The Enduring Qualities of Dewey

Heartsill H. Young
Assistant Librarian, University of Texas

It has been many years since Melvil Dewey's *Decimal Classification* has been discussed before a group such as this. In the nineteenth century, book classification was a controversial subject, and all librarians were eager to learn about and to compare new systems for arranging knowledge. At the first conference of librarians held in this country in 1853, classification was one of the topics discussed. Charles B. Norton read to the group a letter from Romain Merlin in which he gave the principal points of his book classification. At the organizational meeting of the American Library Association in 1876, classification again was one of the topics discussed. Melvil Dewey's new *Decimal Classification* had just been published, and Mr. Dewey appeared before the group to describe and to promote his scheme. By the early twentieth century, however, the *Decimal Classification* had gained such wide acceptance that book classification was no longer controversial, and librarians at large turned their interests and their energies to what they considered to be unsolved, challenging problems. Classification was left to the classifiers. The appearance of the fifteenth, or standard, edition of the *Decimal Classification* was the occasion of some general revival of interest in classification, but for some four decades we have more or less accepted the *Decimal Classification,* without giving much thought to its qualities, good or bad.

It is easy simply to dismiss the *Decimal Classification* with the observation that it has endured, not because of any qualities it may possess, but because it is the scheme that is familiar to librarians and library users and because most libraries could not afford to reclassify, even though they might like to do so.

Its familiarity is unquestionable. Dewey taught his scheme at the New York State Library School, and the graduates of that school went forth to teach it in other library schools or to adopt it for their libraries. Today the *Decimal Classification* is the basic scheme taught in the beginning cataloguing course of every library school in the country, and 85% of college and university libraries and 98% of public libraries in the United States use the scheme in whole or in part.

To dismiss the *Decimal Classification* as something we must accept simply because it has monopolized the field of book classification does not do justice to the scheme. It is not merely something we must endure; it has enduring qualities. Miss Eaton's survey of classification

in college, university and public libraries made in 1954 bears out this statement. One of the questions she asked college and university libraries was: Would you prefer some scheme other than the one you now use if it were possible to make a change? Eighty per cent of the libraries using *Decimal Classification* would not change even if they could. And 13% of those using other classification schemes would prefer to return to the *Decimal Classification.* The public libraries were not asked whether they would change their classification schemes if they could, but they were asked whether or not they had reclassified. Only 28 libraries reported a change from one scheme to another, although undoubtedly more than that have reclassified at some time. What reclassification has taken place in public libraries has been almost exclusively to the *Decimal Classification.* In the light of this evidence, it is obvious that many libraries are content with the *Decimal Classification* and that the scheme is likely to endure for some time to come. It is my purpose to analyze the scheme for those qualities which have made it endure. My approach will be positive. By this I mean that I will be looking for qualities that the Decimal Classification has endured because of—not in spite of. In so doing I make only a small claim for originality. I will quote several writers on classification, but sometimes when I am not quoting my remarks will undoubtedly have a familiar ring. When this happens, you may be hearing the rephrased remarks of Berwick Sayers, Ernest Cushing Richardson, Henry Evelyn Bliss, your library school cataloguing teacher—or Melvil Dewey himself.

The *Decimal Classification* has endured, first of all, because it presents a usable outline of knowledge, arranged according to recognizable principles.

Every book classification begins—or at least it should begin—with an outline of knowledge. When the *Decimal Classification* first appeared, it was not on his outline of knowledge that Dewey placed his emphasis; he appeared to be more interested in his notation and in his index than in the order of his classes. This is only reasonable. There had been many outlines of knowledge before his; neither was his the first book classification. The distinction of his scheme lay in the notation and in the relative index, and these were the features he publicized. Moreover, Dewey was first and foremost a practical man. He wanted a scheme that would work, one that would remedy the lack of efficiency and the waste of time and money in the constant recataloguing and reclassifying made necessary by the fixed system of arranging books. Any one of many systematic orders of knowledge might have served him, but it was his ingenious notation which served as the means of arranging books on library shelves.

But while notation and index are important to book classification, a usable outline of knowledge is essential. The best ordered book classification will not survive if it is burdened with a cumbersome notation and if its schedules are inadequately indexed. It is equally true that the best notation and index in the world cannot save a poorly ordered book classification.

The *Decimal Classification* has been severely criticized because of the order of its classes. There is no likelihood whatsoever that a modern classifier would arrange knowledge in the same order as Dewey. On the other hand, Dewey's outline of knowledge must be reasonably sound, or else it would not have endured.

Part of the criticism of the order of the *Decimal Classification* stems, I believe, from failure to understand the basis of the scheme. The order of the classes cannot be explained entirely on the basis of what Bliss calls contemporary scientific and educational concensus, as we are likely to try to do. Many of the expansions of the scheme which have come with the advancement of human knowledge are so ordered, but the skeletal framework of the scheme has a philosophical base.

Dewey always disclaimed his debt to any particular classification scheme for the order of his classes, although he did at one time admit that the outline of Natale Battezzati, which was an adaptation of the Brunet or French booksellers' system, stimulated him more than any other. Be that as it may, his scheme is not as similar to Battezzati and Brunet as it is to Francis Bacon's chart of human learning.

That the *Decimal Classification* is related to Bacon's philosophical system is, of course, common knowledge. Henry Evelyn Bliss in *The Organization of Knowledge in Libraries,* for example, calls attention to the similarity but considers it needless to discuss the resemblance or trace it in detail. His purpose, however, was different from mine. He set out to disqualify both the *Decimal Classification,* and Bacon's philosophical system along with it, as organizations of knowledge. My purpose is to explain the order of the *Decimal Classification,* and since the order can sometimes be understood only by looking to the ancestry of the scheme, I will pursue the relationship of the Dewey and Bacon systems in some detail, although by no means exhaustively.

Bacon's chart of human learning formed the framework of his treatise on *The Advancement of Learning,* which was published in 1605. His purpose in writing this treatise was "to circumnavigate the small globe of the intellectual world to find what parts thereof lay fresh and waste, and not improved by the industry of man"—in other words, to survey what had been accomplished in the field of learning up to the turn of the seventeenth century and thereby to determine what remained to be accomplished. In breaking up the intellectual world into its various segments, Bacon follows a definite principle of division. He says:

> The best division of human learning is that derived from the three faculties of the rational soul, which is the seat of learning. History has reference to the Memory, poesy to the Imagination, and philosophy to Reason.
>
> The sense, which is the door of the intellect, is affected by individuals only. The images of those individuals—that is, the

impressions which they make on the senses—fix themselves in the memory, and pass into it in the first instance entire as it were, just as they come. These the human mind proceeds to review and ruminate; and thereupon either simply rehearses them, or makes fanciful imitations of them, or analyses and classifies them. Wherefore from these three fountains, Memory, Imagination, and Reason, flow these three emanations, History, Poesy, and Philosophy; and there can be no others. For I consider history and experience to be the same thing, as also philosophy and the sciences.[1]

Invert Bacon's three main classes, and you have the order of Dewey's main classes: philosophy, religion, social science, philology, pure science, applied science, and the fine arts, the products of reason; literature, the product of the imagination; and history, the product of memory.

Memory produces history, and history Bacon divides into natural, civil, ecclesiastical, and literary. Civil history is of three kinds: memorials, antiquities, and perfect histories. Memorials are history unfinished, or the rough drafts of history; they merely record the observation of bare events, without cognizance of why these events took place or what their consequences might be. Antiquities are remnants of history which have escaped the shipwrecks of time. Perfect histories take the form of chronicles, lives, and narrations, which is another way of saying that they are either histories of the times, of persons, or of actions greater in scope, depth and significance than memorials.

Dewey's history class is quite similar to Bacon's civil history. Bacon considered natural history to be the basis of the sciences, in that it recorded the variety of things and led to new discoveries, and Dewey moves natural history to the sciences. Ecclesiastical history Dewey classes with religion and literary history with literature. But civil history remains much as Bacon arranged it. Dewey's description and travel, antiquities, biography, and history of specific places closely parallel the memorials, antiquities and perfect histories of Bacon.

Next in Bacon's system comes imagination, which produces what he calls poesy and what we today call belles lettres in all forms. Poesy, as Bacon put it, "exceeds the measure of nature, joining at pleasure things which in nature would never have come together, and introducing things which in nature would never have come to pass." In Bacon's scheme, philology, rhetoric, and elocution have no place in poesy, because they emanate from reason, not from imagination. In inverted fashion, Dewey's literature class precedes, rather than follows, his history class. Like Bacon, he separates philology and literature, but he does make the concession of linking rhetoric and locution to literature.

Finally in Bacon's system comes reason, which produces what he

calls philosophy, but which encompasses the subjects which we today would designate as philosophy, religion, philology, fine arts, and the sciences: physical, natural, and social.

Bacon divides philosophy into three parts: divine, natural, and human. Divine philosophy, which leads off the class, is concerned with the discovery of God through the mind, as distinct from revelation. Natural philosophy is concerned with physics, the investigation of variable causes; applied science; and metaphysics, the investigation of final causes. Human philosophy is concerned with the philosophy of humanity, or man segregate, and civil philosophy, or man congregate.

The influence of Bacon's philosophy division is felt throughout several classes of Dewey. For instance, Bacon divides his philosophy of humanity into body and mind, and three of his "body sciences"—decorative, athletic, and voluptuary arts—constitute Dewey's fine arts division. Bacon divides the science of the mind into substance and faculty, and this order pervades Dewey's philosophy class, which moves from substance or nature of the mind to the faculties of the mind to the exercise of these faculties. Bacon's philosophy of man congregate moves from conversation, which includes etiquette and manners, to business, to state government, economics and law. In inverted fashion, Dewey's social sciences move from political science to economics to law and end with customs and folklore, which includes etiquette and manners.

The *Decimal Classification,* then, has a philosophical base which affects its fundamental structure. But Bacon only breaks up knowledge into rather large chunks. He does not provide us with the many little slivers which are necessary to a book classification. Dewey, therefore, had to ramify Bacon's classes. The order he follows in these ramifications may be logical, as in geology; geometrical, as in history and in the numerous subjects which may be subdivided geographically; chronological, as in the time divisions of history and literature; genetic, as in the natural sciences; or alphabetic when he lacked any other special order. His primary goal—one he does not always achieve—seems to have been a natural progression. Berwick Sayers states this purpose of classification very clearly in his *Manual of Classification.* He writes:

> He [the student] may find that most of the book classifiers have been working . . . . towards the position as stated by Bliss when he says of science order: 'One study may be applied to, or introductory to, another, as mathematics to physics, physics to chemistry, chemistry to biology, biology to society, sociology to economics, linguistics to literature, and logic to philosophy'; and so a logical order of main classes emerges on a characteristic of progression from one science to another.[2]

This characteristic of progression may apply not only to main classes, of course, but to sub-classes as well. The greatest exponent of this natural progression characteristic was Charles Ammi Cutter, but Dewey also made use of it. Take for example Dewey's treatment of political science.

Political science, as Dewey uses the term, may be defined as "the science which is concerned with the State, which endeavors to understand and comprehend the state in its conditions, in its essential nature, in its various forms or manifestations, its development." This is a nineteenth century definition, coming from J. K. Bluntschli's *The Theory of the State*. This is not to say that the same definition may not be found in a modern treatise on political science. It just so happens that the nineteenth century definition fits.

One more definition is necessary before Dewey's political science scheme is analyzed, and that is a definition of state. Almost all definitions of state include four elements: people, territory, organization, and sovereignty. The following definition is representative and widely accepted:

> The state, as a concept of political science and public law, is a community of persons more or less numerous, permanently occupying a definite portion of territory, independent or nearly so, of external control, and possessing an organized government to which the great body of inhabitants renders habitual obedience.[3]

Dewey's political science is made of these four elements essential to a state: people, territory, organization, and sovereignty. These elements are treated historically and descriptively, subjectively and objectively.

Dewey's divisions of political science (320) are these:

321 - Forms of state
322 - State and church
323 - Relations of state to individuals or groups
324 - Suffrage and elections
325 - Migration and colonization
326 - Slavery
327 - Foreign relations
328 - Legislation
329 - United States political parties

From this bare outline, Dewey's order is not apparent. The classes do, however, have a systematic arrangement. We begin with political theory. All early social organizations arose spontaneously and for a long time grew without conscious direction. Later a point was reached when man, realizing what was taking place, began to modify his institutions. As a result he was led to examine their nature and to attempt an explanation of their phenomena.

There are two phases, therefore, in the evolution of the state. One is the objective, concrete development of states as manifested in their governments and external dealings; the other is the subjective development of ideas as to the state in general. Dewey begins with the theory of the state (320.1) and then proceeds to the form of the state (321), which is the outward manifestation of the state's existence. The form of the state he approaches in two ways: (1) a classification based on the location of sovereignty in government and (2) a classification based on the evolution of the state, from its origin in the patriarchal family to the development of the republic.

Standing before the relationships of the state to individuals and groups is the relationship of the state to a rival institution: the church (322).

The analysis of the state leads naturally to a consideration of sovereignty. Viewed from its internal aspect, it opens up the relations of the state to its population; viewed from its external aspect, it leads to the relations of state to state.

Population is made up of man congregate and man segregate; that is, of groups and individuals. The obligations between the state and its population are reciprocal; that is, the people confer authority and power upon the state and hence they owe the state obedience. On the other hand, there are restrictions on how far the state may go in regulating the actions of those who owe it obedience; individuals and groups enjoy rights and privileges which the state may not invade. Dewey considers first the relations of the state to groups whose social, economic, or other cultural ties create political problems (323.1-.3). Then he considers individual rights and protections (323.4).

But the state does not guarantee rights and protection to anyone who happens to reside within its territory. It is citizenship which makes the individual a member of a political society, subject to its government, and bound to its fortunes. It is the citizens, too, who, by direct act or tacit consent, confer power and authority upon the state. However, the entire citizenship does not have the right to share in expressing the state's will. Only the electorate shares this right. Dewey proceeds naturally, then, from group and individual rights (323.4), to citizenship (323.6), and to suffrage and elections (324).

The population of a state does not remain static. Movements of people, or migrations, exert a powerful influence on the internal political life of a state. And if migration is in the form of a conquest, the opening up of new lands creates colonies and colonial government. Colonization may, of course, be considered a form of organization, but Dewey links it with population instead. His progression is from movements of population (325.1-.2) to the result of these movements: colonization (325.3).

Next slavery (326) occupies a singular position in the Dewey scheme. Slaves are ordinarily displaced people and therefore slavery is connected with movements of population. Slaves constitute a social

group; yet they differ from the groups previously considered by Dewey in that they have no rights or liberties which they can assert against the state. Slavery, then, culminates the analysis of the state's population.

Having considered the internal aspects of sovereignty, Dewey turns next to the external aspects, to the relations of state to state (327). Foreign relations, as Dewey uses the term, means the negotiations between states for the purpose of protecting or furthering their vital interests. The law governing these relations is excluded.

Dewey turns from sovereignty to the organization of political machinery. The relations of the state to groups, individuals, and other states lead to the process which regulates these relations: legislation (328). But while the legislative process has its basis in law, there is an extra-legal piece of political machinery which exerts a powerful influence on the state's relations, both foreign and domestic. This is the political party—the vital force which keeps the machinery of the state in operation (329).

Dewey, then, is not merely a tabulation of classes. He proceeds upon definite principles of division that we can recognize even if we do not, in the light of modern knowledge, always appreciate them. Henry Evelyn Bliss has been very blunt in his criticism of Dewey. In *The Organization of Knowledge in Libraries* he attacks the scheme on every possible score and concludes:

> The Decimal Classification is disqualified as an organization of knowledge both structurally and functionally. It does not embody the natural, scientific, logical, and educational orders. It fails to apply consistently the fundamental principles of classification . . . . It is an antiquated and inadaptable product based on the plan of an undergraduate of six decades ago and never coherent or scientific or practical.[4]

Much of Mr. Bliss' criticism was directed at the first and second summaries of Dewey. The lack of proper order of these first hundred divisions are objectionable on theoretical grounds, but in practice the order of these divisions seems to be of little consequence to libraries. The order of the main classes means little as far as the arrangement of the book collection is concerned, because libraries arrange the main classes to suit themselves. The arrangement of the second summary is of little consequence because the library user probably is working within a narrower field than the second summary provides and therefore does not proceed, let us say, from economics to transportation, or from North American to South American history.

Even Mr. Bliss concedes that the expansions of Dewey, which come after the third summary, are an improvement upon the fundamental structure. He writes:

> His [Dewey's] classification has embodied a large amount of scientific detail, much of which, obtained from specialists or 'experts,' is scientifically correct. Otherwise it would have attained to less acceptance by scientists . . . . *Subordination* and *collocation* are manifest in most of these 'expansions,' but those principles were disregarded in the original, fundamental structure.[5]

So much for Dewey's outline of knowledge and principles of division.

The *Decimal Classification* has also endured because its editors have been liberal in their policy of expanding old topics and inserting new ones, but at the same time conservative in their rearrangement of topics.

No matter how comprehensive a classification scheme is in the beginning, it eventually needs revision. The author of a classification scheme cannot see far beyond the present boundaries of knowledge, and so his scheme should be expansive and flexible in plan.

The *Decimal Classification* has had some measure of success in keeping pace with knowledge by means of revised editions and by means of quarterly supplements to the latest (16th) edition. It meets the criterion of expansiveness, in the sense that it readily admits new subjects or ramifications of old ones. But it is flexible—that is, capable of admitting new topics and concepts without dislocation—only to the extent that any enumerative scheme is flexible. The problem of relocation was concisely stated by the Dewey Classification Editorial Policy Committee in 1956, as follows:

> In the making and editing of any classification, two basic principles are constantly in conflict. One is the DC traditional policy of integrity of numbers, which enables its users to depend on each new edition to include few or no relocations of topics but to include expansions which are based on the schedules in earlier editions, thereby achieving continuity and avoiding the cost of reclassification. The other principle is the philosophy of keeping pace with knowledge, which holds that any classification scheme, to retain its usefulness must, from time to time, restate or redefine and regroup or rearrange subjects according to the changed concepts of a new generation.[6]

With the exception of the 15th edition, the *Decimal Classification* has been revised in keeping with the Committee's first principle, that of integrity of numbers. Revisions have been in the form of additions and expansions rather than in alteration of the scheme. Therefore, although in one sense the *Decimal Classification* is expansive, in another sense it is rigid. The balance which the editorial policy has maintained between expansiveness and rigidity is one of the reasons why the *Decimal Classification* has endured.

The most significant contribution which Dewey made to

classification was his decimal concept. Not only has this quality contributed to the endurance of the *Decimal Classification;* it has also contributed to the endurance of every classification scheme which has embodied it. Of this method of subordination, Dewey's biographer, Fremont Rider, has this to say:

> Just what is the essential quality of the Decimal Classification that has made it so great a contribution to librarianship? To answer this question it is necessary to distinguish carefully between the underlying and the superficial; to realize that the *Dewey Decimal Classification,* despite its present very widespread use, is, in the long view, a thing of evanescent value; to see that it was Dewey's basic classificational concept, and not the details of the schedules in which he embodied that concept, persuasively ingenious and convincingly logical though these schedules were, that was his great contribution.
>
> What is this basic and revolutionary concept? He implied it clearly in his 'memo' to the Amherst faculty—a progressively, and indefinitely more minute, classificational subordination expressed by means of decimally placed nomenclative characters. How revolutionary this concept was is the more apparent if we attach to 'decimally,' as we have used the word, an acquired meaning broader than its dictionary one, making it inclusive of all numerical bases instead of merely the ten-digit one.[7]

So far I have refrained from mentioning the Library of Congress classification scheme, but now I must use it as an example. In contrast with the *Decimal Classification,* the Library of Congress scheme uses what Fremont Rider calls a serial nomenclature; general numbers are not provided, only specific ones. The Library of Congress scheme, then, admirably serves those libraries whose collections approach the scope and depth of the Library of Congress, but it is not adaptable to the needs of libraries of a different nature. The following comparison of Dewey and Library of Congress classification illustrates this point. Suppose a library acquires these five books on physical geography:

The Principles of Physical Geography
Physical Geography
Practical and Experimental Geography
Introduction to Physical Geography
About this Earth; and Introduction to the Science of Geography

These examples were all taken from the *Library of Congress Catalog: Books - Subjects,* and, as their titles indicate, they all deal with physical geography in general terms. According to the Decimal Classification, they could be classed 500, or 550, but most likely they would all be classified 551. Classified according to the Library of Congress scheme, each of the five books would necessarily have a

different classification number. All are general works on physical geography published in the twentieth century. *The Principles of Physical Geography* is a comprehensive work and classifies in GB53. *Physical Geography* is a compend, and therefore goes in GB54. *Practical and Experimental Geography* is a textbook and goes in BG55. *Introduction to Physical Geography* is also a textbook, but it is a quarto volume and therefore goes in GB56. And *About this Earth* is a popular work and goes in GB59. There is no general number in the Library of Congress schedule to hold them all together; because they differ in scope, form, size, and treatment, each must have a different classification number.

It is the decimal concept, lacking in the Library of Congress scheme, which makes the *Decimal Classification* adaptable to the needs of all sizes and types of libraries, because this concept enables a library to use broad or close classification, according to its needs. A library may use only the ten main classes, all 17,928 classes which the 16th edition provides, or any number of classes between these two extremes.

Another quality which has contributed to the widespread acceptance of the *Decimal Classification* is its pure notation of arabic numerals. The use of arabic numerals has not, of course, contributed to its acceptance in the United States as much as it has in foreign countries.

It is only fair to point out that Dewey's base of ten arabic numerals is too narrow to permit economical notation. Had he applied the decimal concept in a broader sense and made the letters of the alphabet his base, a shorter notation would have been possible. Cutter, for example, used a mixed notation for his *Expansive Classification* and used as his base the letters of the alphabet. A comparison of the divisions provided by notational symbols in the two classification schemes shows:

	Expansive	Decimal
One symbol	26	0
Two symbols	676	0^8
Three symbols	17,576	1,000
Four symbols	456,976	10,000
Five symbols	11,881,176	100,000

Dewey wanted a pure notation, however, even at the sacrifice of a short one, and it is undoubtedly due to this quality that the *Decimal Classification's* notation has become a sort of international language.

Three more qualities which have caused Dewey's scheme to endure will not be pursued at length. These are its terminology, its index, and its mnemonic features.

A classification scheme is nothing more than a statement of knowledge in words. Classification therefore is inextricably linked with semantics. Dewey had a life-long interest in words, both in their

meaning and in their spelling. The precise terminology used to express his scheme—with the exception of the 15th edition—undoubtedly contributed to the scheme's acceptance.

Dewey placed great importance on his index; so emphatic was he on this point that he leads one to believe that he considered the index more important than the order of his classes. One of the canons of classification is that an index to the schedules be provided, and all usable schemes have them. Dewey's index is essential, but it is not a substitute for a systematic order of classes.

The mnemonic features which pervade the scheme have proved to be useful.

Now I am going to digress briefly from my topic. I have been discussing the qualities of the *Decimal Classification* which have been responsible for its endurance. There are two reasons for the endurance of the *Decimal Classification* which have nothing to do with the qualities inherent in the scheme. They are Melvil Dewey the man and the measures he took to assure the continuation of the scheme.

Dewey conceived his classification scheme in 1873, when he was 21 and a junior at Amherst College. His public school education had been haphazard. The school terms at Adams Center, New York, were short and change in the teaching staff was frequent. He read everything he could lay his hands on, but then what could one lay his hands on in a rural New York community in the mid-nineteenth century? How could a man with this educational background devise a classification scheme which has received such universal acceptance? To answer this question, one must reckon with Dewey's personal qualities. He had an encyclopedic mind and an abundance of intellectual curiosity. He was an organizational genius. And, with the help of a forceful personality, he was his scheme's best promoter.

A classification scheme needs constant study and revision if it is to keep abreast of knowledge and survive. Mr. Dewey, through the Lake Placid Club Education Foundation, provided the funds for the work of revision, and placed the *Decimal Classification* on sound financial footing. The Foundation, in turn, placed the scheme on sound professional footing in 1937, when it decided to share the control of the *Decimal Classification* with the library profession and appointed a permanent *Decimal Classification* Editorial Policy Committee, made up of members of the Foundation and members appointed by the American Library Association.

In summary and conclusion, I quote Berwick Sayers from his *Manual on Classification:*

> No one now rushes to defend the D.C. on the grounds of the modernity of its order or the brevity of its notation. The curious fact remains that more and more libraries throughout the world continue to use it, many of them modifying it; somehow it works. We should fail in our appreciation of services rendered if we did not say that a scheme which has survived for eighty years in

ever-growing currency in spite of merited criticism must have virtues which in practice outweigh our theoretical objections. These are its accessibility and the ease with which it may be applied in whole or in part to collections of books and other material of any size, and expanded as these collections grow. Even if the order of the main classes and of some divisions is unacceptable to many minds, there is in ordinary general library practice no obvious necessity for an optimum order, although such an order is in some way necessary to the ideal scheme, which should be one of logical classes in logical relations. Unfortunately all order is conditioned when applied to books, by the size of the books, the physical shape and division of a library into departments and branches, which make it impossible to run all books in one sequence of class-numbers whatever they may be.

After a lifelong use of the Decimal scheme, in which I have read and listened to thousands of comments, I am convinced that the oldest and most persistent one comes from the expert who wants all material together on his subject, whatever its verifiable place; it is the most understandable one and the least reasonable. The notation was and remains the most obvious reason for the world-wide use it enjoys; that is, an international 'language' understood by all nations. Some day the Decimal scheme may disappear, as do all human efforts, but now we look forward to the seventeenth edition.[9]

Notes

1. Francis Bacon. *The Works of Francis Bacon,* ed. James Spedding, Robert Leslie Ellis, and Douglas Denon Heath (Boston: Taggard and Thompson, 1863), Vol. VIII, pp. 407-408.

2. W. C. Berwick Sayers, *A Manual of Classification for Librarians and Booksellers* (3d ed., rev.; London: Grafton & Co., 1959), p. 88.

3. J. W. Garner, *Political Science and Government* (New York: American Book Co., 1928), p. 52.

4. Henry Evelyn Bliss, *The Organization of Knowledge in Libraries* (2d ed., rev.; New York: The H. W. Wilson Co., 1939), pp. 227-229.

5. *Ibid.,* pp. 201-202.

6. "Criteria and General Procedures for Decimal Classification, Edition 16. Restatement, December 5, 1955," *Journal of Cataloging and Classification,* XII (April, 1956), 91-92.

7. Fremont Rider, *Melvil Dewey* (Chicago: American Library Association, 1944), p. 37.

8. It should be noted that the *Universal Decimal Classification* which dispenses with the final zeros has ten one-symbol forms and 100 two symbol forms.

9. Sayers, *op. cit.*, pp. 125-126. In the last sentence the word "seventeenth" has been substituted for the words "necessary sixteenth" to update Sayers' statement.