BRADFORD DISTRIBUTION AND CORE AUTHORS IN CLASSIFICATION SYSTEMS LITERATURE

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By applying of Bradford's law to analysis of the source documents and their references by classification systems researchers in the world, this paper presents core authors of the field during the period 1981-1990. The findings show that 1) core authors of the international classification systems literature are the Library of Congress, M. Dewey, S. Ranganathan, J. Comaromi, A. Neelameghan, L. Chan and K. Markey; 2) the highly cited authors are linked either to the developers of the classification systems or to a research center, or else they authored the most frequently cited books; and 3) the data confirms to Bradford's law and the unusual rising tail of Bradford distribution is appeared and explained.

Introduction

While few will doubt that a considerable amount of research work has been published on classification in the world, very few studies have sought to quantify the authorship of classification systems literature. Consequently, Dahlberg called for a statistical analysis of the literature on various classification systems in various countries.

Rubincam mentioned that "One method for determining who is influencing the literature in a particular field is to examine the references that authors make to the works of others,... In principle, this approach is a more stable measure of significance than the opinion of a single author or a small group of experts." Therefore, by analyzing the references, there might emerge a group of authors who would be referred to often enough to be considered responsible for a core body of literature on classification systems.

The primary purpose of the study was to identify the major contributors to the international literature concerning classification systems from 1981 to 1990. The literature of general and special classification systems which were designed to arrange publications on library shelves was the main interest of the present writer.
Methodology

The method that was employed in this research was a reference study, an analysis of references of journal articles and other formats with the objective of identifying the core authors in the world. Narin\(^3\) noted that the concentration of author influence in fields for the identification of key persons in the development of a specialized topic could be revealed by this method.

**Sampling procedure**

The specific body of data used in this study was a sample of international literature published during 1981–1990 that had a primary focus on universal classification systems. For the purpose of the present study, data were collected through the Classification Literature section of *International Classification (IC)*, an extensive annotated bibliography section of the journal for the relevant period. It was accepted as a primary comprehensive current bibliography for the international literature of classification systems in a wide variety of languages and from a wide variety of sources.

*Level-one literature.* A body of source documents about classification systems literature that were published between 1981–1990 was referred to as the "level-one literature" of the classification systems. Since this study focused on classification systems for classifying publications and arranging them on shelves, to keep the focus on classification systems, from the division "4 On Universal Systems" of the classification literature scheme in Classification Literature of every issue of *IC*, all entries, including "see also" references, were chosen for this study.

Table 1 showed the characteristics of the population, source items and their references. Eleven hundred and thirty four entries were found as source items under the division "4 On Universal Systems." Among them, this researcher attempted to collect physically all 495 source items with references from the following major university and research libraries: Indiana University, University of Illinois, University of Michigan, University of California at Los Angeles, University of California at Berkeley, and Columbia University. Some source items that could not be obtained through those libraries directly were collected by using interlibrary loan services. Copies of foreign publications were difficult to obtain, especially in the case of lesser-known journals not available in the U.S. Four hundred and twenty source items were found, nearly 85 percent of the universe of level-one literature. Inaccessible items were mainly foreign monographs and local journals published in foreign countries. Some of the source items could not be located due to incomplete bibliographic information.