The Development of Record Systems

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IN the management of government records, one of the most interesting and important phases has to do with the formulation of the record system. It is interesting because here we get away from the purely physical aspects of our material and turn our attention toward its informational content, sharing more closely with the rest of the agency an interest in the subject-matter fields in which agency programs are carried on. It is important because the record system is the means by which we gain control over the information contained in the documents, and so are able to render an effective reference service, — which is, after all, our major function, and the reason for including the management of records among the administrative services that facilitate an agency's operations.

The usefulness of the record system as a tool depends to a large extent on its having certain characteristics, some of which we have learned about through bitter experience. We know that primarily it must meet the reference needs of the office of origin, the agency responsible for the accumulation. As a corollary, we know that there must be some means of bringing together related material in organic fashion, and of locating items of information regardless of their relationship. It must be flexible enough to permit of expansion and development without changing the character of the pattern or making it more complicated. Physically, the material must be organized in units capable of ready identification for purposes of reference, citation, and control. Also, the experience of recent years has shown us the wisdom of keeping physically separate material of different retention values to facilitate disposal and retirement, and material of different reference restrictions to safeguard information. Finally, we must remember that ultimately the accumulated records of the office of origin that have enduring value will find their place among the national archives as an organic unit, and so must not be intermingled with the records of other offices. The ideal we are striving for is a record system that will

meet these requirements and still be simple enough to use economically, and understandable enough to teach to intelligent people without extraordinary background.

Today as we look around among the government agencies, we find many different types of record material accumulating, with various kinds of record systems governing their arrangement, classification, and indexing. There is a lack of uniformity in the manner in which the record systems are applied, and in the extent of their coverage. They differ widely, too, in the effectiveness with which they can be used to facilitate reference. The lack of reference facility, however, cannot be laid entirely on the record system. While here and there we come upon a well administered reference service staffed with competent people, such instances are all too few. We need to develop our knowledge, to raise our standards, to train our people. As a step in this direction, it might be profitable to examine more closely the character of these record systems, and to trace the "why and wherefore" of their development in the hope of acquiring a broader knowledge of their capabilities.

In examining these record systems, for purposes of comparison we must bear in mind the elements that comprise them, — the unit of material, the physical arrangement, the classification plan, and the index. The unit of material may be an individual document, or it may be a number of documents filed together to form a "case" file or a "subject" file, which is established and added to from day to day as the work of the office progresses. "Case" files are those in which the subject matter is centered on a particular person, place, or thing. "Subject" files are those in which interest is centered on some phase of subject matter, general or specific, reflecting a wide variety of administrative events that brought the documents into being. These units are physically arranged in series in an orderly manner to facilitate reference. In some systems, case files and subject files are arranged in the same series, while in other systems, case files are arranged in separate series from the subject files. As a means of gaining access to the information in the record material, two basic types of finding aids are used. One, the classification plan, is designed to bring together related material, while the other, the index, spreads over the alphabet items of information contained in the material regardless of their relationship. Sometimes the physical arrangement is made to conform to the classification plan, sometimes to the index, and sometimes it differs from both of them, as will be seen later. Classification plans have various systems of notation, and are generally known and identified by their notation,

such as the decimal system, the subject-numeric system, the alphanumeric system. For our purposes, however, it will be more meaningful if we group our systems according to the principle that determines the order of their major categories. Following this criterion, we find all our systems falling into three groups: the chronological, the logical, and the alphabetic, to name them in the order of their development.

CHRONOLOGICAL SYSTEMS

Chronological systems developed in the earliest days of our country, when life was simple and government comparatively small. All writing was done by hand. Business was carried on in leisurely fashion, and record material did not accumulate at a rapid rate. The filing system then in use in most all government offices was simple and primitive, following the pattern of (1) incoming correspondence, (2) outgoing correspondence, and (3) miscellaneous papers. Incoming letters were numbered in the order of their receipt and folded to fit into document boxes 3½ inches wide and eight inches high. Alphabetic indexes were made to these letters, at first in book form and later on cards. Outgoing letters were copied into blank bound books, which were also indexed in book form and later on cards. Miscellaneous papers consisted in the main of form material of one kind or another; they were usually filed in various series and were not indexed.

Thus the first system used in our country had a chronological arrangement with a serial number code, with a single document as the unit. There was no classification, reliance being placed entirely on the index. This state of affairs went on until the invention of the typewriter in 1874. By 1897, it was generally in use in government offices. Carbon copies of outgoing letters superseded the fair copies in bound books, and made possible the filing of the outgoing letter with its related incoming letter. From this beginning there gradually evolved the practice of filing together into one unit all related papers. The unit was given one number in the series. In the early series of files, gaps in the serial numbers indicate where consolidations were made.

The greater number of these units were case files, and were indexed by name. A smaller number were subject files and were indexed by topic. In the course of time, in some instances all the case files concerning the same subject were given the same serial number as the related subject file, while in other instances the case files were placed in separate series from the subject files. In this evolution

of the file in lieu of the individual paper as the basic unit, there came to light a difficulty that still remains to plague us today, — that is, the question of where one file should end and another begin. With case files, the question is simple because of the concreteness of the person, place, or thing around which the subject matter revolves. With subject files, however, the manner in which subject matter begins, grows, branches off and subdivides into additional subjects, often overlapping and intermingling, makes difficult at times the determination of just what should be included in a given subject file.

This chronological system with a numerical code has a number of advantages. For one thing, the chronological arrangement is a natural one, corresponding to the order of administrative events, and chronology is therefore an important element in the formulation of a record program. Although it is neither a classified system nor a self-indexing one, it is well adapted to certain types of records, especially where there is a large preponderance of case files of substantial proportions. A good modern example is the system governing the legal records of the Federal Trade Commission.

The Federal Trade Commission is a quasi-judicial, quasi-legislative administrative agency, established in 1915 to administer laws prohibiting unfair competition, deceptive practices, and certain monopolistic tendencies in industry and commerce. Its major operating activity involves the adjudication of cases initiated by the filing of an application for complaint. The resulting case files constitute 76% of the bulk of record material that accumulates each year. These case files are arranged in two series, one containing the application cases that are settled without the issuance of a formal complaint, known as the Informal Docket cases, and the other containing the complaint cases that undergo formal proceedings before the Commission to be adjudicated, known as the Formal Docket cases. The remaining 24% of material comprises the general files of the Commission.

The general files are arranged by subject, and included in 43 separate categories, serially numbered in the order in which they were established, with gaps between numbers due to consolidations. The Informal Docket cases, serially numbered in the order in which they were set up, are all included in one of the categories of the general series, number 1, which precedes the serial case number separated from it by a dash. The Formal Docket cases have their own separate series of numbers and are not included in the general series by any symbol.

While the physical arrangement of the material in the file cabinets is governed by serial numbers, it is possible to arrange the categories in classified arrangement on paper, with the related serial numbers to the right as in a table of contents, without the necessity of revising the physical arrangement or serial numbering. Thus a classification scheme of flexible character is provided, reflecting organically the activity pattern of the agency.

LOGICAL SYSTEMS

Logical systems were ushered in by an event that was destined to have a profound effect not only in the library field where it occurred, but also in the field of record administration. Melvil Dewey invented his Decimal Classification for the arrangement of books in 1873. It was first published in 1876 and widely acclaimed in the library world. The same year he established the Library Bureau for advancing library interests. He was one of those energetic and fertilizing personalities always to be found behind the advances made in any field. In 1898, The President of the B. and O. Railroad asked W. H. Williams to prepare a classification for use in organizing railroad records, as a result of which the "Railroad Classification File" was copyrighted in 1902. This venture was the first adaptation of the decimal system to record material.

The decimal system is really a logical arrangement of subject-matter categories with a decimal notation or code, and is accompanied by a relative index. Through the relative index, one has access to all the material that has been classified by subject, without the necessity of indexing the material itself. This system seemed to be the long sought solution to the problem of organizing material by subject, systematically and economically, without the necessity of indexing each document. Government offices one after another developed logical systems with a decimal notation patterned after the Dewey system, — for example, the Office of Indian Affairs in the Department of the Interior developed such a plan for its records, which was placed in effect in 1907 and is still being used.

In 1910, the State Department devised a decimal classification for the records of the department, which was centrally maintained. This system has gone through several editions without drastic change. It is unique in the method by which geographical subdivisions are incorporated in subject categories by the use of country numbers. However, it is showing its inadequacy under the strain of world events, and has been the subject of study for purposes of revision which is badly needed.

Such was the trend of events until, on February 13, 1912, the Taft Commission on Economy and Efficiency issued a memorandum of its conclusions concerning the manner of doing business in government departments, with suggestions for the use of labor-saving devices. One of these suggestions was "That all correspondence, both incoming and outgoing, should be filed according to subject classification arranged as nearly as possible upon a self-indexing basis, and that where file numbers were regarded as essential a logical arrangement of numbers under a decimal or analogous scheme should be employed."

On the basis of this suggestion, logical classification schemes were proliferated all over the government, the classic example of which is the War Department Decimal File System, first published in 1914, and since then revised without any drastic changes. This system was made mandatory throughout the War Department, with certain leeway in its application to meet the needs of various bureaus and offices.

An interesting example of the limitation of the decimal system is shown in that of the Weather Bureau, first established in 1912, extended to the field service in 1915, and successfully maintained mainly because of the stability of the Weather Bureau organization, until about the later 1930's when expanding activities in the fields of aerology, hydrology, statistics, research, and specialized forecasting caused the system to creak at the seams.

Experience with decimal systems emphasizes the fact that their effectiveness depends more on the analysis, division, and arrangement of subject matter rather than on the kind of code attached to them. The decimal code, however, has proved to be somewhat inflexible with a tendency to become complicated under conditions of rapidly developing subject matter such as we have witnessed during the last decade. A logical system, however, does bring together related material in organic fashion more effectively than any other we know. What we need to develop is a flexible and simple code capable of expanding and remaining simple under rapidly changing conditions. Some experiments directed toward this end are now under way and give promise of success.

ALPHABETIC SYSTEMS

Alphabetic systems can be traced back to that same Melvil Dewey who, in 1876, established the Library Bureau for advancing library interests. In 1892, the first vertical letter file was invented by Dr. Rosenneau, Director of Associated Charities in Boston, and

developed by the Library Bureau. It was publicly displayed in Chicago at the World's Fair in 1893. The vertical method of filing stimulated research on the part of the Library Bureau staff to develop systems of guides and folders for use in vertical files.

At the time the Library Bureau began its research, the bulk of record material was in the form of case files arranged chronologically with a serial number code and a name index. The Library Bureau, imbued with the spirit of the times, aimed at economy and efficiency, and decided to make the file self-indexing by arranging it in index or alphabetic order, eliminating the separate index. They made researches in the spread of names over the alphabet as they appeared in the directories of various cities, and on the basis of the information gathered they devised systems of guides and folders that would equally divide the bulk of material in the file drawer and thus facilitate reference to the material.

As a result of their experimentation, the Library Bureau evolved two types of systems which were given distinctive names, patented, and placed on the market. They were comprised of folders and guides with labels of varying cut and position, arranged according to a pattern that would be apparent when placed in vertical position in a file drawer, and would form a framework within which record material could be filed and found when needed. The two types included one in which a straight alphabetic arrangement was maintained, and the other, the so-called "automatic" system, in which the names are arranged initially by the first letter of the surname and then according to the first part of the name, in grouped alphabetic arrangement. This method of alphabeting avoids the necessity of going deep into the name to determine its place in the file.

As time went on, commercial concerns selling equipment set up their own research laboratories and developed their own patented systems following the lead pioneered by the Library Bureau. In 1926, the Library Bureau was absorbed by Remington Rand. The Variadex and the Triple Check Automatic systems presently sold by Remington Rand are the modern versions of the original straight alphabetic and grouped alphabetic (or automatic) systems conceived in the laboratory of the Library Bureau, to which color has been added as an additional safeguard against mistakes in filing. All the systems on the market today fall into the general patterns described above, with some variation in position of guides or folders, or in whether or not serial number codes have been added to the alphabetic divisions to facilitate filing and finding. An alphabetic name file based on the phonetic principle was later developed and

is now sold by Remington Rand under the name "Soundex." These commercial systems all have sales appeal. It is important to know their characteristics before buying them.

In government offices, while many followed the suggestions of the Taft Commission and developed decimal systems to govern their records, some turned their attention toward an alphabetic, self-indexing system in the search for simplicity. The plan was to break the subject matter down into the basic divisions, specific in character, and arrange these categories alphabetically in one series, including any necessary cross-references to make the file self-indexing. An early example of this type of alphabetic system is that of the Marine Corps, put into use in 1921. A four-digit serial number code was assigned to the basic divisions in skips of five to allow for insertions in the alphabetic arrangement. The subdivisions of the basic divisions were also numbered serially within each basic division, with skips. The system created quite a vogue at the time, and was the pattern for the system developed by the Public Health Service and placed in effect in 1923. The Public Health Service, however, worked out an improved method of assigning serial numbers to letters, in both the basic divisions and their subdivisions.

In 1923, the Navy Department developed and put into effect a unique system based on the alphabet, but under a procedure the opposite of that followed by the Marine Corps and the Public Health Service. The Navy broke down their subject matter into seven broad areas representing the major functional fields in which Navy operations were carried on. These seven categories were given standard titles, and a mnemonic letter code corresponding in most instances with the initial letter of the standard title. Within each of these categories, related material was arranged in subcategories and sub-subcategories each of which were given serial number codes in the order in which they were set up. This plan allowed for unlimited expansion. It was made applicable throughout the Navy Department with the exception of the Marine Corps, which had developed the system described above. While this system is alphabetic as far as the major categories are concerned, within the major categories the chronological system with a numeric code determines the order. The idea of a self-indexing system was not adopted, and a very complete relative index is part of the classification manual. A new edition of the manual is in process, and when it is placed in effect, the Marine Corps will at last abandon its own system and join the rest of the Navy in adopting the manual for its own use.

Coming down to more recent times, we find another system de-

veloped by the Department of Agriculture based on the alphabet, that has been the prototype of those of many other agencies. It is called the subject-numeric system because the code consists of the name of the major category plus a serial number for the subdivision. Sometimes there are finer subdivisions each one being serially numbered within its own series. The system has a number of interesting features described in the *Procedure Manual for Records Management*, issued in September 1942. A unique feature of this system is the method of developing the file units, called "continuity filing." The categories are broader in scope than those of the Marine Corps system, and in consequence there is more association of related material. The manual includes a relative index, as it is now recognized that such a system cannot be self-indexing.

In this survey I have given a brief description of the various types of record systems now in effect in government agencies, and a short history of their origins. This is merely setting the stage for further study in a badly neglected area. Although we have been discussing only current records, we should remember that there are three stages in the life history of record material, and that problems neglected in the current period are automatically inherited by the custodians of later periods. Many of the problems we are discussing today relating to record centers, and much of the activity in the National Archives since its establishment, have been caused by the problems neglected during the current period and inherited by these later custodians. It is time for us to get busy!