An insight into 110 years of influence of Principle of Literary Warrant on Dewey Decimal Classification system

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The present article is an endeavour to understand the one hundred and ten years of influence of the Principle of Literary warrant as introduced by E. Wyndham Hulme on the revision of Dewey Decimal Classification (DDC) through different editions in the field of library classification theory and practice. During this study, a comparison with other warrants/consensus has been undertaken whenever and wherever deemed necessary. The literary exploration was based on all the editions of DDC which are available on Internet Archive platform. The paper divides different editions of DDC into two distinct groups: one in which only veiled references to literary warrant were found corroborating Dewey’s thinking about applicability of different consensus angle and the other where declared references to the concept by Editorial Policy Committee were encountered. The article concludes that the principle has extended its influence on the web environment of DDC as well.

Keywords: DDC; Dewey Decimal Classification

Introduction

Late nineteenth and early twentieth century classification specialists especially Anglo-American library thinkers were pre-occupied with the creation and refinement of classification systems by giving utmost importance to theoretical foundation of library classification¹. Nobody dared to base library classification on the book topics that already existed; rather the general tendency was to enumerate all possible or potential topics².

It was Edward Wyndham Hulme who challenged the established trend of aligning book classification to the order of sciences and mentioned that book classification is simply “a mechanical time-saving operation for the discovery of knowledge in literature”³. He formulated the concept of literary warrant in the year 1911 and included it in his work Principles of Book Classification, published in a series of articles in the Library Association Record between 1911 and 1912.

According to Hulme, “a class heading is warranted only when a literature in book form has been shown to exist, and the test of the validity of a heading is the degree of accuracy with which it describes the area of subject-matter common to the class”⁴. He emphasised on the actual published literature as the basis for classification and not concepts in the universe of knowledge or any abstract philosophical idea⁵.

The potentiality of application of literary warrant in different subject access systems has seen its acceptance across a number of control vocabularies. The present article is an effort to understand the extent of application of the concept as a principle in revision of different editions of Dewey Decimal Classification (DDC) covering all 23 editions published so far. A comparison with other warrants/consensus has also been done whenever and wherever deemed necessary. Internet Archive website (https://archive.org/index.php) was consulted for access to different editions of DDC. The following sections will give brief accounts of Hulme, Decimal Classification (DC) System devised by Melvil Dewey and will be followed by influence of literary warrant on DDC and discussion thereof.

E. Wyndham Hulme and literary warrant

E. Wyndham Hulme (1859-1954), the son of a London surgeon and an alumnus of Oxford University served British Patent Office (renamed as Intellectual Property Office) in different capacities, initially as higher division clerk, then as assistant librarian, and, finally, from 1894 until his retirement in 1919 as librarian⁶. During his entire career at British Patent Office, he published a number of books and articles on the invention of English flint glass, the statistical history of iron trade in England and Wales between
1717 and 1750, or the Gallic fortification in Caesar's time. His contribution towards theories of knowledge organisation chiefly remains in the Principle of Literary Warrant which according to Beghtol the topics around which a literature has become established. Apart from that Hulme may be considered as the pioneer of bibliometric study as he, as Sandars Reader in Bibliography at the University of Cambridge in May 1922, for the first time proposed to apply statistical techniques in bibliographic data to quantify progress of science.

Decimal Classification Scheme
Melvil Dewey, the chief architect of Decimal Classification and Relative Index, while working as a student library assistant encountered 'the confusion of the contents of the Amherst College Library in 1872' which engaged him in studying classification of knowledge as conceived by Aristotle, Bacon, Locke, and other philosophers together with classifications of Schwartz and Harris. After a great deal of study and visit to a number of libraries, he was convinced about the futility of the then 'almost universal practice of arranging books alphabetically by their authors' names or by size or accession or even color' and decided to introduce a scheme of arrangement of books by subject based upon Harris's inversion of the Baconian order of History, Poesy, Philosophy. Amherst College adopted the plan in 1873 and finally after necessary refinements, 1st edition of Decimal Classification Scheme was published anonymously from Amherst, Massachusetts in the year 1876 with the title ‘A Classification and Subject Index for Cataloguing and Arranging Books and Pamphlets of a Library’, thus abandoning absolute location of books on shelves by shelf and book number.

Dewey, in the very first edition, expressed his concern about impossibility of a satisfactory classification of all knowledge as embodied in books in view of the traditional dichotomy of demands for a system that would be both stable and contemporary and henceforth repeatedly sacrificed philosophical theory of classification and accuracy to the paramount importance of practical utility and economy. In doing so, although he admitted the theoretical absurdity of Decimal Principle's division of every subject into just nine heads resulting into improper coordination in some places, yet he acknowledged satisfaction in practical application of the schedules. The following narrative is an effort to study the influence of Hulme's Principle of Literary Warrant in one hundred and forty five years journey of Decimal Classification Scheme.

Influence on initial editions of DC
Melvil Dewey, during his life time, never allowed any modification of the Scheme solely driven by theoretical requirements as he apprehended that in doing so the Scheme would be detracted from its practical usefulness. His sincere efforts to make classification as minute as possible had drawn him towards Charles Ammie Cutter's Rule 161 for specific subject heading when in the first edition of DC he wrote:

The content or the real subject of which a book treats, and not the form or the accidental wording of the title, determines its place. Following this rule, a Philosophy of Art is put with Art, not with Philosophy.

According to him “the predominant tendency or obvious purpose of the book, usually decides its class number at once” and existing literature and its specific representation were given utmost importance in notational expression at each level of exactness. Here, we find surprisingly great similarity between Dewey’s view on philosophical theory of classification and Hulme’s viewpoint on the tendency of philosophical classification to obscure the nature and purpose of classification and to hinder the formation of sound canons of construction and criticism. Hulme decisively argued that the source for our authority in classifying a book should be the book itself instead of a preconceived classification system with its 'ideological' preferences.

Apart from the subject of a book, growth of subsections of a subject was addressed by Dewey with addition of figures to the original three figure subject representation and not vice-versa. That means growth of literature would warrant addition of figures for subsections and to arrive at close classification and limitless expansion of the scheme. In Dewey’s words:

The apparent difficulty in such cases is entirely obviated by the use of a fourth figure, giving nine sub-sections to any subject of sufficient importance to warrant close classification. Should the growth of any of these sub-sections warrant it, a fifth figure will be added, for the scheme admits of expansion without limit.

In preparing alphabetical subject index, Dewey consulted subject experts at great length which might have been done to reflect scientific consensus in line
with Ernest Cushing Richardson’s advocacy that “the closer a classification can get to the true order of the sciences and the closer it can keep to it, the better the system will be and the longer it will last”\textsuperscript{16}. Nonetheless, he was not totally comfortable with and sanguine about the outcome of expert involvement when in second edition of DC he expressed his concern as:

\textit{Each of these thousands of subjects has been carefully assigned its number, many of them after long consideration and consultation with experts. Even if the decision reached were not the wisest possible, all practical purposes are served...}\textsuperscript{17}

In fact his doubtfulness was put into larger perspective when editorial introduction to the 17\textsuperscript{th} edition of DC addressed the issue in the following way:

\textit{Subject experts should be consulted when all other methods fail, and sometimes for verification of a tentative decision. But do not let the subject experts who are not also book classification experts occupy your time telling you how to remake the classification tables; what you need from them is assistance in placing given books on difficult subjects within an existing scheme.}\textsuperscript{18}

Dewey, in arranging books in the classification, as in filling out the scheme, also tried to bring in the essence of pedagogic order of knowledge as reflected in preface to the 1\textsuperscript{st} edition where he mentioned practical usefulness of his arrangement to students for its familiarity to the academic sphere. Coming back to the issue of influence of the Principle of Literary Warrant upon DC, an unmistakable signature of literary warrant was found in the 11\textsuperscript{th} edition’s discussion of accommodating new subjects in the scheme wherein a ground (i.e., important enough) for allotment of new number by addition of another decimal to already existing allied topics was prescribed by Dewey:

\textit{A new topic is always closely related to some existing head. If there is no blank number available it is combined with the head nearest allyd, and, when important enough, distinct provision for the new cumr is made by adding another decimal.}\textsuperscript{19}

**Influence on DC 15\textsuperscript{th} edition onward**

In the beginning of 1960s, the scenario was changing slowly as the researchers were infusing new attention to literary warrant although many a time with projection of other factors in combination with literary warrant or comparative superiority of other factors. As for example, Farradane (1961) advocated consideration of a combined approach of literary warrant and user’s point of view for specialised classification\textsuperscript{20}. It may be argued that Farradane might not be the pioneer in this regard as almost ten years back the importance of user angle was documented in forwarding words to revised 15\textsuperscript{th} edition of Dewey Decimal Classification & Relative Index:

\textit{Since in all probability there will never be a “last” edition of DC, we earnestly request all users to give us the benefit of their criticism in order that sometime our successors may actually bring out “the perfect book”}\textsuperscript{21}

While digging the past, veiled references to literary warrant were found to surface in the forwarding words of Milton James Ferguson, the then Chairman and Editor of revised Standard (15th) edition of Dewey Decimal Classification & Relative index:

\textit{Our location in the Library of Congress has enabled us to use its vast resources in books and print and to estimate approximately the volume of literature falling into any class; for it is obvious that a number without a book is wasted effort.}\textsuperscript{22}

Following which, the numbers without literature were omitted from the schedule. The change of location of DC editorial office in the Library of Congress (LC) in the year 1927 (and became Decimal Classification Division (DCD) at a later stage) could be viewed as watershed moment as it divided religious and cultural bias towards western hemisphere specially north Americans\textsuperscript{23} as observed in different editions of DC, into two distinct pattern; one in which there was overwhelming influence of western literature in DC up to 14\textsuperscript{th} edition. The other is related to the relocation of DC editorial office in LC. As a result, members of the editorial committee were exposed to enviable collection of LC which might have resulted into strong commitment to the idea of literary warrant on their part specially since the publication of the 16\textsuperscript{th} edition in 1958\textsuperscript{24}.

The LC collection was further enriched with the establishment of LC overseas offices in Asian and African countries in 1962\textsuperscript{25}. It may be mentioned here that to fulfil the mission of the LC that is to “make its resources available and useful to the Congress and the
American people and to sustain and preserve a universal collection of knowledge and creativity for future generations and to pay heed to the problem of lack of non-European research materials in north American libraries, LC overseas offices came into being. Around the same time these offices started Cooperative Acquisitions Programme (CAP) for over hundred participating institutions, primarily academic research libraries.

The LA CAP is the outcome of the desire in the 1950s to address scarcity of Afro-Asian research materials and a proposal was put forward by a group of scholars to use funds accrued from Public Law 83-480 (P.L. 480) to purchase library materials. Although this fact may seem to be out of tune in relation to the overall context, yet it is hard to deny that with the arrival of Asian and African literature in LC, DC editorial committee had to look beyond WASPish (White, Anglo-Saxon, Protestant) confines to accommodate Afro-Asian literary warrant. This trend has become a continuous process and reflected in further reduction of Christian bias in the 200 Religion schedule that was initiated in DC edition 21 and completed in DC edition 22.

Again, with the exponential increase of cross-disciplinary and interdisciplinary knowledge retrieval in this age of globally shared information, “it is thus probably no longer possible to specify one clearly defined user group for an information resource. For this reason classification research needs to curtail local emphases and to augment culturally neutral internationalisation”.

Thus, there is a gradual shift in cultural warrant application from western centric approach to culturally neutral internationalisation as is evident in recent editions of DC. No doubt this has increased the acceptance of DC by many more countries. In comparison to this, principle of literary warrant has so far consistently been applied to different editions of DC since its documented application from edition 15.

Indeed, the explicit editorial rule of seeking twenty (arbitrary number) published literature on a topic before accommodating a new number against the topic has been the defacto guidance of choice for editing DC schedule which effectively eliminated personal bias of the editors. The obvious comparison with literary warrant merits its inclusion in the foregoing discussion in keeping with western religious and cultural bias as reflected in initial editions of DC. Another significant fact that might have a lasting impression upon DC editorial team is that LC Classification justified the American perspective through literary warrant of LC collection.

Intriguingly DC 20th edition slightly departed from the policy of eliminating numbers without literature with the inclusion of standing room numbers for topics carrying insufficient literature with them (and hence do not qualify to have their own assigned number) but incapacitating the numbers by denying feature of either addition of standard subdivisions with them or other number building techniques. The editorial introduction corroborates as follows:

Standing room numbers provide a location for topics with relatively few works written about them, but whose literature may grow in the future, at which time they may be assigned their own number.

The concept of topics in standing room could be viewed as one of the finest application of literary warrant, for, the concept may be used to monitor growth of literature in a particular domain of interest, to identify emerging areas of interest among scholarly communities, and to provide scope for future expansion of the schedule. Going back to veiled reference to literary warrant, the same was found to have application in selection and use of form or style such as philosophy, theory, dictionaries, essays, etc., which are as important as subject matter and applicable to any class, division, section, or subsection only when sufficient literature warrants such division. DC 18th edition was very much close to declaring the concept of literary warrant when Frances Hinton, the then Chairman of Decimal Classification Editorial Policy Committee wrote in the preface:

The terminology of the classification scheme reflects the terminology used by the literature being classified.

However, it is only from DC 19th edition that explicit mention of literary warrant has been noticed with special reference to expansion of a section in the schedule. The glossary that accommodated literary warrant for the very first time in this edition defined it as:

Justification for various provisions of a library classification system based not on theory but on the existence of actual works and their probable acquisition by libraries.
Edition 21 deserves special mention as it is the first edition which was prepared with online access to the OCLC Online Union Catalogue for guidance on literary warrant. The latest DC edition, i.e., 23rd, devoted a considerable part of its explanation towards applicability of literary warrant in enriching the Relative Index:

The Relative Index is primarily an index to the DDC as a system. It includes most terms found in the schedules and tables, and terms with literary warrant for concepts represented by the schedules and tables.

Topics with unambiguous index entry, strong disciplinary focus, and adequate literary warrant, have been assigned interdisciplinary numbers in the Relative Index. Normally as a rule phrases beginning with the adjectival form of countries, languages, nationalities, religions (e.g., French poetry, Italian architecture), and phrases containing general concepts represented by standard subdivisions (e.g., educational statistics, bank management) have not had the opportunity to be enlisted under the Relative Index in DC 23rd edition. But a provision for inclusion of such a phrase heading has been recommended only when there exists strong literary warrant in favour of it (e.g., English literature).

Thus, literary warrant has been the single most important guiding principle for the DC editors to judge whether or not a number in the schedule needs to be removed, expanded or changed together with inclusion of concepts in the Relative Index as represented by the schedules and tables. With the publication of Electronic Dewey in 1993 and subsequent introduction of Dewey for Windows and Web Dewey in the year 1996 and 2000 respectively, DC entered the digital era for World Wide Web presence which facilitates delivery of frequent updates and provision of thousands of relative index terms but the underlying editorial application of literary warrant remains unchanged.

A note on DCD and DC revision in connection with literary warrant

After the relocation of DC Editorial Office in the LC, it has gone through many mergers and name changes. In 1967, reorganisation of an LC Processing Department resulted into elevation of DC Editorial Office to division status and henceforth recognised as Decimal Classification Division with matching increase in staff strength and production and became a part of the Processing Division of the LC in 1968. The chief of the DCD also acted as the editor-in-chief of the DDC. In 1988, OCLC acquired Forest Press and thereby responsibility of publishing DDC too. In 2008, within U.S. General Division, DCD was renamed as Dewey Section and ultimately was moved to the U.S. Programs, Law and Literature (USPRLL) Division in 2013.

The Decimal Classification Editorial Policy Committee (DCEPC), the OCLC and the Library of Congress are the three pillars of DC administration. It may be mentioned here that American Library Association (ALA), the first external corporate body, in trying to influence the course of the DC in order to protect and represent the interests of librarians and the profession, set up a Special Advisory Committee on the Decimal Classification and in 1953 it was given its present name, the Decimal Classification Editorial Policy committee. Now DCEPC is an international committee of ten members representing the ALA, the LC, the OCLC and includes classification professionals from the UK, Canada, South Africa and Australia.

The Dewey Section is comprised of four full time classifiers, the Dewey program manager, two Dewey assistant editors (funded by the OCLC Online Computer Library Center, Inc.), one part-time consulting Dewey editor, and the USPRLL Automation Operations Coordinator (AOC). The classifiers assign DDC to bibliographic records for Electronic Cataloging in Publication (ECIP) titles and published books and to respond to queries submitted to the Dewey section. The USPRLL AOC and the Dewey program manager also classify part time. The Dewey Section receives and processes all ECIPs. The Auto Dewey program (software) semi-automatically assigns DDC numbers to fiction, poetry, and drama work by single authors from many European, Latin American, Commonwealth and the United States literatures. The editorial team under the direct supervision of editor-in-chief (based at OCLC in Dublin, Ohio) works in the online Editorial Support System (ESS) and synergistically with the classifiers to keep Web Dewey (online Dewey classification tool) updated with new Dewey numbers, Relative Index terms, and mappings to thesauri such as LCSH (Library of Congress Subject Headings), Sears List of Subject Headings (SLSH), BISAC (Book Industry Standards and Communications), and MeSH (Medical Subject Headings) in order to fulfil the threefold
mission of the Dewey Section – to develop, apply, and assist in the use of the DC⁴⁸.

Revision of DC, although a lengthy and continuous process, yet with passage of time, has become more democratic in nature by involving a variety of stakeholders through multipronged approach. Depending on the requirement, there are three kinds of development: Major revision, Moderate revision and Minor revision. Major revision, again, is subdivided into New schedule, Complete revision, and Extensive revision⁴⁹. Under the guidance of editor-in-chief, assistant editors in consultation with the classifiers of Dewey Section (regarding new and emerging literature) prepare draft proposals which are officially known as ‘Exhibits’⁵⁰.

Being the single largest user of DC for classifying approximately 110,000 titles annually, the Dewey Section maintains a DC shelf list, a file of entries for most of the publication classified by current edition and arranged 001-999 and naturally is in a position to detect where revision, expansion or reduction should take place⁵¹. The process of developing a schedule is more elaborate and includes researching the subject area, discussing problems and potential changes with the classification specialists, scanning through the published literature for literary warrant, consulting subject experts, and pondering upon the impact of proposed changes on users and on the rest of the classification. The editorial team consults the Library of Congress online catalogue and the OCLC online union catalogue for guidance on literary warrant and LCSH, SLSH, thesaurus, and other reference resources and databases for choice of classification terminology⁵².

Literary warrant enables the editorial team to take a close look at current trends in every branch of knowledge. The Literary warrant principle ensures that no number exists in the DC for a topic unless there is sufficient literature in support of the number. European DDC Users Group, for the past fifteen years, has been collaborating with DCEPC and OCLC to coordinate proposals for the development of the DC in accordance with the bibliographic needs of European libraries and users⁵³.

In addition to this, OCLC hosts International Dewey Users Meeting (formerly known as the Dewey Translators Meeting) in conjunction with the IFLA World Library and Information Congress for their valuable input⁵⁴. Of late this whole process is being supplemented by the concept of crowd sourcing where OCLC urges library professionals around the globe to get involved in editorial process as voluntary contributors by creating proposals (Exhibits) through ‘Dewey contributors’ site (https://sites.google.com/view/dewey contributors). Recently, public Google Drive page has been launched where proposals for DCEPC are posted⁵⁵. Feedback from library professionals are also being sought through online survey and poll (announced regularly on Dewey Blog⁵⁶,⁵⁷) to better reflect global Dewey community’s literary warrant needs by incorporating suggested changes in proposals. The proposed schedule revisions and expansions are then forwarded to DCEPC by editor-in-chief for review and recommended action. EPC meets once a year at OCLC in Dublin, Ohio, to review all the exhibits and either approve them or recommend further changes. The DCEPC also approves minor changes throughout the year via an electronic meeting format. Thus, this dynamic and continuous process is taking small cumulative steps to reflect global literary warrant.

Discussion

Between the first official publication of DC as an anonymous edition in 1876 and surfacing of Hulme’s concept of Literary Warrant around 1911-12, there was a gap of almost 35 years. In between, seven editions of DC were published. Naturally, it is expected that there would be no explicit footprint of the concept in Melvil Dewey’s works during that time. Hence whatever influence it may seem to have on the earliest editions of DC might be attributed to the fact that both Dewey and Hulme had similar outlook on the application of abstract philosophical theory of classification in book classification practice.

The pragmatic approach of Dewey could be viewed as the reflection of his desperate search for a system to systematise the literature of Amherst College Library at that point of time and since then he repeatedly sacrificed philosophical principles to make room for practical usefulness. Hulme, on his part, abandoned philosophical ideology and favoured existing literature on a topic to guide book classification.

Dewey passed away in 1931 and although there is no documentary evidence that Dewey had taken any note of the concept of Literary Warrant or had exchanged his views with Hulme, it may be argued that Dewey had a certain intuition about the value of existing literature on a topic for the justification of its
inclusion in schedule fuelled by his experience during Amherst College days. As the DC Editorial Committee took over the responsibility of revision of DC and its eventual relocation to LC, the exposure to colossal collection of LC has definitely been the most influencing factor for allowing literary warrant to take the centre stage for revision of DC both print as well as web version as reflected in the recent editions.

Conclusion
Through 110 years journey, Hulme’s literary warrant has seen inconsistent acceptance among scholars and classification specialists. Literary warrant could arguably be seen to be too futuristic and advance principle for its time and as Hulme established it as a basic notion without explicit detailed explanation, so the principle was left to scholars to interpret in their own ways. As a result, there exist instances where original meaning has seen expansion, restriction, and many a time has been misunderstood. Critics of literary warrant were sceptical about it as a principle and questioned the validity of elementary method like counting as a terminology selection procedure for incorporating a term into a classification schedule. In spite of all the huddles, literary warrant has been the single most important guiding principle as recognised by DC Editorial Policy Committee for selection and incorporation of new terms into a schedule and due recognition has been paid till the latest published edition with an equally effective extension to web environment. Hence, Dewey Decimal Classification could comfortably be considered as a case of its application.

References
11. Dewey M, A classification and subject index for cataloguing and arranging the books and pamphlets of a library, (Amherst College Library; Amherst, Massachusetts), 1876, p.9.
13. Dewey M, A classification and subject index for cataloguing and arranging the books and pamphlets of a library, (Amherst College Library; Amherst, Massachusetts), 1876, p.6.
15. Dewey M, A classification and subject index for cataloguing and arranging the books and pamphlets of a library, (Amherst College Library; Amherst, Massachusetts), 1876, p.5.
16. Richardson EC, Classification theoretical and practical, (Scribner; New York), 1901, p.69.
17. Dewey M, Decimal Classification an Relative Index for arranging, cataloguing and indexing public and private libraries and for pamphlets, clippings, notes, scrap books, resumes, etc., 2nd edn (Library Bureau; Boston), 1885.


Dewey Decimal Classification and Relative Index, Ed. by BA Custer, v.1, 19th edn (Forest Press; New York), 1979, p.lxx.


Fox V, Section 1- Kinds of development. Available at https://drive.google.com/drive/folders/1NH4mA217spSN0_8H0Qiq9pCXXxA628wx (Accessed on 8 September 2021).


