of control over periodical literature, with which it necessarily shares strong familial and formal characteristics. By 1790 there were a total of 42 abstracting journals of which one was English and 25 were German.¹³ The reviewing journal did not appear until late in the century, but by its end 40 had appeared of which 16 were still active. Germany, again, was responsible for 27 of these, England for only 4.¹⁴

But these abstracting and review journals represented only a temporary solution to the problem. Derek de Solla Price has calculated that the number of scientific periodicals has increased by a factor of ten every half century, beginning from about 1750, and that their growth is exponential, the constant being about 15 years for a doubling. The total number of periodicals by 1800 he calculates at about 100, by 1850 1000, by 1900 10,000. But he also observes that the abstracting journal, because it removed some of the pressure, enabled the number of ordinary journals to grow unhampered. "On account of this proliferation, however, the number of abstract journals has also increased, following precisely the same law, multiplying by a factor of 10 in every half-century."¹⁵

These statistics are startling and present the problem vividly, but there are certain difficulties with regard to their compilation. Bolton's Catalogue of Scientific and Technical Periodicals, the first edition of which was published in 1895, listed 5,105 journals. The second edition, in 1897, contained 8,603 entries. Between 1801 and 1850, 230 purely scientific journals appeared, and 203 from 1851 to 1889.¹⁶ Many journals were short-lived, many were incorporated with other journals, and many changed their titles. There were also many

journals of a general nature which included scientific and technical information to a lesser or greater degree.¹⁷ Price's statistics imply a simplicity and a continuity which are perhaps misleading. Even so, crass enumeration of the kind given by Bolton is sufficiently startling. To these figures, to present the picture fairly, should be added those relating to general and literary periodicals and to newspapers. Graham, in a study making no claim to completeness, mentions more than 625 English literary periodicals which appeared before 1900.¹⁸ The raison d'être of many of these periodicals in the eighteenth century was simply to provide bibliographies, annotations, and (later) reviews of general and literary publications for which trade and other bibliographical control was inadequate.

This then is the extra dimension added to the bibliographical problem in the late eighteenth century. Abstracting journals and similar publications and special bibliographies by scholars and dilettantes, complicated the problem to which they also brought a measure of relief. What was needed was the kind of bibliographical organization which Egan and Shera¹ have advocated for adequate bibliographical control in our day. This had its exponents in the nineteenth century, though their proposals were at once simple, single, and more far-reaching, because bibliographic fragmentation was not so acute, and bibliographers were more naive as a result.

As the figures quoted above have shown, the main impact of the bibliographical problem was felt first in Germany. Little of general bibliography before, or even immediately after, Watt was done in England. Several schemes for controlling what, as early as this, looked as if it might become bibliographical chaos were put forward in Europe before 1850, and these schemes are interesting as precursors to what began to happen in England after 1850. They are very general; they recognize the problem, propose solutions which rely on the cooperation of men in societies and other organizations, with some government sponsorship or assistance, and display unshakeable faith that tackling the problem on the broadest possible base locally will make easily attainable much more general, even universal, control. In a sense, in this period of bibliographic history, one can see the beginnings of what might be described, to borrow a phrase of John Metcalfe, as "panaceatic bibliography."

The work of three early European panaceatic bibliologists, Leibniz, Jullien, and Danjou, serves as an introduction to a more detailed study of English systematic bibliography during 1850-1895. Towards the end of the seventeenth century, Leibniz put forward a plan to reorganize the German book trade, and this plan included "a proposal for the establishment of a central or a universal library which would maintain a universal index."¹⁹ More important, however, from the point of view of the kind of historical study being developed here, are Jullien and Danjou. Their work represents early approaches to what are nowadays thought to be separate and perhaps irreconcilable disciplines. Jullien was an early documentalist, Danjou a librarian.

Marc-Antoine Jullien was born in 1775 and died in 1848. He was best known during his lifetime as an educator, but in his youth he had a brief and rather turbulent political career. In 1792, 18 years old, he was sent to England where he met Lord Stanhope and Joseph Priestley--an introduction, as it were, to technology and science.

He was, in later life, very much concerned with the organization of science, and with the achievement of world peace through science and improved international relations, especially Anglo-French relations. "L'union des nations est la gage de la paix universelle et le germe fécond de la vraie civilisation." He was eminently modern, and far beyond his times in stressing that research should be organized on a co-operative basis, and that the results of research should be applied in industry. He emphasized as major problems the organization of the literature and the provision of information services, observing that "l'immense multitude des livres, qui semble obstruer toutes les routes des sciences, devient, sous quelques rapports, un obstacle au progrès de l'instruction."²⁰ In the service of these ideas he contributed greatly to the classification of the sciences, the methodology of "documentation," and the foundation of public libraries. His correspondence with the British Association for the Advancement of Science and his reputation as an educator may have caused his idealistic notions to gain some foreign, particularly British, currency.

Danjou's scheme for a universal bibliography, however, was probably as little known inside France as it was outside though Crestadoro refers to his anonymous pamphlet. Nevertheless, Danjou is something of an archetype. His intimate, though unrecognized, confreres were Jewett in America, with his ill-starred "mud catalogue," and Sir Henry Cole and others in England, who were concerned either with the printing of the British Museum Catalogue or with some form of national union catalog as the basis for a general bibliography. His proposals were put forward in a pamphlet in 1845: "Exposé succinct d'un nouveau système d'organisation des bibliothèques publiques, par un bibliothécaire." His point of departure is the need of the French government for an inventory of the contents of the public libraries under its control. The National Library, then the Bibliothèque du Roi, had fallen into disrepair, and rather than spend the years, the money, and the skilled labor on simply recataloging it, Danjou suggested that the time was auspicious for a universal bibliography. This could be compiled through the efforts of individual scholars, should be classified, and should be distributed throughout the country. Once completed it could be kept up to date by annual supplements, and would be in the nature of a union catalog like Jewett's "mud catalogue," but would serve, as it was hoped later that the catalog of the British Museum would serve, as a universal catalog. Danjou declared himself ready to meet any objections to his proposals, and to give more details of them should they be required, and "si, enfin, l'indifférence accueille cet opuscule et le laisse dans l'obscurité qui couvre son auteur, je m'en consolerais par la pensée que j' ai satisfait à un besoin impérieux de ma conscience, et obéi au désir sincère d'être utile à mon pays." W. E. A. Axon, describing this pamphlet in 1880, observes that "the seed-thoughts that fell unheeded a generation ago in France may yet bear fruit, though on a foreign soil."²¹ Such was the optimism and enthusiasm inspired by the grinding of the British Museum's institutional wheels towards the point of issuing its catalog.

THE BIBLIOGRAPHIC PROBLEM AND THE ENGLISH BOOK TRADE,

1850-1895

Another phase of the bibliographic history being examined here began about 1850 with the maturation of new forms of social organization and the influence of new kinds of technological development. It is impossible to treat this history in a general fashion from that time forward. Therefore, given as background the kind of general development already described, the rest of this paper will discuss some of the vicissitudes of the bibliographic problem in England from 1850 to 1895. This is a convenient breaking point because documentation, which was foreshadowed in the writings of Jullien and which embodied a more refined formulation of and approach to the old problem, then developed into a strong movement on the Continent, and soon created important tributary streams in England and later in America. In 1895, too, the Royal Society stepped up and "internationalized" its bibliographic work. The bibliographic burden, which in the mid-nineteenth century was vigorously designated as the responsibility not simply of individual scholars, but of societies, associations, and institutions, was passed on with the development of international agencies to them, and a machinery for international bibliographic co-operation was developed.

In England, then, the bibliographic problem did not become a matter of vital concern until the middle of the nineteenth century. One may speak without impropriety of Victorian bibliography. Previously, various bibliographers were at diligent and solitary work, and above all, there were attempts to establish and organize trade bibliography. John Bill's London edition of the German Mess Katalogs, William London's work, Catalogue of the Most Vendible Books in England, the Term Catalogues, Bent's London Catalogues, and Sampson Low's British Catalogues represent the most important achievements in this field before 1850. The rise of trade bibliography in England is given a general treatment by Growoll,²² Linder,²³ and Murra.²⁴ From the middle of the nineteenth century this kind of bibliography, as in most other countries, gathered considerable momentum. This was a necessary response to the development of publishing as big business, and to the continual increase in the volume of books with which the trade had to deal.

It is interesting to observe that the development of trade bibliography in England, apart from the oblique view it gives us of the general bibliographic problem, provides simply a parallel to it. The two are not directly related. A consideration of the one is not imperative to a consideration of the other. Trade, or trade-like, bibliography was not considered as offering even a beginning or partial solution to the kind of problem to which the Library Association, and other societies, began to address themselves in the middle years of the century, until the organization in 1950 of the Council of the British National Bibliography with representatives from the great libraries, the major trade organizations, and certain learned bodies. The trade, which could perhaps have injected a healthy realism into the somewhat fanciful and

rather abstract considerations of those only then becoming aware of the bibliographic problem, was in fact generally excluded from their deliberations. There was only an occasional exception, such as the evidence given by the publisher George Bell before the Society of Arts on the possible cost of a universal catalog of English books before 1600²⁵ and the work of Henry Stevens of Vermont.

The effect of the isolation of the trade from other bibliographic endeavors may perhaps be inferred from a comparison with American national bibliography. Leypoldt and Bowker were men of avowed bibliographic vision (witness the preface to the 1876-1884 cumulation of the American Catalog, and Bowker's plan, first submitted to the 1891 San Francisco conference of the ALA, for a Catalogue of the Publications of the Nineteenth Century).²⁶ They, and later H. W. Wilson, who admitted to the motivation of a compulsive "Bibliographical Urge,"²⁷ had no real English counterparts. After a certain amount of rivalry, the firms of Bowker and Wilson began to co-operate with each other, and brought the American book trade into close relations with the American Library Association (in the early days of which Bowker along with Dewey was the leading figure) and with Library of Congress. The result was that a national bibliographic system almost unique in its organization and fullness of coverage was created, and above all, given sufficient support to become commercially viable. In Great Britain, one gathers, the trade, if it called upon the Library Association or the British Museum, both of which were generally absorbed in antiquarian endeavors, took off its cap and used the service stairs.

The trade then is important only insofar as it was responsible for a major portion of the materials flooding into libraries, materials for which some record was necessary. Other sources of publication grew in number and influence during this period, however, and their growth and issuance of journals were major influences in structuring the intellectual life of England. During the period 1800 to 1860, the following societies, many of them dignified and given weight by incorporation by Royal Charter and the use of the honorific, began to publish reports, transactions, proceedings, memoirs, and the like: The Royal Astronomical Society, the Zoological Society of London, the British Association for the Advancement of Science, the Royal Entomological Society, the Royal Statistical Society, the Chemical Society, the Botanical Society of Edinburgh, the Royal Microscopical Society, the Geological Society, the Royal Physical Society, the Linnean Society, and the Geologists' Association.²⁸ Apart from these, of course, were ordinary independent periodical publications, and those coming from fields other than the sciences which had not, despite the sudden spate of their productivity, the age-old respectability of various literary and philological studies.

The history of bibliography from 1850 onwards becomes a study mainly of the work of societies and associations, of men banded together, either voluntarily or under the administrative aegis of government, to prosecute a common cause. Some of these societies were created specifically with the aim of bringing organized, corporate action to bear on aspects of the bibliographic and library problem. But many, especially later in the century and nowadays in the mid-twentieth century, were led from the study of their major fields of interest to some of the secondary, but cumulative, effects of their work. Important institutional involve-

ment in the problem first began in England with the British Museum. This institution is of the first importance to any concept of the structuring of the intellectual life of Great Britain. It is a typically British institution, one of those deeply rooted, highly respected, completely permanent institutions by the creation, careful control, and continued support of which the English have been able to develop a characteristic and enormously influential societal organization. It bears the brunt of much of the bibliographic history which follows.

THE BRITISH MUSEUM CATALOGUE AND C. W. DILKE

The pattern of bibliographic speculation was established for almost half a century in England in 1850 with the publication of the report of a commission appointed to inquire into the constitution and management of the British Museum.²⁹ The Museum had had a long evolutionary growth to this point, and there had been an earlier public inquiry into it,³⁰ but no examination so far-reaching and important as this. The inquiry was set afoot by "a memorial sent to the Prime Minister in March (of 1847) . . . by a number of eminent scientists, who had convinced themselves that the Museum had fallen completely under the control of men of letters and connoisseurs and that its scientific side was being scandalously neglected."³¹

Unfortunately, this charge was soon forgotten or set aside. But the inquiry was of central importance to the history of the Museum in that, as a result of it, the actions and views of the controversial Panizzi, then keeper of Printed Books and later Principal Librarian, were given official sanction. The report of the commissioners is essential to an understanding of the kind of great national library which the Museum Library became under Panizzi. It is also of central importance to the bibliographic movement herein described. One of the points at issue, not unfamiliar because it was also at issue in 1819, 1831, 1836, 1839, and 1841, was the printing of the Museum's Catalogue. Discussion revolved around such difficulties as the need for printing at all to replace the badly interlined manuscript catalog, the kind of detail required in catalog entries, the need for Panizzi's rules, the time it would take, the problems of keeping the catalog at all relevant to the Museum's collections, given their rapid growth under Panizzi, and the failure which met attempts to print it in 1841. These were local, institutional matters, and the Museum's administration showed itself largely concerned over the adequacy of means to an end of simple institutional expedience. The Museum never officially admitted, then or later, a concern with bibliographic problems wider than those intrinsic to its own situation. In this respect, it began to become inward looking and aloof from other bibliographic activities afoot in the nation. This provides an interesting contrast to the Library of Congress which toward the end of the century took on certain responsibilities for assisting other libraries in the United States, and for becoming a center for the encouragement, organization, and provision of various kinds of national bibliographical service. Perhaps the difference is immediately attributable to Panizzi with his suspicion of the public library movement,³² then reaching a legislative climax, and his suspicion of scientific men in general.³³

Despite the Museum's introspection, its belief that the condition of the "eye" of its library was purely a matter for its own concern alone, there were those who were becoming aware that, with the development of the Museum, that eye could be one through which the anxious student could catch a glimpse of the literature of the entire world. Upon this realization, the catalog became the focal point for the cogitations of panaceatic bibliologists and the Museum found itself in the extraordinary position of being the center of much speculation, enthusiastic theorizing, and respectful advice, all of which it calmly ignored, doing whatever it did only when and because it was institutionally expedient for it to do so.

The first and perhaps most influential of those who saw the Museum's Catalogue as an instrument of general bibliographic control was an anonymous contributor to the Athenaeum. He is identified as Mr. Dilke, in the reports of the Society of Arts on Sir Henry Cole's scheme for a universal catalog some twenty years later. There can be little doubt that Mr. Dilke is Charles Wentworth Dilke, the father of the gentleman (later knight) of the same name who with Sir Henry Cole was prominent in organizing the International Exhibition of 1851. Dilke was for several years editor of the Athenaeum, and manager in 1846 of the Daily News which started inauspiciously under Charles Dickens. He wrote nothing, however, for the journals with which he was connected until his retirement from newspaper management in 1847, whereupon he concerned himself mainly with a study of the authorship of the letters of Junius, and a study of Pope.³⁴ In a series of notices Dilke reviewed the report of "Mr. Panizzi's Commission," put forward his own plan for printing and making the best possible use of the Museum's catalog.

He had hoped "that the general cause of the Catalogue was to have a fair trial We must say that our expectations have been disappointed:--and looking at all the proceedings of this Commission and at the result, we feel entitled now to affirm that the leading members of the Commission have been Mr. Panizzi's friends beforehand and his partisans throughout." Dilke dismisses the difficulties in securing a "compendious and accurate" catalog which Panizzi raises, pours a measure of scorn on Panizzi's rules which Panizzi himself had difficulty in remembering, and observes that "any rules should be allowed to override common sense in a Catalogue meant for a common-sense people, is too provoking."

What then is to be done? As a start, Dilke reviews in great detail the evidence before the commissioners of William Cooley, for Cooley clearly indicates a technological development which could be invoked to preclude many of the objections to a printed catalog. The chief of these was simply that of up-dating it, especially as it would take so long to get into print in the first place. But Cooley showed that stereotyping separate titles is quite feasible. With separately stereotyped titles the entries in the catalog could be arranged, re-arranged, corrected, and added to as thought desirable in order to produce an accurate current general catalog or special catalogs ("not classed Catalogues,--but alphabetical Catalogues of classes of books"). In order to keep the time taken to a minimum, he recommended that composing be done directly from the title pages of new books (where necessary, suitably corrected or added to for the compositor's convenience and the catalog's consistency), and as for older books, "printed or written Catalogues already

in existence would supply excellent copy for nineteen-twentieths" of them. Any error could be corrected as noticed from edition to edition by merely recasting one title. Dilke was enthusiastic, but a little vague, about the value of such a catalog to the "provincial" libraries which "we are about to establish under authority of Parliament."³⁵ (The Public Libraries Act of 1850 received the Royal Assent several months later, on August 14.)³⁶

The technology, so to speak, out of the way, Dilke elaborates a scheme of institutional and international participation to make a truly universal catalog out of the British Museum's Catalogue. The Museum is overcrowded, chronically short of room both for books and for readers. Therefore, divide the collection into old books, and new books and duplicates of old books, and house the old books apart. This will necessitate dividing the catalog. The first part of this divided catalog can be made into "a Catalogue not merely of the books that our single library possesses, but of all the books, so far as is known, that have ever been printed up to, say, 1838."³⁷ Should this goal be not at once realized, as omitted books are discovered, their titles can be stereotyped and added to later editions of the catalog so that it may, so to speak, grow into completion.

The Commissioners tell us that if Mr. Panizzi's Catalogue be "completed with any near approach to perfection which its plan and rules contemplate," it will form a record to future times of great value of the printed literature of the period which it embraces." . . .It will do no such thing;-- it will be a poor peddling Catalogue,--a Catalogue of the contents of a local library at a particular moment of time,-- a work . . . unworthy of an age and a people who, in the proposed Exhibition of 1851, have held out the hand of fellowship to the whole world and acknowledged the intellectual brotherhood of nations.³⁷

The first step towards such a universal catalog, one indeed which Panizzi and his assistants could take, is the compilation of the basic catalog, the Museum's catalog, and the compilation of one of "all works published in the English language, or printed in the British territories, but not at present in the British Museum. Think for a moment what would be the literary value of such a catalogue! Judge of it by the uses of Watt's 'Bibliotheca Britannica'." While this work is afoot, the British government should communicate with foreign governments in order to propose to them "that each should undertake to have prepared, and within a specified time, on a common principle to be agreed on, a Catalogue of all books ever printed, so far as is known, by and in all the several nations and languages under their respective governments." Such a catalog would also serve as a global union catalog. An earnest of success, Dilke observes, can be sought in "the large and liberal spirit in which . . . the Governments of the world have welcomed the proposal of Prince Albert for a great World Exhibition."³⁷

THE INFLUENCE OF DILKE'S PLAN: CRESTADORO,
SIR HENRY COLE, AND THE INTERNATIONAL EXHIBITION

The impact of Dilke's plan was considerable. Nowadays it seems very unrealistic. One senses beneath the occasional modest demurrers an

advocate who is a little intoxicated by the grandioseness of his own ideas. But the Victorian Age was reaching its hey-day as Dilke wrote, and the age was very much animated by a sense of its duty towards the poor, by an ardent patriotism, and by a vision of England leading the world towards the perfection of its own institutions. Victorian bibliography reflects these qualities.

The application of stereotyping to catalogs was perhaps the fundamental concept for the erection by Dilke of his Victorian edifice. The actual invention of the process had occurred much earlier, the Scot, William Ged, having patented it in 1725. Eight years later, Lord Stanhope, who had met the young Marc-Antoine Jullien in 1792, "perfected a process of stereotyping which was acquired by the delegates of the Clarendon Press at Oxford in 1805 . . . and stereotyping on this system became part of the general business of the press."³⁸ But it was not until 1850 that the possible use of this technique as a solution to the problems surrounding the reproduction of catalogs was realized. When it was, the idea was eagerly seized on.

The controversy as to whether priority of invention belongs to the American, Charles Coffin Jewett, or to William Cooley was a dramatically publicized one.³⁹ But to try to apportion the degree of right between the two disputants seems unimportant. What is important is the coincidence of a similar idea in two nations so widely separated, for Jewett's famous "mud catalogue," a national union catalog of all the books in the public libraries of the United States, is the same in its broad design as that projected by Dilke using the British Museum's catalog as a basis.

Yet the two schemes are different, and the difference points up the essentially Victorian nature of Dilke's ideas. Jewett's was a practical scheme. He labored long, and ultimately unsuccessfully, over the technique by which it could be put into effect; but with the development of new techniques, given a new sense of urgency, his proposals were finally realized in the National Union Catalog issued by the Library of Congress in the middle of the twentieth century. His gaze did not extend beyond America, beyond the benefits such a catalog would have for the researches of various classes of people--architects, engineers, and mechanics among them,⁴⁰ though he was not unaware that it "looks towards the accomplishment of that cherished dream of scholars, a universal catalogue."⁴¹ Given the isolation, the newness of America, the scarceness of its intellectual resources, the potentialities of development of the country itself, and the kind of social egalitarianism and mobility that were emerging there, he was vitally aware that "a responsibility to the whole country rests upon the man, who selects books for any public library,"⁴² an idea which in the form of "systems" is intrinsic still to the 1956 A.L.A. Standards for Public Libraries. His catalog would help that man discharge that responsibility, a mainly national responsibility, because it would enable him to reveal to the student the full extent of the resources he might need, and it could become the main tool for inter-library cooperation in lending and copying.

Confronting Dilke was the British Museum, by then assuming the posture of a great national library, and the knowledge that England, in

an exercise of greatness, was proposing to bring nations together into the hitherto unparalleled peaceful cooperation of the International Exhibition of 1851. Close to hand was the necessary technology, and Dilke proceeded to show how the Museum's developing musculature could be flexed with powerful cultural effect, and how international cooperation could itself be adduced to the glory of England. He was aware of the public library movement, and though he adverted to it, one may assume that the needs of the masses for books and learning were thought of as something quite different from those of men organized together for research and exchange of ideas into Royal societies.

The same glorious vision of England in the performance of an act of universal bibliographic philanthropy also inspired Crestadoro. Writing in 1856 he quotes with approval Dilke's view that to limit the Museum's catalog, as the Commissioners and Panizzi propose, is unworthy of a people who in the Exhibition of 1851 had "held out the hand of fellowship to the whole world." He proposes, or formalizes, a particular kind of two-part cataloging--the single entry inventory arranged in any order, whether alphabetical or that of the shelves, indexed by a system of "concordance of title words." (This is exactly KWIC indexing rediscovered and mechanized in the last decade.) If the Museum's catalog were compiled according to his scheme, he says, then

If the Museum were burnt to the ground, its inventory and its Index would not lose one iota of their colossal usefulness; but on the contrary they would continue to be an example of well-spent money, not only for the service of the British nation, but as aiding the progress of civilization all over the world The great library of the British Museum is now national, but it would then be cosmical The world has a right to expect this from England, yea England, wealthy England, might do more than this.⁴³

What England should do is to work for the construction of a general index to the catalogs of all the public libraries of the world. She who boasted of never letting the sun set upon her Empire should never let it set upon the libraries flung far as her dominions.

The whole world would thus be converted into a single library, as it were; all its intellectual contents inventoried; all those inventories incorporated into one Universal Index.⁴³

Dilke's scheme was influential as late as 1877 when the Library Association set up a special committee to investigate the possibilities of the Association creating or sponsoring a general catalog of English literature. There continued to be throughout the last half of the century wistful references to it, and the hope that the British Museum and its catalog might be the agencies for it never seemed quite to flicker out in the bosoms of some scholars. But its influence was so extensive and the idea of a universal catalog so firmly entrenched in men's minds, mainly because of the work of Sir Henry Cole who tried to put Dilke's suggestions actually into operation.

Sir Henry Cole was an interesting man. In his youth he had lived in the same house as that eccentric humorist, Thomas Love Peacock and had become his friend. Like Peacock, Cole was very much a public-servant. He was responsible for much in the area of postal reform, and became in 1838 one of four assistant keepers of the newly created Record Office. In 1846 he became a member of the Society of Arts, and was elected Chairman of its Council for 1851 and 1852. These were the years of the International Exhibition for which the Society of Arts was sponsor. A committee appointed in 1849 to carry out the idea of such an exhibition was confirmed by a Royal Commission in 1850. One of Cole's chief colleagues was Dilke's son, and they and several others were mainly responsible for bringing the Exhibition into successful being in 1851. Later, Cole was general adviser to the exhibition of 1862, and helped manage those of 1871-74. His work for the 1851 Exhibition brought him into frequent and close contact with Albert, the Prince Consort, and President of the Royal Commission.⁴⁴

Cole was very much impressed with Dilke's proposals for a universal catalog. His references to "old Mr. Dilke" in the Minutes of Evidence taken before a committee of the Society in 1878,⁴⁵ and his professional association with his son, suggest an acquaintanceship. In any case, he decided to bring the matter before the Society of Arts. He, too, thought that the International Exhibition and a universal catalog were as cause to effect. In a lecture before the Society in 1852 he discussed the "International Results of the Great Exhibition of 1851."⁴⁶ These included an improved system of international law, a general and simple but scientific classification and nomenclature of all objects whether natural or artificial, abolition of the passport system, international copyright, full and complete international catalogs of all printed books, and, above all perhaps, a better and more comprehensive national education, especially in relation to industrial knowledge. There were to be other results, some of which have been achieved but most of them remain still dreams to be fulfilled. The idea of the universal catalog "went to sleep," as he puts it, until 1874 when he drew up and had printed specimens of such a catalog, which in 1876 he submitted to the Prince of Wales, the President of the Society of Arts.

THE SOCIETY OF ARTS' UNIVERSAL CATALOGUE

In resurrecting Dilke's scheme for a universal catalog after his initial introduction of it to the Society of Arts in 1852, Sir Henry Cole proceeded with circumspection. His specimens were to show that though the scheme involved a "large and difficult work to carry out" it was not necessarily impracticably vague. He also consulted with "eminent men, possessing fine libraries, or learned in literature and Bibliography," many of whom "thought sufficiently well of the project to encourage proceeding." The Prince of Wales, upon receipt of the specimens, asked the Society to report on the cost of printing "a universal catalogue of all books printed in the United Kingdom up to 1600." A notice appeared in the Society's Journal for January 25, 1878, introducing the scheme, and another notice appeared three weeks later giving an extended explanation of the scheme and presenting the specimens.

The proposed catalog was to have one main section and a number of sub-sections as thought necessary. It was to be arranged chronologically by broad periods, and alphabetically within these, the sub-sections taking care of any other arrangements thought desirable. The first division of the catalog would be at 1550. Panzer's Annales Typographicum and Hain's Repertorium Bibliographicum, having already partially completed the work as far as 1500, would provide the encouraging beginning point. It was further proposed that each nation should

compile and publish the titles of all printed books which have been produced in it Whatever may be the language of the books, the titles would be given as printed. Each country would publish a given quantity of the titles at fixed periods, which should be printed in the same style, measure, and sized paper as this specimen, and, like it, on one side of the leaf only. It might be convenient if each country used a different coloured paper . . . or printed in a special coloured ink.⁴⁷

The machinery for international co-operation had already been constructed. Dilke had only the "earnest" of the International Exhibition to proceed on, and the somewhat forlorn hope of the British government taking steps to secure international co-operation. The Exhibitions had not proved the answer to all the problems of international relations. But more than twenty-five years later there was something more. Albert Edward, Prince of Wales, had formed a convention between the Princes of Europe at the time of the Paris Exhibition of 1867, for which Cole had been an acting-commissioner and secretary. The convention had been formed "with the view of all countries assisting one another in obtaining reproductions of works of art."⁴⁷ Now, this would prove equally useful to a scheme such as that for the compilation of an international catalog, and it was suggested that the Secretary of State for Foreign Affairs, no doubt with reference to this convention, should establish contact with all countries having a literature printed before 1550, submitting the specimen, and asking for the nomination of a body which could correspond on the subject.

Not only was there this admittedly tenuous organization which might assist in the development of the catalog, there was also a technological development of which Cole was very much aware. Though such comparisons are too facile, one might say that Dilke had stereotyping, and Cole had linotype machines and rotary presses as used by The Times newspaper. In discussing the problems of composition-time needed to produce a catalog, and the time needed to print it off, he continually referred to the enormous quantities of type set daily at The Times and printed off. Not only that, in order to save the printers from the problems of working from manuscript he refers to "a sort of auto-type printing machine very commonly in use," called the Remington type-writer.⁴⁸ Both these advances could facilitate production of the catalog.

In answer to the Prince's request, a committee was set up and began to take evidence for a report. The minutes of evidence were published in the Society's Journal in August 1878. The evidence is extremely confused and conflicting, for nearly every witness called to express his view had a bibliographic axe to grind, so much so that at times the

record becomes rather Gilbertian and one regrets the absence of a Sullivan to immortalize the proceedings as comic opera. The experts officially examined were Walford, Nicholson, Thomas, Arber, Bullen, and Bell, all of whom, save for Bell, were committed to similar bibliographic undertakings elsewhere.

Walford, Nicholson, and Thomas were all members of the Library Association's Committee on a General Catalogue of English Literature, set up at Walford's instigation the year before at the International Conference of Librarians, out of which the Library Association had emerged. Not surprisingly, Walford had very strong views, which he expressed with an impetuous fuzziness very much puzzling to his examiners, on what kind of catalog was necessary, and how it should be compiled. He was firmly convinced that the best way of proceeding was to use a system of slips of his own design, and which were to be used for the General Catalog of English Literature. While the Museum should cooperate to furnish all titles it could, he quite rejected the idea that its catalog should be printed. "I would print nothing preliminary; but make a general catalogue of English books once and for all," which was exactly what he was about in the Library Association. A universal catalog other than one of the kind he had in mind, "I regard as an altogether impracticable undertaking."⁴⁹

Both Nicholson and Thomas supported this view. Nicholson, the Secretary of the Library Association, very much wanted the catalog classified, but certainly not according to the system of the Museum which "may be very good for its own purposes, but is entirely unscientific Mr. Melvil Dewey's is infinitely better, and might be made the basis of the scheme to be adopted." He also drew the committee's attention to the existence of the Library Association and the American Library Association, urging that, given the kind of membership which existed in these societies, their co-operation should be particularly sought. Moreover, the "Educational Department in Washington" had "at very great expense and labour . . . produced the most important work on library-science ever published,⁵⁰ and they would have full sympathy with such a project as this."

Apparently becoming exasperated by all of this, for the witnesses could hardly be got to answer directly the questions addressed to them, Sir Henry Cole observed that

the Prince might be very fairly advised, if the Conference of librarians would put forward a scheme that would be a reasonable guarantee for the beginning of the thing, that nothing could be better than that the very learned people connected with libraries should have it in their hands. But now, this very morning, we have had some new shots put into our locker altogether, and everyone has a different opinion on every point.⁵¹

Of them all, Edward Arber was worst in his jealousy of any prejudice in the Society's scheme to his own work. In January 1877, he had written to Dewey bringing to the notice of ALA the near completion of his transcripts of the Stationers Company Registers down to

1640,⁵² in which he takes not modest, but justifiable, pride. He is now, he apprises Dewey and the American library world, about to begin "my great Catalogue of all Editions of Books printed in England or her Colonies down to 1660 A.D., together with all editions printed by or for Englishmen abroad down to that date, printed in Annual Lists (with a Classified Index at the end), described on a scientific plan . . . and machined on writing-paper."⁵³ When examined by the committee he began his evidence blusteringly in a self-absorbed way, and could scarcely be kept to the point, although Bullen, of the Museum, kept respectfully trying to soften the chairman's somewhat stern treatment. In any case, Arber very decidedly made a declaration that

a large portion of the work down to 1640 has been already done upon a more systematic plan than that of the specimens submitted. It is more final, more correct, and more voluminous than that; that is what I want to say. I do not think that the Committee, who are acting under the Prince of Wales, know it. I have all printed books--not only English--and if you will allow me I will give in five minutes an answer which you may consider as sufficient for the information of his Royal Highness I will not stop at 1600; I will give you an answer that can take it down to 1860.⁵⁴

He takes his five minutes and lays down as law the number of titles and the total costs involved with an authority located in the statement, "I believe, sir, that as regards the printing of such a catalogue there is no man who has got the same experience as I have upon that point, because this transcript, &c., has been entirely by me at my own risk and expense."⁵⁴

So it went on, without any agreement being reached as to the limiting date or what the catalog should include. Indeed, during one lengthy exchange on this last subject, each witness and each examiner kept tossing out into the air short phrases about Antwerp printing, American printing, and related subjects, while Walford at regular intervals solemnly intoned "English Printed Books" as a kind of ground-bass. The only real contribution was made by Bullen, Keeper of Printed Books at the British Museum. He announced that the Museum was thinking of printing a catalog of its English books down to 1640, and, while he admitted every criticism as to the Museum's incompleteness of coverage, nevertheless maintained that "To print that catalogue . . . as I have always expressed my opinion, would be the best method, and I believe the only sure method, of laying a solid foundation for a universal catalogue."⁵⁴ To these two definite and reasonable statements Sir Henry Cole clung during the rest of the proceedings, himself coming to the conclusion that perhaps a return might be had from Parliament to print the catalog up to 1877 and, that in any case, the catalog could hardly be printed without official support, despite the cooperation of librarians and others.

A report was drawn up and submitted to the Prince of Wales which recommended that the government should be approached to see if it would entertain the idea of printing the Museum's catalog to 1878. The

report suggested that, indeed, the catalog should be issued as an ordinary government publication by the Stationery Office, and estimated its size at 45 volumes of 1,000 pages each. It concludes that such a catalog "would be of practical utility in the formation and improvement of public libraries at home, as well as in the Colonies and abroad, especially in the United States, and it would give general aid to the progress of Literature."⁵⁵

The report was received with mixed feelings. Axon, for example, in the Academy hailed it. "The Universal Catalogue would seem at last to be within reach."⁵⁶ An editorial comment in the Library Journal expresses its pleasure that the Society "has given up its less desirable plan . . . in favor of what certainly seems a practical scheme."⁵⁷ But the committee on the General Catalogue of English Literature reported to the second annual meeting of the Library Association with the labored, scathing logic of threatened interest, that the Society of Arts

were asked by their President . . . to consider one question; the inquiry . . . diverged into a second question; and they have reported on a third question. That is to say, they were asked to consider what would be "the cost of producing a Universal Catalogue of all books printed in the United Kingdom previous to the year 1600." The inquiry turned into a discussion upon a General Catalogue of all English Literature, and the Council have concluded by recommending the printing of the Catalogue of the books in all languages contained in the British Museum. It seems not unreasonable to suggest that this circumstance scarcely adds weight to their conclusions and opinions.⁵⁸

The Prince, however, approved the report, and the Committee began actively to ascertain actual costs involved. They issued a circular to printers, and printed a specimen page prepared in what would "probably be the cheapest possible form." They anticipated a second more specific report. None seems to have been issued. The Committee showed itself encouraged by "the unqualified approbation of all the authorities on such questions" and "from numerous articles in the public press on the subject."⁵⁹ Lord Alfred Churchill, at the end of the year in his address as Chairman of the Society's first ordinary meeting, expressed the Society's continued interest in the subject. "But, above all, the public may be congratulated that the Trustees of the British Museum have obtained the sanction of the government to printing, from time to time, the titles of the printed books as they are added to the library."⁶⁰

With this event, followed in 1882 by the decision to print overly distended volumes of the catalog as it became necessary to break them up, the reason for the Society of Arts' interest in the Museum's catalog was withdrawn. Nevertheless, the careful, sensible approach of the Society towards achieving the desired goal presents a sharp contrast to the work of its counterpart committee in the Library Association. Sir Henry Cole cannot be neglected in any study of the concept of systematic bibliography. He brought the idea into popular focus,

and his emphasis on a national bibliography as a basis for a co-operatively formed international bibliography puts him at once in a class with those who, towards the end of the nineteenth century, strove to achieve its apotheosis in a universal bibliography.

1877: THE INTERNATIONAL CONFERENCE AND THE EMERGENCE OF THE LIBRARY ASSOCIATION

For a formal organization to be precipitated in the history of a discipline, to develop a permanent structure and exert a shaping influence on its future, the discipline must have become sufficiently large, complex and important to warrant its assumption of an independent existence; and those who are interested in it must be sufficiently numerous and aware both of its present state and its potentiality for subsequent growth to allow themselves to function actively in and as the organization. Once created such an organization embodies the discipline, monitors its growth and its external relations, and provides a kind of institutional definition for it. As a greater or lesser degree of inertia is necessarily endemic to all institutions if they are to develop stability, continuity, and influence, such a definition is slow to change, and changes come only gradually according to what might be called the laws of institutional evolution.

The International Conference of Libraries in London, and the emergence from it of the Library Association of the United Kingdom, suggest that librarianship had reached this point of development in England by 1877. It had reached it in America just a little before. The institutional definition of librarianship established by the emergence of the ALA and the Library Association, given national differences, was to have important consequences for the bibliographical movement being described here. Largely because of the manner in which the competition among various groups was resolved, several related societies appeared, e.g., the Index Society and the Bibliographical Society; and there gradually occurred a splitting away of what is called documentalism or documentation from the main body of librarianship.

As an organized or emergent discipline, librarianship was the result of the confluence of three streams in the intellectual life of Great Britain. There has already been described the extraordinary bibliographic pressures building up in the society, pressures which libraries, insofar as they exist at all, by their very nature must attempt to relieve. There was also, from the beginning the seventeenth century, a developing dialectic of librarianship. This centered upon the printing of catalogs, especially those of the university libraries, and especially that of the Bodleian,⁶¹ and later that of the British Museum. An early high point in this process was reached at the end of the 1850's, by which time Panizzi's Rules, Crestadoro's Art of Making Catalogues, and Edward Edwards' Memoirs of Libraries had appeared, to say nothing of Watt's, Lowndes', and the Bodleian catalog together with those of the London Institution and the Norwich Library among many more. The American contributions in the 1870's by Dewey, Cutter, and others were also influential in England at the same time. There was, thus, by 1877 a considerable "literary warrant" for librarianship. It had achieved the importance, the social and intellectual justification, of a bibliography of statistical significance.

But above all, a very strong movement for popular education had gained considerable momentum by the last quarter of the century. This had been mainly responsible for the Public Library Act of 1850, and for the 80 adoptions of the Act before 1877.⁶² Indeed, the foundation stone of practically every public library in the kingdom, especially any of those with which later the name of Andrew Carnegie came to be connected, was an unshakeable belief in its efficacy as an agency for popular education. The public library was, in effect, an instrument of benevolent paternalism through which the masses could be elevated or advanced on their own volition morally, materially, and even socially. The importance of this movement can hardly be stressed enough in any consideration of the growth of public libraries and the structuring of librarianship in Great Britain.

There is, however, one other matter, a trickle to these streams, which needs to be mentioned as a competing element in the initially somewhat uneasy definition of librarianship established in 1877, and which was not unimportant in the subsequent adjustments which led to the gradual reduction of that unease. University libraries, and other research libraries, such as that of the British Museum, were older for the most part than the public libraries, and were concerned mainly with the repository function. They tended to hold aloof from the public library movement and themselves took little or no part in the general movement for popular education, except insofar as their librarians, men of learning and high Victorian responsibility, were concerned as individuals with the moral and intellectual welfare of the people. As scholars, as men of letters, the personal interest of these men in books and libraries was typically that of the literary or historical bibliographer. Kindred souls to them were those clergymen and men of independent means, who courted the muse a little, or dug with leisurely fastidiousness in the dusty deposits of their favorite libraries (especially the British Museum) at the behest of some remote literary or clerical whim. Such men were attracted to the Library Association both because of any formal connection they might have with libraries - frequently they had considerable libraries of their own - and because they were literary dilettantes and antiquarians.

All these elements or streams were clearly represented in the papers read at the International Conference of Librarians in 1877 and at the early meetings of the Library Association. There were, for example, contributions dealing with the promotion and problems of public libraries, with antiquarian matters (although these were more important to the deliberations of the Association later), with "house-keeping" matters of the how-to-do-it and what-I-have-done-in-my-library kind - the dialectic in domestic form - and finally, with the bibliographic problem. This last played a quite important role at the Conference, with Henry Stevens, Cornelius Walford, and John Ashton Cross, the British Museum's Catalogue, and Poole's Index all taking important parts in the drama.

The next sections of this paper will consider the various proposals relating to the bibliographic problem which were presented at the Conference and later to the Association for institutional action. This was taken by the Library Association in two proposals presented at the Conference--Poole's Index and Walford's General Catalogue of English Literature. But gradually as the Association's promotion of public libraries was more and more successful, and its membership, therefore,

was increasingly dominated by public librarians, it turned away from the bibliographic problem as such. It began to devote itself more intensively to public library matters, to education, and to house-keeping; even the antiquarian aspects of its interest, very strong for a while, became less and less important with the emergence of the Bibliographical Society in 1892.

THE BIBLIOGRAPHIC PROBLEM AT THE INTERNATIONAL CONFERENCE

One of the most remarkable proposals put forward at the 1877 Conference was that of Henry Stevens of Vermont, who was very much an exception to the rule formulated earlier that the trade was kept apart from library and bibliographical circles in England at this time. He was American, an antiquarian who had performed valuable service for the British Museum, and seems to have been a bluff, genial, likeable fellow, if the tone of his various papers and the reminiscences of Bowker⁶³ are any indication. His biography has recently appeared.⁶⁴ According to The Athenaeum⁶⁵ Stevens' idea of securing accurate copies of title pages by photographic reduction was formulated as early as 1868. His plan as presented to the Conference was quite detailed and attempted to show how new techniques hitherto unused by bibliographers, together with a special kind of institutional organization, could be exploited to solve the problem of satisfactorily transmitting to posterity England's literary history and bibliography, "instead of continuing the present muddle which is manifestly growing muddlier every year as the harvest of the press accumulates." Another problem it could also solve is that of realizing a bibliographical ideal, for there has been "no apparent progress whatever made towards that universal and harmonious catalogue raisonné for which we have been so long and devoutly praying."

The technique involved is the reduction by photography of title-pages of books to produce what Stevens calls "photograms," which are one-ninth the size of the original title page. These are then laid on thin paper or cards and given a full bibliographical description on the rest of the card. The printer, by using "an electro-block or some one of the permanent processes" reproduces the photograms and manuscript, which has been set in type, on 4" x 7" cards, or of whatever size is desired. The author admits that certain difficulties need still to be worked out, but he has himself used the method successfully for a number of years. The cards so produced, space being left at the top for author and brief title entry, may be considered "unit cards" and given added subject and author entries--what Stevens calls "cross-references." He is generally thinking of the indexed inventory and betrays some confusion of terminology and method. The uses to which the cards could be put are numerous. Not only would they provide excellent copy for a printed catalog, they could be shuffled to provide any kind of arrangement for such a catalog. The negatives of the photograms could even be numbered "and so arranged on shelves like books that they may be referred to instantly. One shelf eight feet long will hold the negatives of 10,000 titles, as I know by experience." It is but a short step from this idea to that which Fremont Rider has made familiar to present day librarians and library users. Stevens'

method could provide "a full, clear, plan, practical, exact, precise, concise, and comprehensive title, collation, and description--that is to say, a real portrait and intellectual photograph of every one of the books in our libraries." As a result, bibliography might aspire to become a science and librarians to incorporation in a society such as the Society of Arts or even the Royal Society, with the letters FLA conferring no less honor than FSA or FRS. Part of Stevens' prophecy was indeed fulfilled in 1898, when the Library Association received a Royal Charter and the right to use such letters.

In any case, given this methodology as a basis, Stevens' plan was for a "co-operative or universal system" to prepare catalogs of "old, rare, beautiful and costly books." His concept, however, of what such a catalog should include is extremely generous. "My notion is that every book, big or little, that is published, like every child that is born, should be registered, without inquiry into its merits or character."⁶⁶ If a General Bibliographic Bureau were established

no better mode of co-operative or universal cataloguing [could be found, for there] librarians, collectors, and amateurs may buy descriptive slip or card titles of books as they buy postage-stamps, money-orders, or telegrams, at a tithe of the cost they would incur in making them themselves, and at the same time infinitely superior in quality. Such a bureau, or clearing-house, under Government protection, it is believed, might from the beginning be made self-supporting, or even remunerative, like the Post Office.⁶⁶

He sounds a familiar note to the student of general bibliography as he brings his paper towards its conclusion:

Who does much, of him much is expected, is an old rule in international affairs by which England may fairly be called upon to give to the world the first instalment of a Universal Printed Catalogue, made on true bibliographical principles, with full titles and collations, not alone of English printed books, but of all the books in all languages existing in our public and private libraries, or likely to be in them.⁶⁶

Stevens' plan created a certain amount of interest in the press, although the Conference received it rather phlegmatically. In the article referred to above, the Athenaeum considered it to be "impossible to recognize the claims made by Mr. Stevens, that the birth of every book should be registered as carefully as that of every human child," but nevertheless admits that "without some definite, methodical arrangement, according to their contents, the multitudinous products of the printing-press [will] defeat, by their numbers, the purposes of their existence--the communication and diffusion of ideas."⁶⁷ The kind of central office envisaged by Stevens could be supported "by a comparatively small tax on the libraries of various nations. The orderly, periodical distribution of . . . titles . . . is an easy

matter when the postal service is developing into a system of universal carriage." The next week the Athenaeum described the scheme in much fuller detail.⁶⁸ Generally speaking, Stevens' proposal was thereafter ignored, although Edward Arber, in stressing to the Society of Arts' Committee on a Universal Catalogue the need to proceed from the actual books themselves, holds Stevens up as an example, for "he not only will not trust the accuracy of any human being, but he has all the titles of books copied by photography."⁶⁹

One significant reversion to it, however, was made by H. R. Tedder in 1893 when dealing with copyright deposit and the need for an "official record of current literature."⁷⁰ Despite the Athenaeum, the necessity for centralized and official registration of the national literature has been an idea much echoed in contemporary conferences and by contemporary authorities on national bibliography. Convinced of its importance, Stevens vigorously adverts to it again, as at the fourth annual meeting of the Association in 1881 when he urges:

Let [England's] general BIBLIOGRAPHY be added to the post-office and the schoolhouse, and go hand-in-hand with the census at the cost and charges of the interested public.⁷¹

Cornelius Walford's paper on a "New General Catalogue of English Literature"⁷² was quite brief, but it had considerable repercussions. That such a catalog is necessary, he argued, is evident from the fact that there is now available none which is reasonably cheap, complete, or even with fully adequate bibliographical details. Owners of special private collections should be asked either to lend their catalogs or to supply on uniform slips the titles of the works in their collections. "Where the owner cannot undertake this work, or get it done either free or at a small cost, then let the Library Association send their own officer to do it." Such a catalog would serve as a union catalog, and though it should be alphabetical, there should also be a subject catalog, by which Walford means a catalog arranged in broad classes such as Locality, Occurrences, and Institutions and Associations. He particularly stresses the advantages to be had from the use of slips such as those of his own design, examples of which he submits to the conference as specimens, and observes that "I venture to believe the Government--this government, with a popular author at the head of it--would make a grant for printing it as a real boon to the world of letters." On the last evening of the Conference the Library Association of the United Kingdom was formed, and upon a motion by Walford, seconded by W. E. A. Axon of the Manchester Literary Club, it was resolved "That, recognizing the urgent necessity for a General Catalogue of English Literature, the Conference recommends to the Council of the Association that steps be forthwith taken to prepare such a catalogue, and leaves all details to the Council."⁷³

A short discussion followed Walford's paper and that of John Ashton Cross which was read immediately after it, and in this was raised a matter already dear to the hearts of those interested in general bibliography, one to become even dearer with the Society of Arts' labors. Professor Mondino, Vice-Librarian of the Biblioteca Nazionale, Palermo, suggested that

the catalogue of the British Museum might be printed in slips, so that every sheet of paper contained a certain number of titles which could be cut out and arranged either alphabetically or by subject The expense of printing would be covered by selling the slips, which not only many librarians but many private gentlemen would be glad to buy. He suggested that if these slips were sent to other librarians throughout the world, they would gladly inset the titles of any books in their possession which the Museum might lack, and that by such co-operation a general catalogue of printed books might easily be made.⁷⁴

This is, in effect, a variation on Dilke's idea. Interestingly enough, the actual printing of the Museum's accession slips beginning in 1880 had very little bibliographical impact, except insofar as these slips were seen as harbingers of a whole printed catalog.⁷⁵

There was no lack of interest in the general subject of the Museum's Catalogue at the Conference. The discussion after Stevens' paper was largely a monologue by Jón Hjaltalín, of the Advocates Library in Edinburgh, to the effect that if the Advocates Library could print its catalog, a venture in which he was then involved, the Museum could also print its catalog. Most important in this connection was a paper by W. E. A. Axon on "The British Museum in its Relation to Provincial Culture."⁷⁶ He puts it quite bluntly: "The greatest help which the British Museum could give to the national culture (not merely provincial culture) . . . would be the issue of a printed catalogue. The want of such a guide is felt every year with increasing force." He therefore outlines a plan for issuing it based on "a combination of the cataloguing methods suggested by Dr. Crestadoro and Professor Jewett," the one for an inventory indexed by a concordance of title words, the other for stereotyped titles, which latter would be "useful in a thousand ways," especially as the "MS catalogue in the British Museum is now so far advanced that no great effort would be required to make it a complete record of the printed books up to whatever date might be decided to be the proper limit." The Museum's Catalogue was something in which Axon took much interest and on which he wrote frequently. He urged his scheme for issuing the catalog again the next year at the Oxford meeting of the Library Association,⁷⁷ and carefully followed the deliberations of the Society of Arts, publishing a useful synthesis of the various proposals for a universal catalog from Danjou through Dilke to Sir Henry Cole.⁷⁸ During the following years his articles on the Museum's Catalogue, and aspects of the general bibliographical problem, appeared both in the library literature and in journals such as the Academy.

From the discussion which arose after Axon's paper at the Conference, it was apparent that most were in favor of printing the catalog, although the problem of its immediate and perhaps crippling outdatedness as a result was raised. Both Garnett and Bullen were convinced, the one of the scope of its utility, and the other of the feasibility of keeping it up to date by periodic supplements. John Winter Jones, President of the Association, and Principal Librarian of

the British Museum, however, had last say--as he continued to have until he was succeeded in office by Augustus Bond. Theoretically, he was in favor of printing the catalog, but the size, cost, and time necessary to make it bibliographically perfect were against it, even though "the mere printing might be accomplished in a few weeks or months." His observations at this time and his somewhat laconic statistics were variously interpreted and struggled with by the Society of Arts Committee in the next year.⁷⁹

John Ashton Cross submitted a proposal to the Conference for a universal index of subjects,⁸⁰ observing that such an index should be made and soon, "is simply assumed." He described briefly the various kinds of special bibliographies which exist, and could provide a basis for his index, but he nowhere mentions science or technology as subjects for inclusion. To give the index permanence and some aspect of finality, the work should be divided among libraries which should specialize to make them thoroughly competent for their tasks - a requirement to which Edward Nicholson took strong objection. Finally, like Stevens, Cross recognized a need for "a central clearing-house . . . to which all references should be sent. Such a clearing-house might, . . . by the use of the materials thus furnished, supply each library in return provisionally and from time to time with a General Index, amply sufficient for miscellaneous readers." The rather obvious and slightly condescending concessions made to the needs of the miscellaneous and general reader reflects a consciousness of educational, not solely bibliographic functions which the index will fulfill. Such a clearing-house as that proposed would need to be managed by an international committee having editorial, co-ordinating, and other special duties. The problem of financing the venture is raised, and dismissed sanguinely, for "the money will no doubt be found if the work is only seriously undertaken. By whom can it be more fittingly undertaken than by a Library Association?"

It was in the discussion period after Cross's paper that Justin Winsor introduced William Poole to the Conference together with the news that his Index was to be continued. This was a matter first raised at the 1876 Philadelphia meeting of ALA at which a committee consisting of Winsor, Cutter, and Poole had been set up at Dewey's suggestion to consider the feasibility of issuing a new edition of the work prepared on a co-operative basis.⁸¹ Five reports of the Committee were published by September 1877, and by that time rules had been formulated, a list of periodicals drawn up, and co-operating librarians asked to indicate which journals they would index. The proposal to continue the index was received with great enthusiasm amongst American librarians. At the 1877 meeting of ALA in New York, a long discussion occurred upon the President's suggestion that the ALA's delegates to the International Conference of Librarians should be "authorized to present the views of this Association in London" on the Index and the kinds of periodicals which should be indexed, in order "to make this co-operative indexing an international affair." The debate was the old one between public librarians with their philosophy of education, and literary librarians who disdained matters of science and technology. Henry Homes of the New York State Library thought "this was primarily a literary index,

and not a scientific one. He had no doubt that many scientific articles would be of great interest to certain classes of people, but the line would have to be drawn somewhere." Spofford, having entered his caveat "against any scheme which would include such subjects as those relating to technical matters" moved that

the committee which may be selected as delegates to the British Conference be empowered and instructed to present the scheme for indexing periodical literature, with accompanying circulars, to that conference, and to officially make endeavours to secure the hearty and just co-operation of British librarians, in order to make the scheme a success.⁸²

This resolution was adopted, and Dewey silenced controversy over the other matter with typical shrewdness by pointing out that the Index was Poole's affair, and that the ALA by leaving it to him, would be absolved of any financial responsibility.

In London, Poole gave a brief history of his Index; a printed report with the rules to be observed in indexing had already been distributed. Upon his motion it was resolved that a committee should be appointed to discuss the matter. Robert Harrison, indicated his preference for the old-fashioned method of subscription-publishing rather than a "plan of employing gratuitous labor" in which he had little faith. Ashton Cross, however, "earnestly advocated the adoption of the scheme," for apart from other advantages, his own scheme for a co-operative universal index would be encouraged by it, for "Mr. Poole's scheme was really a part" of the wider one.⁸³ On the whole, opinion was favorable and, at the last meeting of the Conference, Robert E. Graves, an assistant in the British Museum, Robert Harrison of the London Library, and J. D. Mullins of the Birmingham Free Libraries were elected as the "English committee to co-operate in preparing a new edition of Poole's Index."⁸⁴

THE LIBRARY ASSOCIATION AND INSTITUTIONAL ACTION

Article 2 of the Constitution of the Library Association of the United Kingdom adopted at the International Conference of Librarians on Friday evening, October 5, 1877, states that the Association's

main object shall be to unite all persons engaged or interested in library work, for the purpose of promoting the best possible administration of existing libraries, and the formation of new ones where desirable. It shall also aim at the encouragement of bibliographical research.⁸⁵

Though the bibliographical problem was an important issue at the International Conference, the Association's subsequent encouragement of bibliographical research was in fact of a limited and passive kind. Indeed, bibliography, at best a troublesome word, gradually came to be interpreted in its narrower sense of the study of "the transmission of texts"⁸⁶ which may lead to textual criticism on the one hand, or to fairly sterile antiquarianism on the other. The direction in which the Association had moved by the early 1880's is clearly brought out

by H. R. Tedder in comparing AIA conferences with those of the Library Association:

Whereas the A.L.A. is exclusively practical and technical, the L.A.U.K. has devoted considerable attention to the history of libraries, and some regard to bibliography has justified the retention of that subject as one of our main objects The American conferences . . . are more interested in methods of actual library management than in bibliographical museums or the curiosities of librarianship. The L.A.U.K. is constituted upon the lines of the antiquarian and scientific societies familiar to Englishmen, with frequent meetings in London . . . and yearly gatherings in different parts of the country One of the best features of the L.A.U.K. is that, while it has always maintained its distinct professional character, it has the advantage of being able to attract a very large number of persons not connected with library management but deeply interested in library work, and who have given to our discussions a certain breadth of tone that might have been wanting had librarians alone taken part in them.⁸⁷

There were in the very early years, however, some attempts made to continue the Association's interest in problems of the widest bibliographical concern, especially as it had actually committed itself institutionally to Poole's Index and to Walford's General Catalogue. One of those introducing a new note into the Association's deliberations was James Bailey, sub-librarian of Radcliffe Library at Oxford, for whom the "new Poole" was something of an inspiration. At the 1878 Oxford meeting of the Association he entered a diffident plea for a subject index to scientific periodicals. This branch of literature is not of general interest, he admits, but is, after all "taking a prominent place in all schemes of education," so some attention must be paid it. "What I suggest . . . is the desirability of making an Index to scientific periodicals on the same plan as the new edition of Poole's Index--i.e., by the cooperation of different societies, libraries, and individuals."⁸⁸ Unlike Poole's, his index would necessarily have to include foreign periodicals, but with the support of the Association, he was sure that sufficient cooperation would be forthcoming. The Royal Society's alphabetical list of scientific papers, as half a loaf, was better than no bread, but some subject index was needed. That this lack was felt, both generally, and particularly in relation to the Royal Society's catalog, emerged in the subsequent discussion which included Garnett, Walford, Stevens, Axon, and others, but no action was taken.

Bailey, therefore, brought the matter up again the next year in a slightly different form in a proposal to make Poole's Index useful in libraries. In this paper he urged that at least English scientific periodicals should be admitted to the index as a body of literature important to too many potential subscribers to be neglected.⁸⁹ The

Library Journal was not sanguine about the outcome of such a scheme, a "periodical Poole" actually having been planned but abandoned because of inadequate support from librarians.⁹⁰ There being no appearance of any start upon the work he proposed, Bailey suggested to the 1880 Edinburgh meeting that a good substitute for his index would be an index of bibliographies. This would certainly be less work than his earlier scheme, and would require less subject knowledge.⁹¹ His papers were at least not without some effect. Garnett was impressed by his idea⁹² and suggested that the British Museum could do the work (with an increase in staff), or, if it were undertaken by the Association, that it could be helped along if learned societies sent to the Association the titles of articles to appear in their journals. But there the matter rested.

The fate of this sort of proposal is more clearly demonstrated by the reaction to Ernest Thomas's "Proposed Index to Collectaneous Literature."⁹³ His project arises from the obvious value of Poole's Index and he observes that a similar index would be equally useful for volumes of essays and collected works of one kind or another. Such an index would need to be complete for English literature, but should also include some French and German; cooperation with American, French and German librarians should do away with any difficulties arising from its international scope. Says Tedder: ". . . the cooperative system . . . [is] . . . not adapted to the compilation of such an index . . . [and] . . . Mr. Thomas should compile it himself." Says J. T. Clark: ". . . indexes . . . [are] . . . rather for the Index Society"--a society formed in that year.

Poole's Index, a triumph for bibliography on the other side of the Atlantic, established in American librarianship a principle of bibliographical cooperation which was the subject of much self-congratulation among American librarians, for whom Poole had become a Nestor without peer or price. In England, Poole's index demonstrated the almost abject failure of the cooperative principle in libraries and librarians. From the very beginning there was little confidence in "getting much gratuitous work done by cooperation." The committee appointed at the International Conference dozed gently until prodded into apologetic action by letters from Poole.⁹⁴ A letter appeared in the Athenaeum in May 1878 appealing for the cooperation of English librarians,⁹⁵ a copy of a circular letter was sent to all members of the Association,⁹⁶ and by the time of the Oxford conference in October, the Committee was able to state that some of the work had been received.⁹⁷ Nevertheless, by 1881 Poole had to report to ALA that the larger portion of the indexing undertaken in Great Britain had not arrived in America, and that his committee had therefore decided to omit this work from the main edition of the Index, incorporating it if possible in the first of the proposed five-year supplements. "Perhaps if they had made their selections earlier, and with the same confidence in the cooperative principle, and faith in each other, which the American librarians have, they could have worked with more interest and efficiency" was his acid comment.⁹⁸ When the "new Poole" finally appeared in 1882 the Association passed a resolution congratulating Poole on it.⁹⁹ The Athenaeum, probably reflecting a more typical though unofficial opinion, indulged in a little raillery at the expense of the Index.

"It is a curious point . . . why the passion for bibliography has seized hold of . . . [the Americans] . . . whilst it is little developed on this side of the Atlantic."¹⁰⁰

As the "Co-operative Index to Periodicals," Poole's Index continued to be issued as an enduring testimony to the feasibility of a co-operative attempt at a solution of part of the bibliographical problem, an attempt which would probably have failed or never have been proposed without the existence of the ALA. This one successful demonstration led the Americans to bring to a conclusion, or at least to get further along with, a number of other bibliographical matters to which the English unsuccessfully addressed themselves. As early as 1882 with the Index well under way Poole urged the ALA to undertake other co-operative ventures. "A General Index to works other than periodicals is greatly needed [Such an index] would differ from the scheme of the Universal Index, which has been much talked about in England and nobody is willing to undertake in this."¹⁰¹ Fletcher took up this idea in 1886 and proposed an Essay Index,¹⁰² like Thomas's Index of Collectaneous Literature. Two years later this was well under way,¹⁰³ and appeared along with the second supplement to Poole in 1893, the two works being continued by a combined annual index. In 1891 Fletcher began to toy with the idea of a co-operative index to scientific periodicals.¹⁰⁴ The limitation of no subject approach to the Royal Society's catalogs was also very much felt in America, and Fletcher reported that an "enthusiastic American" actually had approached the Society to seek permission to compile and publish a subject index to its catalogs. "They refused permission. That is the attitude of the Royal Society."¹⁰⁵ Fletcher was still speculating on the best means of securing "the much needed index to scientific transactions" for "the enormous growth of literature demands thorough indexing,"¹⁰⁶ at the time of the World's Fair Congress in Chicago in 1893. But the Royal Society was itself stirring, and its active engagement in the bibliographic problem in 1895 rather put an end to such projects, much as the printing of the British Museum's catalog put an end to the speculation based on putting it into print.

The failure of institutional and co-operative action in Great Britain on the bibliographical problem at the time is dramatically demonstrated by the work of the Committee on a General Catalogue of English Literature which was appointed at the second monthly meeting of the Association. The Committee consisted of a cross-section of notable librarians for it included among others Bullen, Harrison, Ashton Cross, Thomas, Walford, and the two Wheatleys.¹⁰⁷ By the time of the Annual Meeting at Oxford in October 1878, the committee had decided that the catalog should be alphabetical, with class bibliographies or subject indexes, should consist of all English books printed at home or abroad, should include ephemera, and should be brought down to the present. On July 2, it had addressed a letter to the authorities of the British Museum acquainting them with its work and especially with its decision that:

the authorities of the British Museum be urged to make their proposed catalogue of English books down to 1640 cover the whole existing literature of the

period Should they decide to do so, the Council of the Library Association would undertake to use their organization for the supply of additional slips We are further requested to inquire whether, in the event of complete arrangements being made for the compilation of a General Catalogue of English Literature down to the latest period, the Committee . . . could be assured of the co-operation of the authorities of the British Museum in furnishing title slips of all their English books.¹⁰⁸

The Museum's brief reply was not surprising, given the principal librarianship of Winter Jones: "The Trustees feel that they must decline to take part in the preparation of a General Catalogue of English Literature."¹⁰⁸

The Committee, however, was "reluctant to accept the answer of the Trustees as final" for "without the co-operation of the British Museum in one shape or another the difficulties of the task will be infinitely increased."¹⁰⁸ It had become obvious at this stage in the Committee's work that its conception of co-operation was different from that of the Americans. Co-operation was to be between libraries, not between individuals, and actually achieving specific institutional provision for and commitment to a scheme is the point at which co-operation in Great Britain failed. Furthermore, neither the committee nor the Association as a whole could shake itself free of the notion that the British Museum must be committed to the scheme before it could be assured of success. At the Oxford meeting, the Committee's report, a long paper by Walford on the specific methodology of the compilation of the catalog,¹⁰⁹ and Axon's paper on the practicability of printing the Museum's catalog were all read one after the other, and discussed together as aspects of a common problem. The discussion was, of course, almost entirely on the Museum's catalog. Garnett, for example, regretted the 1640 catalog. "To a mere catalogue of English books up to 1640," he "would much prefer one of all books since 1840." Axon could see no conflict between the printing of the Museum's catalog and the preparation of a General Catalogue of English Literature: "we wanted both," but work on the latter "could hardly make fast progress without a catalogue of English books in the Museum." He rather wished to see a catalog of the Museum's current accessions. Such a work would save many long journeys simply to see if a book were in the Museum.¹¹⁰

When it became known that the Museum was about to issue such a catalog in effect by printing accession lists, the Committee urged very strongly the view, as Walford had urged it before the Society of Arts, that "printing the Museum Catalogue as it stands is quite inadequate to our needs . . . the true solution of the whole matter lies in the co-operation of our great national library with the other more important libraries throughout the country."¹¹¹ It, therefore, set about obtaining an estimate of the cost and preparing a specimen of the kind of catalog it was advocating. Actually, any enthusiasm in the committee's work had just about disappeared by this time, for the Museum's 1640 catalog (under Bullen) was well underway, and the Accession Slips of 1880 presaged the inevitable appearance of the catalog itself (under Garnett). In 1880 a dissension arose within the committee, one foreshadowed in Walford's second paper on the catalog, as to

what it should include; and the specimen, upon which Thomas worked for some time, did not proceed very far. At the annual meeting in Edinburgh one blunt opinion was that "in view of the difficulties and the impracticable character of the whole proposal, and the way in which it had obstructed the other work of the Association for the last three years, it would be well that the reference to the committee should be discharged."¹¹²

Although the Committee was not immediately discharged, for all practical purposes this was the end of Walford's proposal. Yet, he was irrepressible. At the next annual meeting, he presented an "Outline of a plan for the preparation of a catalogue of (British) periodical literature,"¹¹³ which according to the Athenaeum provided "an appalling glimpse of what human industry can attempt."¹¹⁴ This enormous project, begun even though he had nothing to modify in his former proposals, and despite the fact that "the Museum authorities have commenced to print its catalogue," was before long terminated irrevocably, for Walford died in 1885. With his death, and later with that of Thomas in 1892, "One of the unrealized ideals of the Association, in its early days . . . the modest proposal of a General Catalogue of English Literature,"¹¹⁵ was, like its instigators, quietly laid to rest.

THE INDEX SOCIETY, THE BIBLIOGRAPHICAL SOCIETY, AND "THE GREAT END IN VIEW" ONCE AGAIN

The action of the Library Association on the bibliographical problem of which it was very much aware, and with which it was uniquely able to deal, was clearly circumscribed by limitations in its self-concept. A tentative accounting for these limitations must recognize the Association's tendencies towards bibliographical antiquarianism on the one hand, and its increasing involvement in the public library movement on the other. Poole's Index, and Ashton Cross's Universal Index, to say nothing of Fletcher's co-operative indexes of general and scientific literature, might be considered as significant if limited contributions towards systematic bibliography.

Nevertheless, few of the Association's members took this point of view at the time. The controversy over what should be included in such indexes was resolved on educational grounds. The final decisions were generally based on the efficacy of these indexes as educational or reference tools for public librarians dealing with a large clientele in which were represented persons with wide variations in educational and cultural background. The proposals, however, for a universal catalog or a general catalog of English literature, were more clearly motivated by a bibliographic ideal, and as their use was not so immediate, or apparently valuable, not such a high priority was set on them.

One of the most exact expressions of this dichotomy of feeling or attitude is provided by Henri Milman in a letter from Boston to the Library Journal on the Society of Arts Universal Catalogue.

If the chief mission of the modern library movement is to educate the masses through the people's university, what right have we to spend our time over the merely curious and antiquarian? Of what earthly good would such a catalog be to the general reading

public? . . . Poole's Index, the ALA Catalog, publishers' title slips, class bibliographies of the best modern books, uniform methods and supplies,-- all these promise the highest success if our time and money and strength are not diverted from them. Therefore, I send my little note of warning, not that I love the catalogue before 1640 less, but because I love the popular education of to-day more.¹¹⁶

In both England and America there was considerable confusion about the relationship between indexing, bibliography, librarianship, and education and time has done little to resolve this confusion.

It is pointed up in England by the emergence of the Index Society and of the Bibliographical Society. It is hard to say whether they were formed because of the inadequacy of the Library Association to give a sufficiently clear statement of the nature of its work in the area of indexing or historical bibliography. Certainly these specialized societies subsequently influenced the direction of the Association's movement, limited and contained its bibliographical activities, and so to an extent defined its functions. That there was initially an intimate relationship of complement between the three organizations is suggested by the fact that they had considerably overlapping memberships of librarians. Any account of either the Library Association's bibliographical activities or the fate of the bibliographical problem in England in the late nineteenth century must take cognizance of both the Index Society and the Bibliographical Society.

The Index Society was, like the Library Association, a precipitator of the International Conference of Librarians in London in 1877. Specifically, it arose from interest created by the proposal to continue Poole's Index, by Ashton Cross's scheme for a Universal Index, and the knowledge that the work required for both these projects would be expensive and unremunerative. The Athenaeum, therefore, asked "Could not a permanent Index Society be founded with the support of voluntary contributions of money as well as subject-matter?" With a regular and adequately supervised staff, any indexing performed by such a society would be much more valuable than that done independently as part of a co-operative scheme.¹¹⁷ Justin Winsor heartily agreed with the Athenaeum, and was certain that American librarians would support it! "The library associations [of both England and America] have enough to do in many other directions, and if this work of co-operative indexing can be taken off their hands by a thoroughly competent society, all libraries and the public, too, will be, I think, gainers by the movement."¹¹⁸

On November 3, 1877, H. B. Wheatley announced in The Academy that such a society had been formed, with the immediate object

of compiling subject-indexes, and indexes of standard books of facts, to be printed and circulated among the members; and with the ultimate object of building-up a general index of universal literature, which can be referred to at the office of the society during compilation.¹¹⁹

Both in this notice and in a brief but rather sharp exchange with Walford over the relation of the society to the General Catalogue of English Literature, for Walford the "great end in view,"¹²⁰ it was clearly stated that "registration" of books and "questions touching books and their titles" were considered to be the province of the Library Association, and would not be dealt with by the Index Society. The Index Society's province was "the contents of these books," not the books themselves.

Nevertheless, because of the existence of the Library Association's committee on Poole's Index, the Society took no part in the indexing work most immediate to hand.¹²¹ With the failure of the English librarians acting through the Library Association to meet their obligations, Poole observes that actually the indexing of the English serials

is a proper and legitimate work for the Index Society It will be difficult to find in what the society has done, or has proposed to do, anything that will compare in usefulness to completing the work of indexing the list of periodicals which were assumed by the librarians of the United Kingdom as their contribution to the "Index of Periodical Literature."¹²²

Although the Society continued its work for a number of years, still keeping on its horizons an eventual universal index which would emerge by a process of simple accretion,¹²³ it never undertook any such work as that urged upon it by Poole. So local in character became many of its activities that the Library Journal urged Americans to form an index society of their own with some agreement for exchange of publications and for reciprocal membership with its English counterpart.¹²³ Commenting on ten years' work, the Library Journal was later forced to the conclusion that

One of the less happy results of co-operation so far has been the English Index Society The Society, unfortunately, instead of broadening out into work which would be of interest and value either to scholars at large, or librarians as such, has shown a tendency toward local work of comparatively small importance and very narrow in scope. We judge that many . . . have been repelled from membership in the Index Society by this policy.¹²⁴

Yet, very probably because of the existence of this Society, the Library Association did not actively pursue the various indexing schemes laid before it--those of Ashton Cross, Bailey, Thomas, and quite possible that of Poole also, which would have provided legitimate tasks for it from the point of view of either its bibliographical or its educational commitment.

The Index Society eschewed anything dealing with the "registration" of books. The Bibliographical Society, which was formed at the end of 1892 only gradually absorbed the Library Association's antiquarianism.

The society actually came into existence to deal with the very problem of "registration," which was being neglected, in point of fact, by the Association. It is extraordinary that nearly twenty years after the Society of Arts began to work towards securing a universal catalog to 1600, and Walford and others attempted to compile a general catalog of English literature, that after twenty years of languishing and cursory attention, these very ideas were vigorously taken up again, made the basis for the establishment of a new society, and again quickly allowed to droop and die. By this time, however, hope could rise high, for the Museum's general catalog and Bullen's 1640 catalog, projected before, were now actually available.

Interest in these two catalogs was naturally maintained in library circles while they were in preparation. Stevens, in discussing English bibliography before 1640, had joyfully anticipated the appearance of the 1640 Catalogue. "All the world, outside, especially American and Australia, is standing on tiptoe of expectation."¹²⁵ When the catalog actually began to appear, the old ideas were whispered abroad again by those who had earlier discussed them boldly. Axon, for example, in The Academy, was one who sympathized with Dr. Garnett, "who once said to 'a mere catalogue of English books up to 1640,' he would have preferred 'one of all books since 1840.'"¹²⁶ (see above page 31 here) In the Library Chronicle, Tedder addressed himself to the problem of how much the catalog does not include, and pleaded:

Why cannot the five great libraries who enjoy the privilege of the copyright Act, the Museum, Oxford, Cambridge, Edinburgh and Dublin, unite in the production of a joint-catalogue?¹²⁷

The decision in 1879 to print the accession slips of the Museum, the next step in the printing of the most distended volumes which would have had to be broken up and the slips redistributed anyway, and finally the actual beginning of the systematic issuance of the whole catalog were much publicized. The reason for the Museum's actions lay in Garnett's assessment¹²⁸ that printing was the only way to reduce the enormous and increasing bulk of the manuscript catalog to manageable proportions, and Augustus Bond's conviction that this assessment was just.¹²⁹ The library world watched the activity in the Museum closely and critically. Stevens of Vermont and Dziatzko of Breslau had a prolonged and slightly acrimonious debate on the Museum in general and on the forms its catalog should take.¹³⁰ Dr. E. Reyer wrote from Vienna to the Neuer Anzeiger "protesting against the issue of an alphabetical [sic] catalogue of the British Museum as a costly and comparatively useless work, and demanding a classed catalog" ¹³¹ For Bowker, Garnett's announcement

of the not unlikely completion of a British Museum printed catalogue by the opening of the twentieth century presents a truly millennial aspect. Once the British Museum Catalogue becomes a fact, the Utopian universal catalogue becomes a certainty.¹³²

Bowker was, however, proved wrong, and out of the bruhaha in the library world which accompanied everything the Museum did with respect

to its catalog, no useful proposal crystallized after the failure of Walford's committee. Librarians seemed pretty content with what they now had. Garnett, himself a Vice President of the Bibliographical Society at the time of its formation, harked back to the idea of the universal catalog, perhaps a little wistfully, at the Library Association's Paris conference in 1892. "But little has of late been heard of the proposed Universal Catalogue of Literature, which was a favorite subject of discussion some years ago." He speculated that perhaps the deaths of Sir Henry Cole and Ernest Thomas were the cause of the present neglect of the idea. He also pointed to the fait accompli of the printing of the British Museum catalog. "My recommendation to those who desire to see a universal catalogue--as all do in theory--is to accept this confessedly imperfect catalogue . . . and labour to perfect it by the co-operation of the principal libraries throughout the world, not by reconstruction . . . but by simple addition This would further involve the establishment of some central authority to edit these accessions." His cry comes--"we must organize ourselves." But when he considers the "attendant difficulties, I own I am not sanguine that the project will have matured by the time that the Museum catalogue is in print." But the difficulties he believes could be overcome, and if such a universal catalog were compiled, "we should have effected an object of still greater importance [in] the establishment of an universal literary registry, whose developments and ramifications it is impossible to predict."¹³³

The year before (1891) Copinger had suggested to the Library Association's Nottingham Conference that an English bibliographical society be formed to provide a reasonably complete bibliography of English literature. Thomas Law brought this matter before the Paris Conference and urged that

we, the members of the Association, should co-operate in the publication of a supplement to this catalogue (Bullen's 1640 catalogue), a supplement which should embrace all the books. . . which are not in the British Museum. . . . The final result . . . would go very far indeed towards a complete scientific catalogue of extant British literature up to 1640.¹³⁴

Nothing was done on either proposal--as nothing had been done of any real importance twenty years before--and the Bibliographical Society came formally into existence in October 1892 with a membership of over 160 persons. In his inaugural address as President,¹³⁵ and in an article for The Library,¹³⁶ Copinger clearly sets out the two great tasks of the Society: a general catalog of English literature, a subject which occupied the Library Association "before it settled down to its own work;" and a supplement to Hain's Repertorium Bibliographicum, which together with Panzer's Annales had been proposed as a good foundation for the first stage of the Society of Art's universal catalog. This latter task, for which a committee was immediately set up, became the main corporate activity of the Society.

Nevertheless, the Society was at first quite serious about the larger work. Copinger carefully reviewed the Library Association's activities and pointed out that, since the British Museum's catalog had actually begun appearing, "Half the labour . . . is thus probably saved." What is really wanted, however, is not "the Catalogue of any particular library or libraries, however extensive--the want experienced is of a Catalogue of the literature of the nation, with and indication of its precise nature, and where it can be found."¹³⁷

Henry Wheatley, of the Index Society as well as the Library Association, takes up this matter for Copinger, and outlines in great detail his view of how the catalog might be prepared. He had as early as 1877 in the discussions within the Library Association on Ashton Cross's Universal Index, and the General Catalogue of English Literature asserted his belief in "the adaptability of the system adopted by the Philological Society in collecting materials for the great English Dictionary to the purposes of Bibliography,"¹³⁸ a view Copinger shared. The system was one of sub-editors assuming responsibility for parts of the alphabet under the general supervision of a managing editor, with the assistance of the Society as a whole. This is a slightly more sophisticated organization than those proposed for similar work earlier.

Nevertheless, apart from additions to Wheatley's remarks by A. H. Huth¹³⁹ little more was done on the project. Indeed, the Society very soon began to concentrate its interest more narrowly. The "Registration" aspect of bibliography was continued by H. R. Tedder¹⁴⁰ in a paper already referred to. But the capacity of bibliography "in the hands of genius of rising to the higher level" which is beyond that of a mere "descriptive science," was demonstrated for Wheatley and others by the work of Bradshaw, and the Society gradually became one appropriate for the kind of literary scholarship whose ultimate refinement is the bibliography of Pollard, Greg, McKerrow, and Bowers--a highly sophisticated art-science of very narrow application.

CONCLUSION

The year 1895 marks the beginning of a new phase in the history of systematic bibliography. Before that date it was mainly the concern of librarians and bibliographers recently organized into associations and societies whose aims, at first more than sufficiently broad to include the bibliographic problem in practice, soon became narrower under the exigencies of fulfilling more basic functions. Indexes, catalogs, and proposals were many during the period 1850 to 1895, but these became increasingly tangential to the real problem, rapidly becoming more serious towards the end of the century. "De jour en jour, la production litteraire et scientifique croit dans les plus surprenantes proportions." ¹⁴¹ But in England the Library Association in Copinger's words had settled down to its proper work, "work more strictly confined to librarians, their training, education, protection, and development, all of the greatest practical importance, and work which now occupies all its time, money, and energy."¹⁴² The Bibliographical Society had, however, also settled to its proper work which was of a more confined nature than originally proposed. The Index Society, during its relatively undistinguished life, had never been involved in anything more than schemes of a fairly trivial local, historical, antiquarian interest. Moreover, the British Museum's Catalogue had been the focal point for the thought of panaceaic bibliologists on the problem of achieving the widest and easiest possible control of all literature, or at least all English literature. With the printing of this catalog it was as though "bibliology" were temporarily spent, for though the "great end in view" was not achieved as a result, and the universal bibliography seen by Bowker as a certainty at the beginning of the new century was as far off as ever, the bibliographical initiative had passed to other kinds of organizations. Stevens, Ashton Cross, and later Garnett with his "universal literary registry" had all seen the need for more stable, semi-official organization specifically created to take in hand their proposals for achieving bibliographical control. In America, Axel Josephson and others were urging the establishment of bureaus and clearing houses. In 1895 something was done. The bibliographical problem was approached on an international basis through actual international organization. The "universal literary registry" was actually attempted in Brussels by the Institut International de Bibliographie and in a more limited form in Zurich by the Concilium Bibliographicum with carefully structured international participation, each venture being given local stability by a measure of official support from the Dutch and Swiss governments.

During the period 1850 to 1895, the increasingly grave literature problems of scientists and technologists had been pretty much excluded from the deliberations of librarians and others--though not entirely, of course, given the Baileys and the Fletchers. But the methods of librarians who emphasized general literature and tended to select and limit what they did according to their assessment of the needs of popular education, became increasingly inadequate. By 1895 the Royal Society, the British Association for the Advancement of Science, and similar American associations had either started to look for or had actually broached solutions to the problem as it related to their special literatures. A number of foreign organizations had already been created to attempt limited control on cards. Cards were used

for example by the Bibliographical Bureau in Berlin and for the Repertoire Bibliographique des Sciences Mathematiques. In America, bibliographies international in scope and mostly on cards had been compiled by the Patent Office, the Office of the Surgeon-General, and the Signal Service.

1895, then, is a critical date and marks the emergence of new and apparently more effective forms of organization for systematic bibliography. International participation was of course inevitably doomed, as the World War showed. But the pattern of organization begun in the last years of the century was influential, and the considerable bibliographic work of the League of Nations and, later, the United Nations, to say nothing of FID and IFLA, is lineally related to the bibliographic dreams become, so it seemed, a reality in 1895. International bibliography and what has come to be known as documentation gathered form and momentum from the peculiar and increasingly pressing literature needs of scientists. With UDC and FID, with the British Society for International Bibliography and the theoretical and hortative work of Otlet, La Fontaine and Bradford a corpus of literature, techniques, and organizations for documentation were developed. Librarianship turning away from panaceatic bibliology began to concentrate upon narrower and perhaps more appropriate projects of national bibliographic importance. In England and America these were usually undertaken by the great national libraries and the library associations. These international and national bibliographic activities may be described as movements, and the two movements define the period of bibliographic history from 1895 to 1950, and they move in and out of each other, sometimes in conflict, sometimes in cooperation, sometimes in isolation one from the other. This motion reached a kind of stable oscillation with the development of a functioning machinery of international cooperation, and particularly after the highly definitive 1950 UNESCO Conference on the Improvement of Bibliographical Services.

After 1950 developments in computer and other kinds of technology began to be related to bibliography, and the information sciences were developed. Given the structure of national bibliography which has evolved, and which has fragmented bibliographical control in various ways in most countries, and given machinery for international bibliographical co-operation which was the final achievement of the international bibliographical movement just described, new forms of societal organization would seem to be imperative for the co-ordination of the various elements out of which general bibliographical control is derived.

The history which has been partly outlined in this paper indicates the deep-rootedness of the idea of universal or generalized bibliography as the ideal towards which all significant bibliographical speculation and activity is directed. As the proportions of the bibliographical problem have changed, and the urgency of the desire for its solution has increased, so new forms of social organization have been brought to bear on it. Often, these organizations seem to be developed to utilize new technologies in the service of the old ideal, and bibliographical history becomes a social history which focuses on the changing relations between certain kinds of technology and certain kinds of social agencies and institutions. Nowadays, government and industry are evolving new

kinds of bibliographic organization specifically to deal with a new technology, and other organizations--learned societies, libraries, universities are adjusting both to the technology and to the new kinds of organization dealing with it. Perhaps one may anticipate the reemergence of speculation about a general index, a world literary register, a world abstracting service--a universal bibliography.

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VITA

W. Boyd Rayward is a Research Assistant and Ph.D. student in the Graduate Library School of the University of Chicago.

He was born in Inverell, New South Wales, Australia in 1939. He received a B.A. with Honours in English Literature from the University of Sydney in 1960, the Post Graduate Diploma in Librarianship from the University of New South Wales in 1964, and an M.S. in Library Science at an advanced sixth year level from the University of Illinois in 1965. He was employed first in the Reference Department and then in the Acquisitions Department of the Public Library of New South Wales from 1961-1964, and was an Assistant in the Graduate School of Library Science at the University of Illinois in 1964/65. During the summer of 1966 he was employed as Reference Librarian at the Illinois Teachers' College, Chicago, South.

Mr. Rayward is an Associate of the Library Association of Australia, and is a member of the international library science honor fraternity, Beta Phi Mu. Several of Mr. Rayward's articles have been accepted for publication in professional journals during 1967.

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