Dewey decimal classification system (DDC)

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Abstract

The paper discusses the significance of Dewey decimal classification and how the classification scheme is fruitful in classifying the books & other materials. It is used in a variety of applications on the web in support of categorization, browsing & retrieval.

Keywords: Classification; ten main classes in Dewey’s system; arrangement of DDC; DDC Call Number.

Introduction

What is Classification?

Classification means to provide a system for organizing knowledge. Classification may be used to organize knowledge represented in any form, e.g. books, documents, and electronic resources.

Book Classification

A major objective of libraries is to see that optimum use is made of their collection by leading each reader or student as directly as possible to the material that he/she needs. As an aid to the achievement of this purpose, nearly all libraries find it helpful, indeed necessary, to impose upon their books and other materials one or more forms of subject control. One such form is classification. To classify a collection of objects is to place together in classes those objects which have certain characteristics in common and to separate from them the objects which do not have those characteristics. Classification may be imposed not only on physical objects, but also on processes, on actions on relationships, on mental concepts, in fact on any kind of subject or group of subjects the members of which show likenesses as well as differences.

Notation

It is the system of symbols used to represent the classes in a classification system. In the Dewey decimal classification, the notation is expressed in Arabic numeral. A system of notation, while not an essential part of a classification system, is a major convenience, in designating briefly the different classes and subclasses, especially if there are a great many of them in a complex pattern of relationships. In identifying the objects or concepts that belong to the various classes, and in determining, for physical objects, their actual distribution and arrangement according to a desired and systematic sequence.

Librarians classify their works (books, periodicals, pamphlets, sound recordings, films, slides, pictures, prints, maps microforms, and other media of information and communication) according to various kinds of characteristics. For example, because of differing problems of shelving, handling and giving service, they usually separate recording, films, atlases, newspapers, and the like, from bound volumes of more or less conventional size; in this case the characteristics of division is physical form. In libraries of rare books the works are classified according to date and place of publication. Another common characteristic upon which division is based is specific kind of use, so that reference books, children’s books, and books in particular languages, books for popular reading collections, or books of current interest may be set aside in separate groups. But most commonly, either overall or within such categories as those named above, librarians classify works according to subject content. Such an arrangement is most useful for effective retrieval of the kind of information wanted by the majority of patrons and the librarians serving them.
For this reason, librarians have generally found it advantageous to follow one of the already existing book classification systems, the best known of which is the Decimal Classification of Dewey.

Creation of DDC
Melvin Dewey (American Librarian) who was born on December 10, 1851 devised Dewey decimal classification also known as DDC in 1873 and in 1876 it got published by OCLC (Online Computer Library Center, Inc) — is a general knowledge organization tool that is continuously revised to keep pace with knowledge. The system is further extended through number building, interoperable translations, and association with categorized content, and mappings to other subject schemes.

It is available in both full and abridged editions. In addition to the full version, a single volume abridged edition designed for libraries with 20,000 titles or fewer has been made available since 1895. "Abridged 15" was published in early 2012.

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The DDC is most widely used classification system in the world. At present it is available in its 23rd edition. Libraries in more than 138 countries use the DDC to organize and provide access to their collections, and DDC numbers are featured in the national bibliographies of more than sixty countries. Libraries of every type apply Dewey numbers on a daily basis and share these numbers through a variety of means (including World Cat). Dewey is also used in a variety of applications on the Web in support of categorization, browsing, and retrieval.

The DDC has been translated into over thirty languages since 1988, authorized translation of the full and abridged editions of the DDC have been published or are under way in Arabic, French, German, Greek, Hebrew, Icelandic, Indonesian, Italian, Norwegian, Russian, Spanish, Swedish, Turkish, and Vietnamese.

One of Dewey’s greatest strengths is that the system is developed and maintained in a national bibliographic agency, the Library of Congress. The Dewey editorial office is located in the Dewey Section of the Library of Congress, where classification specialists annually assign over 60,000 DDC numbers to records for works cataloged by the Library. Having the editorial office within the Dewey Section enables the editors to detect trends in the literature that must be incorporated into the Classification. The editors prepare proposed schedule revisions and expansions, and forward the proposals to Decimal Classification Editorial Policy Committee (EPC) for review and recommended action.

Ten Main Classes in Dewey’s System
The main structure of the DDC is presented in the DDC Summaries in the beginning of volume 2. The first summary contains the ten main classes. The second summary contains the hundred divisions. The third summary contains the thousand sections. The ten main classes are:

000----Computer Science, Information & General works.
100----Philosophy & Psychology
200----Religion
300----Social Science
400----Language
500----Science
600----Technology
700----Arts & Recreation
800----Literature
900----History & Geography

Class 000
It is the most general class, and is used for works not limited to any specific discipline, e.g. encyclopedia’s, newspaper, general periodicals. This class is also used for certain specialized disciplines that deal with knowledge and information, e.g., computer science, library and information science, journalism. Each of the other main classes (100-900) comprises a major discipline or group of related disciplines.

Class 100: Covers Philosophy, Parapsychology & occultism & Psychology, logic.

Class 200: is devoted to religion. Bible, History of Christianity and other Religions.
Class 300: covers the social science. It includes Sociology, anthropology, Statistics, political Science, Law, Public administration, Social Problems & Services, education, Commerce, Communications, Transportation & Customs.

Class 400: Comprises language, Linguistics and specific Languages. English, Spanish and other languages.

Class 500: is devoted to natural sciences & mathematics.

Class 600: is a technology which includes Medicine, Agriculture and family living.

Class 700: Covers the Arts: art in general, fine and decorative arts, music and the performing, Recreation, including sports and games is also classed in 700.

Class 800: Covers literature and includes rhetoric, prose, poetry, drama, etc., American literature, old English literature and literatures of other languages. Folk literature is classed with customs in 300.

Class 900: Is devoted primarily to history & geography. A history of specific subject is classed with the subject.

Arabic numerals are used to represent each class in the DDC. The first digit in each three-digit number represents the main class. For example, 500 represent science. The second digit in each three-digit number indicates the division. For example, 500 is used for general works on the science, 510 for mathematics, 520 for astronomy, 530 is used for general works on physics, 531 for classical mechanics, 532 for fluid mechanics, 533 for gas mechanics. The classification structure is hierarchical and the notation follows the same hierarchy. Libraries not needing the full level of detail of the classification can trim right-most decimal digits from the class number to obtain a more general classification. For example:

- 500 Natural sciences and mathematics
- 510 Mathematics
- 516 Geometry
- 516.3 Analytic geometries
- 516.37 Metric differential geometries
- 516.375 Finsler Geometry

A decimal point or dot follows the third digit in a Class Number after which division by ten continues to the specific degree of classification needed. The dot is a psychological pause to break the monitory of numerical digits & to ease the copying of the class number.
Discipline: The concept of discipline, or branch of learning, is fundamental to an understanding of Dewey’s system. The primary basis for DDC arrangement and development of subjects is by discipline, as defined by the main and subordinate classes, while subjects, and strictly speaking is secondary. There is no one place for any subject in itself; a subject may appear in any or all of the disciplines. No class can be said to cover the scope of marriage, or water, or copper, or Brazil; in other words there is no single number for any of these concepts or subjects. A work on marriage belongs in 301 if it deals with the sociological aspect of the subject, in 155 if it is the psychological, in 173 if the ethical, in 390 if it deals with customs, in 613 if it deals with hygiene. Similarly, a work on water may be cast with many disciplines, such as metaphysics, religion, economics, commerce, physics, chemistry, geology, oceanography, meteorology and history. No other feature of the DDC is more basic than this: that it scatters subjects by discipline.

Arrangement of DDC
DDC is composed of the following major parts in four volumes:

Volume 1: It consists of instruction, Glossary, index, Manual, & Tables.

Volume 2: It consists of summaries & top three levels of the DDC schedules from 000-599.

Volume 3: It consists of schedules from 600-999

Volume 4: Consists of Relation Index. Relative Index is an alphabetical index to the classification, for use both by classifiers but also by library users when seeking books by topic. The index was "relative" because the index entries pointed to the class numbers, not to the page numbers of the printed classification schedule. In this way, the Dewey Decimal Classification itself had the same relative positioning as the library shelf and could be used either as an entry point to the classification, by catalogers, or as an index to the Dewey-classed library itself.

DDC call number
We can judge a book by its call number. It is a set of letters, numerals, or other symbols (in combination or alone) used by a library to identify a specific copy of a work. A call number may consist of the class number; book number; and other data such as date, volume number, copy number, and location symbols. The Dewey Decimal Classification Call Number can be found on the spine label. It is so because when the book is shelved, the Dewey decimal classification call number can be seen easily.

References
4. Clipart taken from the Microsoft clipart website.