

"For, in concept formation it appears to be essential that, on the one hand, the presence of a characteristic can be left open for the time being, but that, on the other hand, the presence of a characteristic may also have to be downright forbidden, negated" (LEX).

In the contribution by WILLE, the essence of "Formal Concept Analysis" as based on a set-linguistic model for hierarchical concept systems is explained in detail with the aid of examples. For better orientation in the application of this analysis as well, the various distinct possibilities of utilizing concept lattices are elaborated. A concept lattice, illustrated e.g. by a line diagram, can appear in various basic meanings, such as:

- hierarchical classification of objects,
- characteristics simplification system,
- structure for the representation and retrieval of knowledge,

etc., to mention only a few. Further meanings will be added to the above as the application field of Formal Concept Analysis widens.

WILLE's remarks are supplemented by "Algorithms for Formal Concept Analysis" and a few programming examples (GANTER).

The collection of papers reviewed may be expected to be of interest to a wide range of interested groups, such as computer specialists, mathematicians, philosophers, natural scientists, psychologists, linguists and information processors, and to furnish impulses for both theoretical investigations and practice-oriented applications.

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KAPUR, Shabad: **Classification and Cataloguing**. A Select Bibliography. New Delhi: Harmann Publishing House 1988. 392 p., 4510 refs. ISBN 81-85151-10-5.

Kapur's bibliography collects altogether 4510 references on classification and cataloguing; thereof numbers 1-1448 refer to classification and numbers 1149-4177 to cataloguing. A supplement, covering the years 1983-1986, yields further 333 references; hereof numbers 1-80 pertain to classification, numbers 81-333 to cataloguing. This gives a total of 1528 references on classification (34 %) and 2982 references on cataloguing (66 %).

In a rather vaguely formulated preface (p.V-VII) the author declares her bibliography to be "by no means exhaustive and authoritative" and then refers to a "selective scheme in which only really useful and important entries have been included" (p.VI), a plan of a rather enigmatic character, since it is never revealed to the curious, maybe even impatient reader. Instead of precise demarcations and definitions as one might expect of a preface the hardly helpful introduction abounds in pleasant-sounding platitudes and evasive half-truths: "literature . . . never suffers decline or destruction"; "bibliographies save the precious time and energy of the scholars"; there is "need to provide bibliographic control of the prolific literature" (p.V). The author abstains from an account of the criteria of selection, which have determined the inclusion of entries in her bibliography; therefore, one of the major tasks of the present review should be to state and

evaluate some of Kapur's basic tendencies of selection.

The author's bibliography concentrates on those writings which focus on the practice, techniques and procedures of library classification and cataloguing. It excludes more conceptual and - from an intellectual point of view - more ambitious works (e.g., Dobrowolski, T.: *Etude sur la construction des systèmes de classification*. Paris, 1964); biographies of prominent librarians (e.g., Rider, F.: *Melvil Dewey*. Chicago 1944); studies of the history of classification and subject cataloguing seen as part of the heritage of librarianship (e.g., Lehnus, D.J.: *Milestones in cataloging: famous catalogers and their writings, 1835-1969*. Littleton 1974) and many full and abridged editions of the Universal Decimal Classification in the world's languages. Also excluded are works by noticeable theoreticians of classification (e.g., Dewey, M.: *Decimal Classification beginnings*. In: *Library Journal* 45(1920)p.151-154) as well as definite classics of the theory and management of cataloguing (e.g., Cutter, C.A., Sanborn, K.E.: *Cutter-Sanborn three figures author table*. Swanson-Swift revision. Chicopee, Mass. 1969). In some cases secondary literature gains admission into the bibliography, while important primary sources are left out. The bibliography mentions, e.g., Stevenson, G.: *The Eppelsheimer subject catalogue*. In: *Library Resources and Technical Services*, 15(1971)No.3, p.309-328 (3980), but ignores Eppelsheimer, H.W.: *Der neue Sachkatalog der Mainzer Stadtbibliothek*. In: *ZfB* 46(1929)p.406-24. Some theoreticians of cataloguing are represented by their minor writings, while their principal works are not deemed worthy of attention. Thus, J.W. Metcalfe's *Information retrieval, British and American, 1876-1975*. Metuchen, N.J. 1976 - "a chatty, historical narrative" - is given an entry, while his more significant works - especially *Information indexing and subject cataloging: alphabetical-classified, coordinate-mechanical* (New York 1957) and *Subject classifying and indexing of libraries and literature* (New York 1959) - are disregarded.

The focus of the bibliography is on Anglo-American studies with an additional and - in view of the author's Indian origin - legitimate, though not obtrusive emphasis on South-Asian publications: The bibliography exploits, among others, the following periodicals: *Indian Librarian*, *Indian Librarian Movement* and *Singapore Libraries*. German and French studies are missing. This neglect affects even fundamental works and state-of-the-art reports such as Haller, K.: *Katalogkunde. Formalkataloge und formale Ordnungsmethoden*. Munich, New York, London, Paris 1980 and Burkart, M., Wersig, G.: *Die Nutzung der DK in der Bundesrepublik Deutschland und Österreich. Ergebnisse einer Umfrage im Sommer 1981*. Berlin 1982.

The bulk of the bibliography is made up of periodical articles, among them many trivial, some letters to the editor, announcements, notes, and a lot of highly specialized publications (e.g., Harris, G.: *Classifying theology in Uganda*. In: *Librarians Christian Fellowship Newsletter* 25(Winter 1983)p.26-27: Supplement, 2). Occasionally monographs and booklets are neglected, while less lengthy periodical contributions are included

with utmost generosity. An example from the topic "subject headings": While the bibliography mentions Moll, W.: The classified and alphabetical subject heading index to the catalog-class medicine, pharmacy of the subject catalogue. In: Bulletin of the Medical Library Association 50 (January 1962) p.67-68, it excludes Haykin, D.J.: Subject headings, a practical guide. Washington 1951.

There are neither reviews in Kapur's bibliography (a legitimate exclusion) nor contributions to encyclopedic reference works (e.g., Daily, J.E.: Descriptive cataloguing. In: Encyclopedia of library and information science. Vol.7. New York 1972, p.17-31).

In its classificatory section the bibliography covers almost exclusively works of library classification; publications dealing with classification systems used outside of librarianship, for example, specialized classifications and thesauri (e.g., Voegelin, C.F., Voegelin, F.M.: Classification and index of the world's languages. New York, Oxford 1977) – works recorded, e.g., in Ingetraut Dahlberg's International Classification and Indexing Bibliography. ICIB I: Classification systems and thesauri, 1950–1982. Frankfurt 1982 – are, as a rule, omitted.

We now have to point out the central irony of the book: A bibliography on classification and cataloguing, of all reference books, is lacking in logical order, classificatory elegance and sophistication, even syndetic striving. Thus, the primary division of the book into "classification" and "cataloguing" (the publications on "subject approach", p.321-334, are also assigned to the latter part of the book) is dubious. Here, the dichotomy 'subject approach' vs. 'author/title approach' would have been more appropriate. The further division of the bibliography, whose parts, by the way, are never interconnected through cross-references, is often ruled by rather meaningless form headings. So we find – in alphabetical order – headings such as "report", "review", "survey", subdivisions which, moreover, in most cases are merely keyword-based: "preview and report" (852), "report of a visit" (857), "report of a pilot project" (858) "final report" (861). There is such a predominance of unjustified form subdivisions that, for example, a bibliography on the "Library of Congress Classification" (127) is not entered in the section on the "Library of Congress Classification", but is assigned to the heading "Classificatio (General) – Bibliography". Besides, there are rather inefficient collective headings, such as "Problems and Prospects" (p.177). The heading "Future", which appears quite frequently, does not make sense in a retrospective bibliography; thus, an article published in 1963 is placed within a section titled "Future developments" (217). A strict and proverbially arbitrary alphabetical order separates "Dewey Decimal Classification" (p.59-80) from the related "Universal Decimal Classification" (p.91-101); in between there are manifold classifications as diverse as "Dickinson Classification", "Faceted Classification", "Nippon Decimal Classification" and "Rider's International Classification". A division according to precisely formulated topical headings (e.g., types of libraries, subjects) would have been far more user-friendly. Because of a considerable amount of titles dealing with classification and cataloguing in individual countries a further di-

vision according to regional aspects would have been helpful. Some assignments are rather arbitrary; M.H. Downing's Introduction to cataloguing and classification (140), for example, is entered in the section "Classification", it might just as well have been assigned to the "Cataloguing" section.

The bibliography is lacking in editorial care and consistency of bibliographical description. There are many misprints and oversights (e.g., "microfiche" instead of "microfiche", 2096), mistakes of syllabification, instances of wrong usage of small initial letters (e.g., "norwegian", Suppl., 321), misspellings of proper names, especially geographica (e.g., "Pennsylvaniana" instead of "Pennsylvania", 2593), omissions of diacritics (e.g., "Ohman" instead of "Öhman", 1092) and insufficient demarcations between the main title and the subtitle (Entry Suppl. 275, e.g., has "Descriptive cataloguing a selected, annotated bibliography" instead of "Descriptive cataloguing. A selected . . ." or "Descriptive cataloguing: a selected . . ."). Editors of collections are not credited as such (Entry 170, e.g., has "Maltby, Arthur" instead of "Maltby, Arthur, ed."). Besides, the compiler of the bibliography did not recognize that entry 57 in the supplement is a duplicate of entry 54.

Since the structure and organization of the bibliography do not afford a prompt and efficient retrieval, since the table of contents (p.IX-XV) is of no real help (in most cases the author's wish, "that the reader . . . can readily retrieve those books and articles pertaining to particular information of individual interest", p.VI-VII, will be hard to realize), there is urgent need of detailed subject index. Unfortunately the user is denied both a subject index and a corporate author index which would be useful in searching out anonymous writings issued by institutions such as ALA or FID.

The author index (p.341-64) offers few retrieval facilities. Only the first author of a publication is given an index entry, co-authors and editors are not recorded. The index is also not devoid of blemishes: "Abdul Huq" precedes "Abdul" (p.341); the heading "Domanovszky" has a false reference: 379 instead of 3798. Sometimes index and bibliography are not brought into line (e.g., "Hofner, J.L.", bibliography, entry 2241, vs. "Horner, J.L.", Index, p.351).

As Kapur's bibliography, truly an industrious compilation, records many remote articles and writings otherwise hard to pinpoint, it cannot be denied a considerable wealth of information. And yet, for reasons as mentioned above – especially insufficient structure, inadequate division, unsophisticated classification, implausible criteria of inclusion and editorial carelessness – this bibliography can only be accepted with substantial reservation.

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**Note:**

- 1 Miksa, F.: The subject in the dictionary catalog from Cutter to the present. Chicago: ALA, 1983, p.464, note 13.

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