

## 0 Form Divisions

### 01 Bibliographies

4734 **Bibliographic Bulletin of the Clearinghouse at IINTE 1977.** Warsaw: IINTE 1978. = Supplement 1977  
Publication of the holdings and bibliographic data of the Clearinghouse including thesauri, descriptor, keyword and subject-heading lists and other tools for the construction of thesauri and classification schedules. This Bulletin was prepared with the cooperation of the Faculty of Library Science, University of Toronto. It contains an author/editor index and a subject index. (Address of IINTE: Al. Niepodleglosci 188, Warszawa, Poland).

### 02 Literature Reviews

4735 Kovar, B.: **The subject arrangement of information between yesterday and tomorrow.** (In Slovakian). In: Ctenar (Supplements) 28 (1976) No. 10 and 20 (1978) No. 3, 70 p., 226 refs.  
Survey on the main topics of classification as well as on the major classification systems.

4736 Kravčenko, N. D.: **Aspects of linguistic support for conversational IR systems operating in the network mode — a survey of domestic and international materials.** (In Russian). Paper presented at Nauč. Seminar Otd. IPS VINITI. Moskva 1978. 46 p., 34 refs. (Typescript No. 2139-78)

Psychological aspects of man-machine interaction are touched upon, among them the user reaction to the system response time, the user preference for interrogation languages structurally akin to natural language, the need for automatic indexing procedures, the use of standard text processing procedures as the basis for linguistic support to a network of computer-based STD centres, the development of convenient and efficient teaching programs which also operate on-line. (Author)

### 03 Dictionaries, Terminologies

4737 Kondakow, N. I.: **Wörterbuch der Logik.** (Dictionary of logic). (In German). Ed. by E. Albrecht and G. Asser. Leipzig: VEB Bibliographisches Institut 1978. 554 p., M 22.— Best.-Nr. 576 449 3  
Translation from the Russian of almost 3000 entries and their discussions.

4738 Judge, A. J. N.: **Network-related concepts: towards a vocabulary adapted to social complexity and progress.** Words for users, weavers, designers of open networks. In: Transnational Associations 31 (1979) No. 5, p. 185-192  
On the one side list of relevant terms grouped under 8 headings, on the other side definitions of 34 relevant terms.

4739 Nilsson, S., Muller, J.: **Recommended palynological terms and definitions.** In: Grana (Sweden) 17 (1978) No. 1, p. 55-58, 11 refs.  
The authors work in the Swedish Museum of Natural History, Stockholm 50, Sweden.

4740 Hideux, M.: **Critical comments on the terminology used in numerical taxonomic methods.** In: Grana (Swed-

en) 17 (1978) No. 3, p. 179-180, 14 refs.

Only a short time ago taxonomic methods have also been applied to problems in palynology and botany. The terms denoting such methods are pointed out.

4741 Nadeau, M., Levesque, D.: **L'enfance en difficulté.** (Terminology concerning the difficult child). In: Actual. terminol., Canada 12 (1979) No. 1, p. 1-7, 15 refs.  
English-French glossary with definitions and explanations in French of terms used in the field of the difficult child.

4742 Braun, E., Radermacher, H. (Eds.): **Wissenschaftstheoretisches Lexikon.** (Lexicon philosophy of science) (In German). Graz-Wien-Köln: Styria Verl. 1978. 713 p., DM 88,—  
77 authors have provided the articles to 250 entry-words in the field of philosophy (theory) of science.

4743 Schulze, H. H.: **Lexikon zur Datenverarbeitung.** Schwierige Begriffe einfach erklärt. (Lexicon concerning data processing). (In German). Reinbek: Rowohlt 1978. 259 p., DM 7.80

### 04 Classification Systems and Thesauri

4745 Kaufman, J.: **Recordings of non-western music: subject and added entry access.** Ann Arbor: Music Library Association 1977. 36 p. ISBN 0-914954-11-3  
Introductory essay and lists of a) subject headings used by the Library of Congress for recording of non-western music, b) Library of Congress Subject headings for ethnomusical recordings.

4746 Methodisches Zentrum für Wissenschaftliche Bibliotheken: **Bibliothekarisch-bibliographische Klassifikation.** Politische Parteien, Gesellschaftliche Organisationen. Textband 1, 2 + Registerband F 6/7 (LBC Political Parties, Social Organisations). Berlin: Meth. Zentr. f. wiss. Bibl. 1977. (Bd. 1-3) 1109 S., M 98.50; = Tafeln für wissenschaftliche Bibliotheken, Bd. 16.

4747 Methodisches Zentrum für Wissenschaftliche Bibliotheken: **Bibliothekarisch-bibliographische Klassifikation.** Tafeln für wissenschaftliche Bibliotheken. Bd. 18: Militärwissenschaft, Militärwesen. (Library-bibliographical Classification. Schedules for scientific libraries. Vol. 18: Military science and military matters.) (In German — Translation from the Russian). Berlin: Meth. Zentr. f. wiss. Bibl. 1978. 516 p.  
Contains the main tables, auxiliary tables and an alphabetical index.

4748 Westby, B. M. (Ed.): **Sears List of Subject Headings.** 11th ed. New York: Wilson 1977. XLI, 617 p. ISBN 0-8242-0610-X

4749 Verein d. Bibliothekare an Öffentlichen Bibliotheken (Ed.): **Systematik für Bibliotheken (SfB)** Bisher SSH, Systematik der Stadtbibliothek Hannover. (Classification system for libraries). 2nd ed. Lfg. 1- (In German). München: K.G. Saur Verl. 1978-  
This first delivery contains the subject fields: Geography, ethnology, history, literature, education, philosophy. The second delivery contains medicine, psychology, language, technology and veterinary medicine.

4750 Arbeitsstelle für das Bibliothekswesen. Arbeitskreis "Kinder- und Jugendbibliotheken" (Compl): **Systematik für Kinder- und Jugendbibliotheken (SKJ)**. 2nd ed. (Classification system for children and youth libraries). (In German). München (etc.): K. G. Saur Verl. 1978. 20 p. ISBN 3-7940-5240-4

4751 Rahm, H. (Comp.): **Thesaurus Mathematik**. Alphabetischer Teil. In: DFW. Dokum. Inform. 26 (1978) No. 5, p. 211-217

The systematical part of this thesaurus for mathematics was published in the same journal 26 (1978) No. 3, p. 137-151. Here follows the alphabetical part.

4752 **INSPEC Thesaurus**. 1979 ed. Hitchin, Hertfords.: Institute of Electrical and Electronic Engineers 1979. £ 30.- (U.K.), \$ 70.- (USA), £ 35.- (rest)

The 1979 edition contains many new and up-dated entries.

4753 **INIS: Subject categories and scope descriptions**. Wien: International Atomic Energy Agency 1978. 738 p. = IAEA-INIS-3 (Rev. 5). ISBN 92-0-178678-6

4754 **INIS Thesaurus**. Wien: International Atomic Energy Agency 1979. 738 p. = IAEA-INIS 13 (Rev. 16) ISBN 92-0-178079-6

This 16th revision follows the 15th of 1978. Contains the list of eliminated and added descriptors.

4755 **Lexique U2: sciences de la terre**. (Lexicon U2: geosciences). (In French). Paris: CNRS. Centre de Documentation Scientifique et Technique 1979. 36 p.

Alphabetical descriptor list for indexing the documents of the PASCAL GEODE and the PASCAL files.

4756 **API Thesaurus**, 16th ed. Washington, D.C.: American Petroleum Institute 1979. II, 273 p.

The present edition of the thesaurus has a total of 5309 terms. The main part is arranged in alphabetical order. A new edition of the thesaurus is prepared every year.

4757 **ASM Thesaurus of Metallurgical Terms**. 3rd ed. Metals Park, Ohio: American Society for Metals 1979. 176 p.

The thesaurus comprises some 9000 main terms and some 70 000 cross references.

4758 **Lexique U8: métallurgie**. Paris: Centre National de la Recherche Scientifique. Centre de Documentation Scientifique et Technique 1979. 87 p.

Controlled descriptors list for the indexing of PASCAL entered documents in metallurgy.

4759 **Thesaurus of Aluminum Technology**. (A vocabulary of terms for the indexing and retrieval of literature dealing with aluminum technology.) Washington D.C.: The Aluminum Assoc. 1978. 163 p., App. (15 p.), Errata (21 p.)

4760 Commission of the European Communities: **Veterinary Multilingual Thesaurus** (Title also in German, French and Italian). 5 vols. München-New York-London-Paris: K.G. Saur Verl. 1979. 1 Deutsche Ausgabe 214 p., 2 English Edition 244 p., 3 Version française 218 p., Edizione italiana 204 p., 5 Quadrilingual index and microfiches.

The four versions have each an alphabetical main list of terms and several micro thesauri at the end. The hierarchical levels are indicated with the broader and narrower terms, e.g. BT1, BT2 etc.. The different language versions are brought together in the index which possesses 4 entry sorts according to one of the four languages. The microfiches show the same sorts in a different arrangement. There are 4922 descriptors in each language, however 2370 nondescriptors in German, 4190 in English, 2730 in French and 1830 in Italian.

4761 U. S. Department of Agriculture. National Agricultural Library (Ed.): **Agricultural Terms** as used in the Bibliography of Agriculture. 2nd ed. Phoenix: Oryx Press 1978. 122 p. \$ 15.35, ISBN 0-912700-45-9.

The more than 37 000 terms are derived directly from the terms used in the monthly subject indexes to the said Bibliography. All of the terms are fully cross-referenced, word variants are given as well.

4762 Commission of the European Communities: **Agricultural Economics and Rural Sociology. Multilingual Thesaurus**. (Title also in German, French and Italian.) 5 vols. München-New York-London-Paris: K. G. Saur Verlag 1979. 1 Deutsche Ausgabe 80 p., 2 English Edition 84 p., 3 Version française 84 p., 4 Edizione italiana 78 p., DM 200,-

The four versions have each an alphabetical main list of terms and several microthesauri at the end. The hierarchical levels are indicated with the broader and narrower terms, e.g. BT1, BT2, etc. The different language versions are brought together in the index which possesses 4 entry sorts according to one of the four languages. The microfiches show the same sorts in a different arrangement. There are 2 270 descriptors in each language, however the nondescriptors vary, namely 190 in German, 360 in English, 410 in French and 250 in Italian.

4763 Gnany, R.: **AGRIVOC: a selected list of FAO descriptors covered by AGRIS subject categories**. (English, French, Spanish) Roma: Food and Agricultural Organization 1978. 76 p.

4764 Commission of the European Communities: **Food. Multilingual Thesaurus**. (Title also in German, French and Italian) 5 vols. München-New York-London-Paris: K. G. Saur Verl. 1979. 1 Deutsche Ausgabe 128 p., 2 English Edition 145 p., 3 Version française 144 p., 4 Edizione Italiana 132 p., 5 Quadrilingual index and microfiches 168 p., DM 300,-

The four versions have each an alphabetical main list of terms and several micro thesauri at the end as e.g. for countries, food, industries, microorganisms etc. The hierarchical levels are expressed in addition to the indication of broader and narrower terms by adding level numbers as e.g. BT1, BT2 etc. The different language versions are brought together in the index which possesses 4 entry sorts according to one of the four languages. The microfiches show the same sorts in a different arrangement. There are 3 458 descriptors in each language, however, the number of the non-descriptors varies according to language: there are 1 170 in German, 2 130 in English, 1950 in French and 1 200 in Italian.

4765 Muench, E. V.: **Biomedical subject headings. A reconciliation of National Library of Medicine (MeSH) and Library of Congress subject headings**. 2nd ed. Hamden, Conn.: The Shoe String Press, Inc. 1979. 774 p., \$ 52.50; ISBN 0-208-01747-X

Correlation of MeSH and LCSH in the field of medicine by three different approaches: (1) Alphabetical list of MeSH with their correlates of LCSH, (2) Subheadings of MeSH with LC equivalents and (3) Alphabetical list of LCSH with the MeSH equivalents. To each of the MeSH the notation has been added in part (1). There is sometimes more than one notation. References have been included as well. The author stresses in his Foreword that it would be very valuable to establish a computer interface between these two controlled vocabularies. This could also add new dimensions to both lists.

4766 **Permuted medical subject headings 1978. (MeSH)**. Bethesda, Md.: National Library of Medicine 1978. 319 p. = PB 277 921; £ 14.70

4767 Deutsches Krankenhausinstitut eV (DKI); Institut für Krankenhausbau der TU Berlin (Ed.): **Thesaurus Krankenhauswesen** (Alphabetischer und Systematischer Teil). 4. verb. u. erw. Ausg. (Thesaurus for matters concerning hospitals). (in German). Berlin-Düsseldorf: DKI und I.f.K.d. TU Berlin 1978. VI, 192 p. DM 25,-

4768 **Tesoro de formación profesional**. (Thesaurus for vocational training). Montevideo, Uruguay: Centro Interamericano de Investigación y Documentación sobre Formación Profesional (CINTERFOR) 1979.

Descriptors in Spanish and English. They follow the plan of the ILO Thesaurus plan of classification.

4769 Bostwick, D.: A scheme of classification for careers-related information. Stourbridge: Institute of Careers Officers 1977. 16 p.; £ 1.50, ISBN 0-9030761-0

4770 ILO Thesaurus: labour, employment and training terminology. 2nd ed. (In English, French, Spanish). Geneva: International Labour Office 1978. 223 p. ISBN 92-2-001982-5

Main part in systematic and faceted arrangement (semantic groupings of descriptors), preceded by a listing of Subject Category Fields. KWOC-indexes for each of the languages mentioned with an index entry for every meaningful word. After each entry term the correct descriptor and the appropriate facet number are given.

4771 Emirkanian, O., Koch, I. (Comp.): Verzeichnis sportmedizinischer Schlagwörter (List of subjectheadings for sport medicine). Stand 1. 6. 1978 (In German). Köln: Bundesinstitut für Sportwissenschaft 1978. 94 p. List of 1700 descriptors in systematic and alphabetic arrangement.

4772 Vernon, K. D. C., Lang, V.: The London Classification of Business Studies: A classification and thesaurus for business libraries. 2nd ed. London: Aslib 1979. 253 p., ISBN 0-85142-124-5  
LCBS is the only classification scheme to have been compiled in this broad subject area since the second edition of the Harvard Classification of Business Studies was published in 1960. It differs from the Harvard Scheme in that it uses the principle of facet analysis as far as possible.

4773 Lexique U8: Sciences de l'ingénieur, métallurgie exclus. (Lexicon U8: engineering sciences without metallurgy). (In French). Paris: Centre National de la Recherche Scientifique. Centre de Documentation Scientifique et Technique 1979. 95 p.

4774 Arbeitskreis Merkmalverzeichnis: Merkmalverzeichnis für die Artikelbeschreibung. (List of characteristics for product description) (In German). St. Augustin: Bundesmaterialkatalogisierungszentrale 1979. 296 p., DM 16,50  
The team having elaborated this manual and the lists consisted of the following 9 persons: H. Bias, H. Brockmeyer, H. Gasthuber, O. Gekeler, H. Krist, H. Mehnen, B. Schaller, K. Schmidt, H. Solger. In the introductory part 1 the principles and aims for the description of products (articles) by characteristics are outlined. Pt. 2 is concerned with the "Uniform Cataloguing of Materials (products)", the guidelines for the descriptor (identification) and Pt. 3 contains a number of examples. Pt. 4 gives 3 different lists of characteristics in alphabetical and subject arrangement, one of them contains also the English and French equivalents to the German names of characteristics.

4775 Kerschberg, L., Klug, A., Tschritzis, D.: A taxonomy of data models. In: Systems for large data bases. Proc. 2nd International IFIP Conf. on very large data bases. Brussels, Belgium, Sept. 8-10, 1976. New York: Elsevier/North Holland 1976. p. 43-64  
A classification system for conceptual data models in 23 database systems.

4776 FID/Unesco Subject Descriptors to be used in ISORID (Translation into Farsi by M. H. Daneshi and A. H. Azarang) Tehran: Asian Cultural Documentation Center for Unesco 1978? 137 p.  
Terms in Farsi (Persian language) are listed with English equivalents and vice versa. The same for Farsi and French terms and French and English terms.

4777 Ordnungsmittel für das automatisierte Informations- und Dokumentationssystem AIDOS. (Classification/ordering aids for the automatic information and documentation system AIDOS) (In German). (Trilingual edition) Dresden: Kombinat Robotron, Leitstelle für Information, Dokumentation 1977. 204 p. (4 MF) = RKZ-A-3 ID 12761  
Scheme for the subject fields Data Processing and Office Technology in German, Russian and Bulgarian.

4778 Repro-Dok. Schlagwortverzeichnis. Stand: Jan. 1978 (List of descriptors for reprography documentation) (In German) Frankfurt: Arbeitsstelle für Reprrotechnik 1978. 32 p.  
There are about 600 concepts in the alphabetical list.

4779 Martin, E.; Trésor de la Langue Française, Service de Documentation: Le thésaurus de la linguistique française. In: Franç. mod., Nouv. Ser., Nancy (1975) No. 2, Suppl., 70 p.  
Alphabetical list of some 900 descriptors with relationship indications.

## 06 Conference Reports, Proceedings

4780 Neelameghan, A. (Ed.): Ordering systems for global information networks. Proceedings of the Third International Study Conference on Classification Research, held at Bombay, India, during 6-11 Jan. 1975. Bangalore, India: Documentation Research and Training Centre (DRTC), FID/CR and Sarada Ranganathan Endowment for Library Science 1979. 511 p., \$ 40.- (available at DRTC, 31 Church Street, Bangalore 560 001, India)  
Contains the six speeches of the Inaugural Session (by A. Neelameghan, R. Ramanna, A. Ramachandran, H. Arntz, E. de Grolier and S. Parthasarathy), the 54 papers presented or contributed, organized in three broad groups and the Concluding Session's Remarks and Recommendations. The last 30 pages give information on the conference organization and an outstanding index (10 pages) with relationship indications. The 54 papers are the following: 4781 Henriksen, T.: A linguistic description model for indexing languages. 4782 Montgomery, Ch.: Toward a natural language communications interface. 4783 Spang-Hanssen, H.: Are classification systems similar to natural languages? 4784 Diamessis, S. E.: A comparative linguistics approach to classification and information processing: a computer grammar for Indo-European machine translation-transliteration based on (Latin and) Greek. 4785 Lancaster, F. W.: Vocabulary control for on-line interactive retrieval systems: requirements and possible approaches. 4786 Dahlberg, I.: On the theory of the concept. 4787 Grolier, E. de: In search of an objective basis for the organization of knowledge. 4788 Beling, G.: Towards a set theoretical foundation of classification. 4789 Bhattacharyya, G.: Fundamentals of subject indexing languages. 4790 Cavalcanti, C. R.: Universal integrated media for information processing. 4791 Desai, A. R.: Theory of integrative levels, general systems theory, theory of classification, theory of evolution, and theory of pattern recognition (Abstract). 4792 Dhanpat Rai: The Universal Decimal Classification: an integrated information retrieval system (Abstract). 4793 Fugmann, R.: The glamour and the misery of the thesaurus approach (Abstract). 4794 Ghose, A., Dhawle, A. S.: Inter- and trans-disciplinary ordering system for universe of knowledge (Abstract). 4795 Gopinath, M. A., Seetharama, S.: Interdisciplinary subjects and their classification. 4796 Immoth, J. Ph.: A lexical essay towards the developments of the theory of indexes to classification schemes. 4797 Kochen, M.: Organizing knowledge for coping with needs. 4798 Kurbakov, K. I., Boldov, V. G.: Problem of compatibility of information classification systems and some probable methods of its solution. 4799 Leski, K.: The role of classification research in the development of methods and technologies of information processing (Abstract). 4800 Maixner, V.: Classification systems and retrieval languages. 4801 Meincke, P. P. M., Atherton, P.: Knowledge space: A conceptual basis for the organization of knowledge. 4802 Neelameghan, A.: Absolute syntax and structure of an indexing and switching language. 4803 Neill, S. D.: McLuhan and classification. 4804 Richmond, Ph. A., Williamson, N. J.: Three dimensional physical models in classification. 4805 Svenonius, E.: Translation between hierarchical structures: An exercise in abstract classification. 4806 Borko, H.: Changing roles of and developments in automated classification. 4807 Dreese, M. J.: Comparison of document retrieval using UDC-notation given by UDC-expert with catch-words taken from title by clerk, stored in computer memory. 4808 Garfield, E., Malin, M. V., Small, H.: A system for automatic classification of scientific literature (Abstract). 4809 Heaps, H. S., Leung, K. V.: Automatic document classification based on a theory of relevance. 4810 Krishnamurthy, E. V., Sankar, P., Krishnan, S.: Algorithmic

Wiswesser Line Notation (ALWIN) for organic compounds with cyclic structures. 4811 Helbich, J.: Experimental comparison of nine statistical procedures for measuring selective power of single words. 4812 Hersey, D. F., Foster, W. R., Payne, W. H., Hunt, B. L.: Toward a machine assisted indexing vocabulary for international use. Recent developments at the Smithsonian Science Information Exchange (SSIE). 4813 Hoyle, W. G.: A measure of overlap in classification systems. 4814 Kleszcz, F.: Method of information retrieval and subject index compilation for abstracting periodicals with the use of a thesaurus enlarged with machine part classification. 4815 Schneider, J. H.: AUTOCLASS: A computer system for facilitating the creation and updating of hierarchical classifications. 4816 Cooke, G. A., Heaps, D. M., Mercier, M.: Manipulation of machine-readable data bases for classification research: some Canadian experiences. 4817 Harris, B., Sinas, E., Laskowski, R.: Faceted information retrieval for linguistics (FIRL): Further developments. 4818 Janos, J.: Information systems with automated indexing based on the analysis of texts. 4819 Rigby, M.: Advances since Elsinore in the use of automated equipment for vocabulary, classification schedule and information or data control on a universal scale. 4820 Toman, J.: Trend of the future: two ordering systems used together? 4821 Toman, J., Lloyd, G. A.: Introduction to the Subject-field Reference Code (SRC) or Broad System of Ordering (BSO) for UNISIST purposes. 4822 Austin, D.: Differences between library classifications and machine-based subject retrieval systems; some inferences drawn from research in Britain, 1963-1973. 4823 Buntrock, H.: Problems and issues in agricultural classification and indexing systems. 4824 Giertz, L. M.: The STB-system: case study on an information system for global cooperation in the field of buildings construction. 4825 Jachowicz, R. L.: Application of classification as a basis for the formulation of thesaurus. 4826 Kofnovec, L., Simandl, D.: Quantitative structure of world scientific and technical literature and its use for optimizing general classifications. 4827 Rajan, T. N., Guha, B.: A comparative study of subject heading structuring according to POPSI and PRECIS. 4828 Rolling, L. N.: Computer management of multi-lingual thesauri. 4829 Scibor, E.: Indexing languages for future Polish national computer based information system. 4830 Sokolov, A. V.: Compound indexing languages. 4831 Vilenskaya, S. C.: Systems approach as a principle of thesaurus building on the basis of the subject headings language. 4832 Wahlin, E.: Special classification systems used together with a common reference system: the AR-Complex. 4833 Wersig, G.: Experiences in compatibility research in documentary languages. 4834 Wolff-Terroine, M.: A macrothesaurus. Why? How? 4835 Samuelson, K.: Information ordering in world-wide communication. 4836 Massil, S. W.: Design of systems for a regional information centre. 4837 Raghavendra Rao, M. K., Kamath, V. A.: INIS - a successful experiment in operating a decentralized computerbased, mission-oriented information system. 4838 Shepherd, M., Watters, C.: Hierarchical retrieval from structured text. - (The papers which have been published elsewhere in the meantime are included as 'Abstracts' in this volume.) There is an abstract to each paper on its first page. Discussions have not been included.

4839 Rahmstorf, G., Ferguson, M. (Eds.): **Proceedings of a Workshop on Natural Language for Interaction with Data Bases.** Laxenburg, Austria: International Institute for Applied Systems Analysis 1978. 297 p.

Collection of papers presented at the Workshop held at IIASA in Laxenburg, Jan. 10-14, 1977. It aimed at discussing the advantages and limitations of natural language as a man-machine communication tool. After an introduction by the editors the following 16 papers are presented: 4840 Krägeloh, K.-D.: Access to a data base system via natural language. 4841 King, M. et al: Catering for the experienced and the naive user. 4842 Lehmann, H.: The USL system for data analysis. 4843 Hendrix, G. G.: A natural language interface facility and its application to a IIASA data base. 4844 Briabrin, V., Senin, G.: Natural language processing within a restricted context. 4845 Stonebraker, M.: INGRES - a relational data base system. 4846 Berry-Rogghe, G. L., Wulz, H.: An overview of PLIDIS - a problem solving information system with German as query language. 4847 Szolovits, P., Hawkinson, L. B., Martin, W. A.: On overview of OWL, a language for knowledge representation. 4848 Lehmann, E.: Progress in the development of a multipurpose German language question-answering system. 4849 Rahmstorf, G.: Use of semantic net-

works for information retrieval. 4850 Tyugu, E.: Use of a problem solver for data base handling. 4851 Guckler, G.: A dictionary as a data base. 4852 Lau, G.: The role of prepositions in understanding relations. 4853 Bernorio, M. et al: A domain oriented natural language understanding (DONAU) system for man-machine interaction with dynamic data bases. 4854 Guida, G.: Ideas about the design of natural language interfaces to query systems. 4855 Stamper, R.: Two paradigms for natural language and data bases. - App.: The IIASA Energy Resources Sample Data Base. - List of participants.

4856 Schneider, W., Sagvall Hein, A. (Eds.): **International Federation for Information Processing (IFIP): Computational linguistics in medicine.** Proceedings, IFIP TC-4 Working Conference, Uppsala, 2-6 May 1977. Amsterdam: North Holland 1977. 193 p., 58 refs. ISBN 0-444-85040-6

The aim of this working conference was to study how and to what extent the application of methods from computational linguistics (CL) and artificial intelligence (AI) can contribute to the automatic processing of verbal medical information and to the modelling of medical knowledge and medical decision processes.

4857 **International Seminar on Intelligent Question-Answering and Data Base Systems.** Proceedings. Bonas, France, 21-30 June 1977. Le Chesnay: Institut de Recherche d'Informatique et d'Automatique 1978. 297 p., 297 refs. ISBN 2-7261-0152-6

The volume contains 23 invited papers and some contributed ones. They are divided into the three chapters: 1) Machine representation formalisms, 2) Answers to questions on the basis of previously entered data, 3) Systems using artificial intelligence.

4858 Junginger, F.: **Der Schlagwortkatalog als Sacherschließungsinstrument großer Universalbibliotheken.** (The subject-headings catalog - instrument for the subject access to large university libraries) (In German). In: *Z. f. Bibliothekswes. u. Bibliographie* 26 (1979) No. 2, p. 74-84

Report on the papers and results of a two-day seminar of some 32 experts on Nov. 14-15, 1978 in Munich. Papers were given by Mr. Hansis on PARTHES (Thesaurus for Parliamentary materials), R. Supper on PRECIS, C. G. Nowak on the AKD-Thesaurus for Public Libraries, I. Dahlberg on the Pilotstudy DB-Thesaurus (Th. for the German Library, Frankfurt/M.), Ms. Poll on the Subject-headings Catalog of the university library of Erlangen, Mr. Frankenberger on the Subject-headings Catalog of the newly founded Bavarian university libraries. F. Junginger had prepared a comparison of the most important subject-headings rules in German and had tried to present the common grounds as well as useful single solutions. This comparison (displayed in a matrix) was discussed. Here the results of these discussions are given. Concerning the resolution of this meeting see *Intern. Classificat.* 6 (1979) No. 1, p. 37.

4859 Dahlberg, I.: **Matter and methods of subject access to knowledge.** In: *Intern. Classificat.* 6 (1979) No. 2, p. 119

Report on the second seminar concerning classification and education, held at the Bibliothekar-Lehrinstitut, Köln, 28-29 March 1979, at which occasion 7 lectures were given mostly resulting from questionnaire evaluations on the "matter and methods" used for the teaching of classification at German Library and Documentation Schools.

4860 Dickson, A. J.: **Informatics 5 - "Analysis of Meaning".** In: *Intern. Classificat.* 6 (1979) No. 2, p. 118-119  
Report on the 5th Conference of the Aslib Co-ordinate Indexing Group (now Informatics Group), held in Oxford, March 21-23, 1979.

4861 **First International Conference on Terminological Data Banks.** In: *Intern. Classificat.* 6 (1979) No. 2, p. 122-123

Report on the conference, held in Vienna, April 2-3, 1979; more than 50 experts from 17 countries attended the meeting.

4862 Endres-Niggemeyer, B.: **Klassifikation und Er-**

kenntnis (Classification and Cognition). (In German). In: Nachr. Dok. 30 (1979) No. 3, p. 140—  
Report on the 3rd Annual Conference of the German Classification Society, 4–7 April 1979, Königstein.

4863 Dahlberg, I. (and Dahlberg, W.) (Ed.): **Klassifikation und Erkenntnis. I.** (Classification and Cognition, Vol. I). Proceedings der Plenarvorträge u. d. Sekt. 1 "Klassifikation und Wissensgewinnung" der 3. Fachtagung der Ges. f. Klassifikation eV., Königstein/Ts., 5.–6. April 1979. Frankfurt: Gesellschaft für Klassifikation 1979. VIII, 216 p., DM 34,—; Studien zur Klassifikation, Bd. 4 (SK-4) ISBN 3-88283-004-2

Contains the following 9 papers and the reports and comments of the final session by (1) the session chairmen, (2) the chairmen of the SIGs in action and (3) by P. N. Kaula, F. Lang, H. Arntz and I. Dahlberg. — 4864 Scheele, M.: Der Mensch als Voraussetzung und als Ziel der Klassifikationsforschung. 4865 Judge, A. J. N.: Representation of sets: the role of number. 4866 Dahlberg, W.: Zur Geometrie der Grundbegriffe. 4867 Mertens, P.: Die Theorie der Mustererkennung in den Wirtschaftswissenschaften. 4868 Hansert, E.: Die Statistik als Methodik zur Konstruktion von Wissen. 4869 Schwendtko, A.: Wissenschaftssystematik und Scientometrie. 4870 Henrichs, N.: Gegenstandstheoretische Grundlagen der Bibliotheksklassifikation? 4871 Fugmann, R., Winter, J. H.: Durch mechanisierte Klassifikation zum Analogieschluß. 4872 Greiter, F., Guttman, G., Oeser, E.: Die Rolle der Klassifikation bei der Entwicklung und Bewertung neuer Produkte. — List of participants.

4873 Dahlberg, W. (Ed.): **Klassifikation und Erkenntnis. II.** (Classification and Cognition, Vol. II). Proceedings d. Sekt. 2 und 3 „Wissensdarstellung und Wissensvermittlung“ d. 3. Fachtagung d. Ges. f. Klassifikation eV., Königstein/Ts., 5.–6. April 1979. Frankfurt: Gesellschaft für Klassifikation 1979. VIII, 232 p. DM 34,— = Studien zur Klassifikation, Bd. 5 (SK-5) ISBN 3-88283-005-0

Contains the 6 papers of the topic "Classification and Knowledge Representation" and the 6 ones of the topic "Classification and Knowledge Mediation" with discussions. 4874 Sechser, O.: Modi der Bedeutung von Elementarausdrücken in Retrieval-Sprachen. 4875 Bechtel, H.: Vorweggenommene Postkoordination zur Minderung des Problems der variablen Wortbedeutung in kontextfreien Dokumentationssprachen. 4876 Mlitzke, E.: Zur Klassifikation von Aussagen. 4877 Svenonius, E.: Facets as semantic categories. 4878 Kaula, P. N.: Canons in analytic-synthetic classification. 4879 Henzler, R. G.: Modelle und Methoden der maschinellen Thesaurusentwicklung. 4880 Rahmsdorf, G.: Sprachlicher Ausdruck für spezifische Begriffe. 4881 Hözl, J.: Name und Benennung in der Warenklassifikation. 4882 Vasarhelyi, P.: Implications of the INTERCONCEPT Project for classification and indexing. 4883 Karlgren, H.: How to handle vagueness. 4884 Petöfi, J. S.: Explikationen in umgangssprachlichen und fachsprachlichen Wörterbüchern. 4885 Bivins, K.: Frame searching and indexing languages.

4886 Bock, H. H. (Ed.): **Klassifikation und Erkenntnis. III: Numerische Klassifikation** (Classification and Cognition, Vol. III: Numerical Classification). Vorträge und Diskussionen zur Numerischen Klassifikation bei der 3. Fachtagung der Ges. f. Klassifikation eV., Königstein/Ts., 4.–6. April 1979. Frankfurt: Gesellschaft für Klassifikation 1979. X, 174 p. DM 30.— = Studien zur Klassifikation, Bd. 6 (SK-6) ISBN 3-88283-006-0

Contains the 10 papers (with discussions) on numerical classification methods (cluster analysis, numerical taxonomy) presented during the 3rd Annual Conference of the German Classification Society and a working session of the Special Interest Group on "Numerical Classification". 4887 Diday, E.: Problems of clustering and recent advances. 4888 Opitz, O.: Neuere Entwicklungen zur Taxonomie mit qualitativen Daten. 4889 Degens, P. O.: Konsistenzforderung für die automatische Klassifikation. 4890 Barreiter, M.: Experimente zum Schnittverfahren Cluster-Algorithmus. 4891 Bollmann, P.: Beschreibung des Koeffizienten von Jaccard durch Transformationen. 4892 Schaller, K.: Eine Methodenbank zur Clusteranalyse. 4893 Nollau, H. G.: Ein Verfahren zur automatischen Klassifikation. 4894 Ihm, P.: Numerische Klassifikation und Distanzgeometrie. 4895 Schader, M.: Ein Austauschverfahren zur Klassifikation qualitativer Da-

ten. 4896 Bock, H. H.: Clusteranalyse mit unscharfen Partitionen. — Concludingly a summarizing report on the Session 4 of the 3rd Annual Conference is given by W. Sodeur and also a report on the activities of the SIG Numerical Classification by H. H. Bock.

## 07 Textbooks

4897 Farradane, J.: Book review of Maltby, A. (Ed.): **Classification in the 1970s: a second look.** London 1976. In: *Libr. Quarterly* 47 (1977) No. 3, p. 484–485

4898 Haake, R., Koblitz, J., Nestler, F., Schmolli, G. (Eds.): **Handbuch der Information und Dokumentation.** 2nd ed. Leipzig: VEB Bibliographisches Institut 1979. (here p. 104–136)

The entire chapter 5 of this handbook on information and documentation is devoted to classification and indexing. It contains definitions, description of an information retrieval language in general, of classification systems, descriptor lists and indexing by subject headings, thesauri and coordinate indexing and special indexing forms.

4899 Herdman, M. M.: **Classification: an introductory manual.** Rev. by J. Osborn. 3rd ed. Chicago: American Library Association 1978. 44 p.

Informs among other also on the Dewey Decimal Classification (p. 12–18), the Library of Congress Classification (p. 18–22), the Universal Decimal Classification (p. 22–26) and the Colon Classification, (p. 25–28).

4900 Horváth, T.; Vargha, D.: **Information thesauri.** (In Hungarian). Budapest: Országos Széchényi Könyvtár Könyvtártudományi és Módszertani Központ. 1977. 80 p. Manual throwing light on the theoretical bases of thesauri and offering practical assistance to those which have to prepare thesauri.

4901 Knight, G. N.: **Indexing, the art of.** A guide to the indexing of books and periodicals. London: George Allen & Unwin 1979. 218 p. ISBN 0-04-029002-6

Foreword by H. Macmillan. Contents: Introductory. Thematics. Headings and subheadings. Proper name headings. Subject headings. References and cross-references. Alphabetical arrangement. The indexing of periodicals. Newspaper indexing. Cumulative indexing. Editing the index. The correction of proofs. Humour in indexing. — App.: 4902 J. A. Gordon: The Society of Indexers. 4903 Greengrass, A. R.: The American Society of Indexers. 4904 Garrow, C., Hagger, J.: The Australian Society of Indexers. 4905 Greig, P. E.: The Indexing and Abstracting Society of Canada. 4906 Bakewell, K. G. B.: The Wheatley Medal. 4907 Bakewell, K. G. B.: The Carey Award. — Index.

## 08 Other Monographs

4908 Daily, J. E.: Book review of Langridge, D. W.: **Classification and indexing in the humanities.** Boston and London 1976. In: *Libr. Quarterly* 47 (1977) No. 3, p. 486–487

4909 Foskett, A. C.: Book review of Comaromi, J. Ph.: **The Eighteen Editions of the Dewey Decimal Classification.** Albany, N. Y. 1976. In: *Libr. Quarterly* 47 (1977) No. 3, p. 481–482

4910 Gasthuber, H.: Book review of **Kooperation in der Klassifikation.** Vols. I and II. (In German). In: *Forum Ware* 7 (1979) No. 1–2, p. 123–125

## 09 Standards, guidelines

4911 **Standards for the editor, publisher, librarian and information scientist.** London: British Standards Institution 1978. 10 p.

This list contains also complete information on the BS 1000 "Universal Decimal Classification", full and abridged editions in English.

4912 Deutsches Institut für Normung, Normenausschuß Bibliotheks- und Dokumentationswesen (NABD): DIN 3166. Länderzeichen. (Country Codes). (In German). Berlin: Beuth-Verl. 1978. 17 p.

The German country codes correspond to the international standard ISO 3166. There are two and three-letter codes for countries, dependent territories and other territories as well as rules for adaptation in case of future developments. It is recommended to use the two-letter code.

## 1 Theoretical Foundations of Classification

### 11 General Theory of Order

4913 Dahlberg, W.: Towards a geometry of basic concepts. In: Intern. Classificat. 6 (1979) No. 2 p. 73–84, 12 refs.

The essential pillars of man's thinking and knowing are the basic concepts which structure all his knowledge so far attained and his future knowledge. It is, however, only with great difficulty that these basic concepts can be made accessible for everyone through conceptual clarification, definition and classification. Here, geometrical forms and shapes are used as instruments for a proper representation of interrelationships of such concepts. This approach is supported by a fourfold way of reasoning concerning (1) basic questions of structuralization, (2) the problem of definition and defining, (3) the question of cognition and the standpoints of attaining cognitive knowledge and (4) the problem of classification of such concepts. The figures, tables and charts added display the methods applied as well as the concepts clarified in this way. The Epilog summarizes the four approaches and shows their practical implications.

4914 Perreault, J. M.: The idea of order in bibliography. Bangalore: Sarada Ranganathan Endowment for Library Science 1978. IX, 135 p. = Sarada Ranganathan Endowment for Library Science Series 9.

After an introduction on J. M. Perreault the 6 lectures are given held in Dec. 1975 at DRTC on the following topics: (1) The need for predictability and its fulfilment in order. (2) Order and the structuredness of truth. (3) Disorder, meaning and rules. (4) The structure of bibliographical files. (5) The structure of bibliographic entries. (6) Cataloging codes and coterminity. – There are references and notes to each chapter and an index to the whole book.

4915 Rescher, N.: Cognitive systematization. A systems-theoretic approach to a coherentist theory of knowledge. Oxford: Basil Blackwell 1979. 211 p., L 9.50 ISBN 0-631-19030-9

The aim of the book is to explore the range of issues relating to cognitive systematization posed by the following group of questions: Why is it important that we should develop our knowledge about the world systematically – what is the point of systematization in the cognitive domain? How does cognitive systematization aid in the pursuit of truth? What are the major modes and methods of cognitive systematization? What considerations legitimate the principles and procedures of cognitive systematization? Does the systematicity of our knowledge have an ontological basis or is it purely an epistemological issue? (From the jacket-text)

### 12 Conceptual Basis of Classification

See also 4737, 4742, 4786, 4801, 4866, 5053

4917 Krymskij, S. B.: Knowledge systems and the problem of their categorial determination. (In Russian). In: Logico-filosof. analiz. ponjatijnogo apparata nauki, Kiev 1977. p. 196–225, 27 refs.

Categories are understood as forms of understanding, conceptual frameworks for the formulation of cognitive problems, and forms of synthesising and analyzing the objective content of knowledge. Categories represent the means for patterning the developing knowledge according to the lines of theoretical systems.

4918 Lednikov, E. E.: Modal concepts in the language of science. (In Russian). In: Logico-filosof. analiz. ponjatijnogo apparata nauki. Kiev: 1977. p. 31–36, 26 refs. It is assumed that modal concepts can be used for reasoning in the non-mathematical sciences, thus supplementing the classical formal-logical apparatus and adjusting it for these sciences.

4919 Popovič, M. V. (Ed.): Logico-philosophical analysis of science's conceptual apparatus. (In Russian) Kiev: Nauk. Dumka 1977. 226 p. Collection of papers.

4920 Riggs, F. W.: Book review on N. Bolton: Concept formation. Oxford 1977. In: Intern. Classificat. 6 (1979) No. 2, p. 125–127

4921 Sanko, M. E.: Conceptual schemas, abstract data structures enterprise descriptions. In: Proc. Intern. Comp. Symp. 1977. Liege, Belgium, April 4–7, 1977. New York: Elsevier/North-Holland 1977. p. 85–102

This paper relates recent work on conceptual schemas in the database area to work on abstract data types in computer science. It then suggests that a "real world association between two objects" be used to compare data models. An improved conceptual schema level for DIAM II is used as an example of this approach. This level is compared in detail with other proposed models for the conceptual schema. (Author)

4922 Weinberger, Ch., Weinberger, O.: Logik, Semantik und Hermeneutik. Eine Einführung (In German) München: C. H. Beck'sche Verlagsbuchhandlung 1979. 231 p. ISBN 3-406-04049-7

Introduction into the basic concepts of logic, theory of linguistics and hermeneutics. Not only the logic of descriptive language is treated but also the logic of prescriptive language. In addition definition theory and questions of hermeneutics, especially juridical hermeneutics are ventilated.

### 13 Mathematics of Classification

See also 4788, 4813, 4826, 4865, 4868

### 14 Systemology and classification

See also 4915

4923 Judge, A. J. N.: Tensed networks. Balancing and focusing network dynamics in response to networking diseases. In: Transnational Assoc. 30 (1978) No. 11, p. 480–483, 8 refs.

Examination of some of the assumptions underlying the enthusiasms of networks and their operation in practice. In an annex "Clues to tensing organizational networks" are given. "Summary of symmetrical 2 and 3-dimensional forms" – without and with tension elements (p. 484–485).

4924 Judge, A. J. N.: Networking diseases. In: Transnational Assoc. 30 (1978) No. 11, p. 486–490, 5 refs.

"Speculations towards the development of cures and preventive measures" of systems and networks using the parallelism of human diseases and their relations to the organismic system. "To the extent that there is even a faint parallel between the human body and a social organization . . . such a classification (namely the one of the World Health Organization) can then be used to provide suggestive pointers to the kinds of things which may go wrong with networks of individuals or groups."

4925 Judge, A. J. N.: Book review of J. Gall: Systemantics; how systems work . . . and especially how they fail. New York, Pocket Books 1978. In: Transnational Assoc. 30 (1978) No. 11, p. 491–496, 7 + 2 refs.

Presentation and comment of Gall's 32 Basic Systems Axioms which are full of a hidden humour. "The book is fun but also challenging to the reader who is constantly faced with the question "just how true is this in fact?" (e.g. Axiom 1: Systems in general work poorly or not at all . . . . Axiom 6: Complex systems tend to oppose their own proper function . . .)

## 16 Development of Science and Classification

See also 4868, 4869, 4872

4926 Bauer, G.: **Rationalisierung der Wissenschaftsprognose durch Anwendung von Thesauren und thesaurusartigen Hilfsmitteln.** (The rationalization of science prognosis by means of thesauri and thesaurus-type media.) (In German). In: *Informatik* 26 (1979) No. 1, p. 29–33, 20 refs.

Proposal to use graphic means in addition to other prognosis methods for a semantic representation of the concepts of a field showing also the changes in the semantic structures during the processing of information, the polyhierarchical and multidimensional state of the fields of knowledge as well as the psychologically oriented information processing. Main application fields are prognoses in interdisciplinary sciences.

## 17 Classification Problems

See also 4797, 4820, 4826, 4863, 4864, 4882, 4883

4927 Judge, A. J. N.: **Information mapping for development.** In: *Transnational Associations* 31 (1979) No. 5, p. 185–192. 43 refs. (with notes)

Report on a preliminary investigation into the problems of mapping satisfactorily for policy purposes the domains of science and technology as applied to development. The problem is treated under the following aspects: Quantitative, Logical (classification), Operational (organizations), Comprehensibility, Behavioural, "Mythical" and aspects of Ignorance and lack of systematically ordered information on scientific disciplines, development processes, technologies and applications processes.

4928 Leonov, V. P.: **On the concept of automated encyclopedia.** In: *Intern. Forum on Inform. & Doc.* 4 (1979) No. 1, p. 6–11, 1 fig., 31 refs., 1 Appendix (A fragment from the Encyclopaedic File Index.)

Discusses various projects aimed at organization of the storage and utilisation of scientific and technical literature on a worldwide scale. Analyses experiments in creating encyclopedic stores of knowledge, and advances a concept for the first line of an automated encyclopedia, i. e. a documentary-and-factographic information retrieval system occupying an intermediary position between contemporary information retrieval systems and logical information systems. Stages in textual analysis are described, with their subsequent translation into the language of propositions.

(Author)

4929 Pound, M.: **Cataloging and classification.** In: *American Library Association (ALA) Yearbook* 1978. p. 82–84

4930 Smith, L. S.: **To classify or not to classify.** In: *Serials Librarian* 2(1978) No. 4, p. 371–385, 15 refs.

The author advocates full classifications of serials for a number of reasons: (a) materials on the same subject are kept together, (b) fuller use of the serials collection is ensured, (c) reference work with serials is enhanced, (d) aids can be produced for periodical selection, (e) reshelving is facilitated, and (g) overcrowding in the subject catalogue can be alleviated. Classification gives serials the place of importance they deserve. (Author abbr.)

## 18 Classification Research

See also 4780, 4799, 4898

4931 Berrisford, P. D.: **Year's work in cataloging and classification, 1977.** In: *Libr. Resources & Techn. Services* 22 (1978) p. 227–262

4932 Maron, M. E. (Issue Editor): **Theory and foundations of information retrieval.** In: *Drexel Library Quarterly* 14 (1978) No. 2, p. 1–107

In his introductory remarks the editor states that the field of information retrieval "has lacked theory and foundations", but this issue indicates that "the situation is changing". The following articles review conceptions and methods, theories and procedures. 4933 Wilson, P.: Some fundamental concepts of infor-

mation retrieval (p. 10–24, 10 refs.) 4934 Cooper, W. S.: A perspective on the measurement of retrieval effectiveness. (p. 25–39, 9 refs.) 4935 Robertson, St. E.: Indexing theory and retrieval effectiveness. (p. 40–56, 12 refs.) 4936 Harter, St. P.: Statistical approaches to automatic indexing. (p. 57–74, 29 refs.) 4937 Rijsbergen, C. J. van: Automatic classification in information retrieval. (p. 75–89, 12 refs.) 4938 Kuhns, J. L.: Data retrieval and relational logic. (p. 90–105, 13 refs.)

## 19 History of Classification

See also 4990, 4992, 5016, 5090, 5092, 5097, 5099

## 2 Structure & Construction of CS

### 21 General Questions of Structure

See also 4781, 4783, 4789, 4793, 4794, 4800, 4822, 4830, 4832, 4878, 4900

4939 Delgado, R. R.: **Teoria de sistemas y tesauros facetados.** (Systems theory and faceted thesauri) (In Spanish). In: *Rev. esp. Doc. Cient.* 1 (1978) No. 3, p. 213–224, 17 refs.

If scientific ideas are arranged according to general systems theory, the rather ambiguous concept of 'facet' can be considered as 'criterion for classification'. These criteria can facilitate information processing and retrieval. The paper contains three brief examples of this approach in relation to physics, biology and economic sciences. (Author)

4940 Zechendorf, B.: **Zur Theorie der Klassifikations-systeme.** (On classification system's theory). (In German). In: *Nachr. Dok.* 29 (1978) No. 6, p. 246–248

Attempt at a derivative representation of classification concepts and principles.

### 22 Elements and Special Structures of CS

See also 4785, 4811, 4817, 4858, 4872, 4875, 4877, 4880, 4881, 5101

4941 Mazur, Z.: **Properties of a model of information retrieval system based on thesaurus with weights.** In: *Inform. Proc. & Management* 15 (1979) No. 3, p. 145–154, 3 refs.

This paper describes a model of information retrieval system based on thesaurus with weights. Definitions of the following terms: thesaurus, document description, information query, similarity of queries and descriptions of documents, similarity measure and accuracy of response are given. Inclusiveness and two other fundamental properties of the considered system are given. (Author)

4942 McRee, E. J.: **Choice of subject headings.** 2nd ed. London: Scarecrow 1978, 49 p. = *Modern Library Practices Series*, No. 5. ISBN 0-8108-1087-5

4943 Risko, A.: **Lexical and semantic problems of subject catalogues.** (In Czech). In: *Knižničný Zborník* (1977) p. 86–105, refs.

Discussion of terminological and conceptual patterns of subject headings, especially also the structure of a subject heading, its lexical-semantic pattern and dimensions. Conclusion with an attempt to characterize the individual steps in the formation of a subject heading, and a look at possible future developments. (Author, abbr.)

4944 Walker, P.: **A rationale for the use of split files for subject headings.** In: *Libr. Resources & Techn. Services* 22 (1978) No. 2, p. 154–157, 4 refs.

Based on the assertion that the point of view of subject headings should be descriptive rather than prescriptive, a logical rationale for split files for subject headings is presented. It is asserted that

the use of split files will help to remove some of the controversies relating to headings for races and other groups of persons. (Author)

### 23 Construction of CS

See also 4815, 4825, 4831, 4829, 4979, 4985, 5023-5025, 5031

4945 Bargielski, M., Zychowski, P.: **Essay on the formalization of the elaboration of hierarchical vocabularies.** (In Polish). In: *Aktual. Probl. Inform. Dokument.* 23 (1978) No. 3, p. 30-32, 3 refs.

4946 Barykina, A. I., Roščina, M. G., Chavina, G. N.: **A method for construction of a MIS user vocabulary.** (In Russian). In: *Tr. BNII Gos. Patent. Ekspertizy* (1978) No. 9, p. 125-129 (Rasd. 1-2), 2 refs.

4947 Braun, S.: **Linguistically based methods for indexing and thesaurus construction in information systems.** In: Madey, J. (Ed.): *Selected topics in information processing. IFIP-INFOPOL-76. Proceedings.* Warsaw, 22-27 March 1976. Amsterdam: North-Holland 1977. p. 187-203, 10 refs.

Improvements concerning the consequences of the three items following are discussed: a) inflected word forms must be reduced to standard forms, b) concepts represented by word groups rather than by single words must be identified, c) concepts may be used without explicit occurrence of a word or word group representing them.

4948 Eliseev, O. M., Novikova, L. S.: **Some linguistic problems arising at an early stage in the development of a problem-oriented information retrieval language** (In Russian). In: *Med. kibernet. i informatika na službe zdravoohr.* Riga 1978. p. 226-230

4949 Kobrin, R. Y.: **On principles of terminological work when creating thesauri for information retrieval systems.** (In Russian). In: *Naučno-techn. inform. Ser. 2* (1979) No. 6, p. 1-9, 28 refs.

The principles of forming a thesaurus' glossary are considered. The conception of «term model» - grammatical term structure - which shows the disposition and grammatical category of words covered by it and relations between these words is introduced. Language terms expressing basic concepts of subject domain and reproduced in real texts and speech terms, which are free terminological combinations of words; designating concrete concepts are distinguished. The models of grammatical structures are subdivided into two classes: a) models of language terms, b) models of speech terms. The class of grammatical language term models is determined by the structure and norms of the language, but not by extralinguistic factors; therefore this class should be the same for term systems in any branch of science and technology. (Author)

4950 Mahapatra, M.: **Design of special classification schedules based on the principles of Colon Classification (Edition 7)** In: *Libri* 29 (1979) No. 2, p. 169-188, 17 refs. Descriptive outline of how to proceed in establishing a special classification according to the concept-analytical work going with the establishment of the Colon Classification. I. Idea and verbal planes: Choice and study of the subject. Collection of isolates (personality, matter, energy-isolates). Recording, arrangement of isolates. Grouping of isolates. II. Notational plane: Allotment of sectors. Writing up the final schedule. Preparation of the index. Implementation.

4951 Miščenko, G. L., Šarova, A. V.: **Development of a reaction indexing language recognizing reaction frequencies.** (In Russian). In: *Naučno-techn. inform., Ser. 2* (1979) No. 4, p. 13-16, 6 refs.

The paper reports on the modification of an organic reaction indexing language using three-character terms which has been proposed for an integral information system in chemistry. The incidence rate of the reactions indexed by this language was computed in the 60.000-strong reaction file of the "Ftor" ("Fluorine") computer-based IR system. The incidence rate data were used to detail most of the language lexical units by which main

reaction types are indexed, namely, addition, elimination, oxidation, regeneration. It is demonstrated that the detailing of reaction types is achieved by in-depth indexing specifying changing bond kinds. (Author)

### 24 Relationships

See also 4852, 4876, 4938, 4975, 5034

4952 Mahapatra, M.: **Syntactical difference between POPSI and PRECIS.** In: *Libri* 28 (1978) No. 3, p. 235-245, 4 refs.

Comparison between POPSI (Postulate based Permuted Subject Indexing) and PRECIS (Preserved Context Indexing System) on the basis of format and structure of index entries and the grammatical rules of the systems. It concludes: "PRECIS solely depends upon the one-to-one relationships acted by Principle of Context Dependency and regulated by the various role operators, whereas POPSI is an improved version of chain procedure".

4953 Michell, B. G.: **Does PRECIS have feet of clay? Problems with the universality of the role operators.** In: *Proceedings of the 7th Canadian Conference on Information Science* 1979. p. 123-129

4954 Ščerbina-Samotlova, I. S., Zapol'skaya, T. I.: **The system of cross-references in an abstracting journal.** (In Russian). In: *Naučno-techn. inform. Ser. 1* (1978) No. 3, p. 24-28, 5 refs.

### 26 Notation, Codes

See also 5033, 5100

4955 Dromey, R. G.: **A simple tree-structured line formula notation for representing molecular topology.** In: *J. Chem. Inf. Comp. Sci.* 18 (1978) No. 4, p. 225-234, 9 refs.

Description of a new linear notation system which is usable for manual as well as for computer applications.

4956 Judge, A. J. N.: **Representation, comprehension and communication of sets: the role of number III (Sect. 9-11 and Annexes)** In: *Intern. Classificat.* 6 (1979) No. 2, p. 92-103, 142 refs. Part I in *Intern. Classificat.* 5 (1978) No. 3, p. 126-133; Part II in 6 (1979) No. 1, p. 15-25.

4957 Martin, W. J.: **A readable chemical notation.** In: *J. Chem. Inf. Comp. Sci.* 18 (1978) No. 4, p. 199-204. Description of a chemical notation system which permits direct conversion between name, notation, connectivity matrix and structural formula. It is readable either verbally as a group of symbols or as the name represented by the symbols.

### 28 Compatibility & Concordances of CS

See also 4790, 4798, 4833, 4997

4958 Dixon, J. E. G.: **Concordances KWIC and complete. An appraisal.** In: *Assoc. Lit. Linguist. Comp. Bull. ALLC-Bull.* (Stockport, GB) 6 (1978) No. 1, p. 28-33, 5 refs.

Examines the claims made for the merits of the KWIC concordance and the exhaustive concordance. The author draws the conclusion that the claims are not always justified, and that where they are, other ways of realizing the objectives sought may be preferable, since the disadvantages of these concordances outweigh the value of their distinctive features. The criteria of judgement applied to these, as to all concordances, are the principles of scholarship, and the essentially practical ones of usability, economics, and the user envisaged. (Author)

4959 Horsnell, V., Merrett, A.: **Intermediate lexicon research project: Phase 2: evaluation of the switching and retrieval performance of the Intermediate Lexicon for Information Science.** London: Polytechnic of North London School of Librarianship 1978. 100 p., £ 4. - CBLRDR 5442; ISBN 0-900639-11-3

## 29 Evaluation of CS

See also 4827, 4885, 4959

4961 Cejpek, J.: **From the thesaurus to full-text method.** (In Czech). In: *Československa inform.* 20 (1978) No. 9, p. 238–245, 7 refs.

Comparison between the fundamental operations regarding full-text method and thesaurus method and evaluation of their retrieval precision and completeness.

4962 Greaves, M. A.: **A comparative study of verbal subject data in information retrieval systems in education.** In: *Educ. Libr. Bull.* 21 (1978) No. 2, p. 1–19, 19 refs.

Examines the differences between terms used in the computerized education information retrieval systems operated by the British National Bibliography (PRECIS), Educational Resources Information Center, European Documentation and Information System for Education, and Unesco International Bureau of Education. The differences, those which appear to be arbitrary, those based on national differences, and those related to the operation of the retrieval system, are discussed. Differences in the application of the terms to documents are demonstrated. Summarizes problems which might arise in standardizing the terms in all the systems. Too rigid standardization might hinder progress in the development of more efficient subject access in education. (Author)

4963 Oehme, C.: **Untersuchung einiger Parameter für die Informationsspeicherung zur Erhöhung der Effektivität eines Informationsspeichersystems.** (Investigation into some parameters of information storage to increase the effectiveness of an information retrieval system) (In German). In: *Informatik* 25 (1978) No. 3, p. 38–40, 3 refs.

The parameters: frequency of selection from sources, frequency of descriptor use and information use were investigated and conclusions were drawn regarding the improvement of thesaurus- and indexing quality as well as the effectiveness and rationalization of information storage. (Author, transl.)

4964 Takano, F., Okano, H.: **Utilisation of thesauri and future problems.** (In Japanese). In: *Zyoho kanri* 20 (1978) No. 11, p. 875–893

On the basis of retrieval performance criteria the effectiveness of and typical mistakes in searching in the NASA thesaurus and in MEDLARS and EARS are discussed.

4965 Uspenskij, V. A., Solov'eva, A. A.: **Pre-input processing of medical radiology and roentgenology documents.** In: *Naučno-techn. inform., Ser. 2* (1979) No. 5, p. 17–18, 14 refs.

Different indexing methods for papers on medical radiology and roentgenology intended for the Disciplinary Automated Scientific Medical Information System were evaluated in quantitative terms. It has been found that title indexing leads to a loss of as many as 40 % of subheadings and nearly 50 % of descriptors compared to whole-text indexing. (Authors)

### 3 Classing and Indexing (Methodology)

#### 31 Theory of Classing and Indexing

See also 4901, 4935, 4947

4966 Fugmann, R.: **DIN 31 623 oder die Problematik des genormten Indexierens.** (Concerning the problematic of indexing standardization). (In German). In: *Intern. Classificat.* 6 (1979) No. 2, p. 109–115, 2 refs., Anhang p. 116–117

Critique of the German Draft Standard on "Indexing for subject access to documents" in two parts. Pt. 1 is concerned with relevant indexing concepts and criteria for indexing, Pt. 2 tries to submit rules for coordinate indexing with descriptors and criteria for concept delimitation by descriptors. The Critique treats (1) the peculiarities of controlled and free indexing and (2) the recommendations for the delimitation of concepts.

4967 Maron, M. E.: **Depth of Indexing.** In: *J. Amer. Soc. Inform. Sci.* 30 (1979) No. 4, p. 224–228, 8 refs.

For many years it has been believed that in order to design optimal document retrieval systems one must assign index terms to documents at their optimal depth; therefore, it was of primary importance to answer the following question: "What is the optimal depth of indexing?" This article offers an analysis and answer to this question. We show that the issue of depth of indexing is, in fact, not a central issue in the design of effective document retrieval systems. It turns out that the answer to the question about optimal depth is a logical consequence of answers (which this article provides) to more fundamental questions about indexing and retrieval. (Author)

#### 32 Subject Analysis

See also 4818, 4838, 4871

4968 Charpentier, C.: **Thematic analysis: a linguistic view of the methodological aspects of quantification.** In: *ALLC-Symposium (Oxford, GB)* 6 (1978) No. 1, p. 23–27, 27 refs.

We posit that all art is both vision and form and regard a work of art as made up of connotative networks; one or several themes constitute the largest part of the node in the writer's creation. A given theme is expressed through the means provided by language, particularly through words. We try to combine several methods (traditional, statistical, componential) and the approach is two-phased: induction, deduction. The statistical analysis leads to the componential which, in turn, leads to the study of metaphors. (Author)

4969 Frankenberger, R.: **Bibliothekarische Sacherschließung. Neue Aspekte für die Benutzer durch Einsatz der EDV und Rückwirkungen auf den Bibliotheksbetrieb.** (Subject analysis in libraries. New aspects for the user through computerization and feedback influences for the library management.) (In German). In: *Habermann, A. et al. (Ed.): Die wissenschaftliche Bibliothek 1977.* 67. Dt. Bibliothekstag, Bremen, 31. 5.–4. 6. 77. Frankfurt: Klostermann 1978. p. 202–209, 8 refs.

4970 Fugmann, R., Winter, J. H.: **Reverse retrieval: Toward analogy inferences by mechanized classification.** *Treatise VII on Retrieval System Theory.* In: *Intern. Classificat.* 6 (1979) No. 2, p. 85–91, 5 refs.

Whether or not an object of interest is an element of a class of objects on which important statements have already been made in the literature, can be recognized mechanically by the technique of "reverse retrieval". Thus, by way of analogy inference, statements on the object of interest can be reliably suggested by this technique and submitted for validity scrutiny. Reverse retrieval is an area of information supply which exhibits, as it were, mirror symmetry to the conventional retrieval technique and thus appears as its logical complement. In particular, the former promises to open up the book stocks of libraries just as effectively as conventional retrieval does in the case of data banks. On closer inspection, creative reflection would often turn out to be a variant of analogy inference and could thus be effectively supported by the reverse retrieval technique. (Authors)

4971 Gendina, N. I.: **The use of formal text attributes to identify aspects of document contents.** (In Russian). In: *Naučno-techn. inform., Ser. 2* (1979) No. 4, p. 7–12, 6 refs.

An approach to text analysis formalisation which reduces the influence of the subjective factor in abstracting is presented. Improvement possibilities are discussed for the aspect method of indexing through use of formal text attributes, viz. fixed phrases characterizing particular aspects of document contents. Results of analysis of 200 papers on informatics are presented – a list of identified aspects together with characteristic formal attributes. (Author)

4972 Lipski, W. Jr.: **On the logic of incomplete information.** In: *Gruska, J. (Ed.): Mathematical foundations of computer science. Proc. 6th Symp., Tatraska Lomnica, Poland, Sept. 5–9. 1977.* New York: Springer 1977. p. 374–381

In the context of information retrieval, problems related to information incompleteness were studied by Jaegermann and Lipski. These papers are an attempt to extend to the case of incomplete information the mathematical model of an information storage and retrieval system proposed by Marek and Pawlak. In the present paper we discuss two approaches to interpreting formulas of the Predicate Calculus in an incompletely specified model. These approaches were formulated (earlier) for formulas of a specific language tailored to express queries to an information and retrieval system (Author's Introd.)

4973 Sacco, W. J.: Interpretation of data through pattern recognition. In: *Codata Bull.* (1978) No. 29, p. 14–17, 34 refs.

The application for data handling is in the fields of biology and chemistry.

4974 Zimmermann, H.: *Automatische Textanalyse und Indexierung.* (Automatic text analysis and indexing) (In German). In: Krallmann, D. (Ed.): *Kolloquium zur Lage der Linguistischen Datenverarbeitung.* Essen, 22–24 Febr. 1978. Essen: LDV-Fittings 1978. p. 20–33, 5 refs. Report on the linguistic data processing activities at the university of Regensburg, including the syllabus for Linguistics and Information science, the services and the projects JUDO (model for a software system for the computer-aided indexing of legal documents) and ENZY (automatic data processing of encyclopedic dictionaries).

### 33 Classing and Indexing Techniques

See also 4858, 4974

4975 Chaumier, J., Fourteau, P.: *Le traitement des thésaurus a schemas fléchés par l'informatique graphique interactive.* (The treatment of arrow-graph thesauri by graphic interactive computer handling). (In French). In: *Documentaliste* 16 (1979) No. 1, p. 9–14, 3 refs. It is suggested to use the light-pen for indexing or indication of logical equations for retrieval when searching via the console instead of typing in the descriptors.

4976 Parker, I. M., Thorpet, P.: GRIP — a personal on-line indexing system using a minicomputer. In: *Program* 13 (1979) No. 1, p. 14–22

4977 Ramirez San Martin, J. A.: *The KWIT (Keyword-in-Title) selective permuted indexing system using weights for the listing of scientific and technical material.* (In Spanish). In: *Rev. Espanola de Documentacion Cientifica* 1 (1978) No. 2, p. 149–157

KWIT is a form of KWIC and a compromise between specific and generic indexing, using selective title indexing enhanced by terms drawn from a classification scheme such as UDC. It also does not use all significant terms of a title as the KWIC methods but is based on selective permutation. Examples are given showing that the method overcomes the disadvantages of KWIC.

4978 Kamenoff, L.: *Classification of nursing texts in a hospital library.* In: *Bull. Med. Libr. Assoc.* 67 (1979) No. 2, p. 247–251, 7 refs.

"It was decided to utilise the NLM Classification, but to place nursing texts in the same classes as medical texts on the same subject" and using an adaptation for the nursing literature. Discussion of procedure, advantages and problems.

### 34 Automatic Classing and Indexing

See also 4812, 4816, 4818, 4936, 4937, 4984, 5044

4979 Hoshido, M.: *An automatic extraction method for important words in the titles of articles on classical Japanese literature.* (In Japanese). In: *Dokument. Kenkyu* 28 (1978) No. 9, p. 383–394, 12 refs.

Description of the algorithm used. Results of an investigation on 2227 titles proved satisfying.

### 35 Automatic Ordering

See also 4867, 4886, 4887, 4893, 4973

4980 Kruskal, J. B.: *Multidimensional scaling and other methods for discovering structure.* In: Enslein, K., Ralston, A., Wilf, H. S. (Eds.): *Statistical methods for digital computers.* Vol. III. New York: Wiley-Interscience 1977. p. 296–339

Introduction into multidimensional scaling with a discussion of thirteen commonly used computer programs and their historical and methodological relationships to one another.

4981 Williams, W. T., Lance, G. N.: *Hierarchical classificatory methods.* In: Enslein, K., Ralston, A., Wilf, H. S. (Eds.): *Statistical methods for digital computers.* Vol. III. New York: Wiley-Interscience 1977. p. 269–295

Introduction to the topic of hierarchical clustering methods.

### 37 Reclassification

4982 Brown, D. R., Mackie, D.: *Putting the LC in OCLC. Illinois reclassification on OCLC.* In: *Wilson Libr. Bull.* 53 (1979) April, p. 570

### 38 Index Generation Programming

See also 4828, 4974, 4976, 5034

4983 Dolan, F. T.: *A universal index generator.* In: *Fifth Canadian Conference on Information Science, Holiday Inn, Ottawa, Ont., May 15–18, 1977. Proceedings, Canadian Assoc. for Information Science 1977.* p. 153–163

Entities can be described in terms of their attributes; the number and type of attributes chosen will depend on the nature of the entity and on the context. For example, an author could be described by name, organization, dept., position, phone no., street address, postal code. The universal index generator described allows a non-computer oriented user to build, list, modify, retrieve from and generate extremely flexible indexes to a descriptor file of her/his own design and construction. The description of this entity in this system is the total or partial set of its descriptors. The user controls not only the descriptors appearing in the index entry but also the order in which they will appear. (Author)

### 39 Evaluation of Indexing

See also 4934, 4963, 4971

4984 Kreutz, E., Menetre, E.: *CONDOR, a natural-language-based information system.* In: *Inst. d. Recherche d'Informatique et d'Automatique: Intern. Seminar on Intelligent Question-Answering and Data Base Systems. Proc., Bonas, France 21–30 June 1977.* Le Chesnay 1978. p. 199–203

The goal of CONDOR is the development of software tools for the processing of any type of both structured and unstructured information encountered in information storage and retrieval applications. The main components developed are: a) Description of information structures, b) Natural language analysis, c) Automatic indexing and classification of unstructured information, d) Description, interpretation and execution of logical control structure and sequence.

4985 Ždanova, N. G.: *Establishing and maintaining an Information Support Subsystem thesaurus.* (In Russian). In: *Algoritmy i programy dlja EVM.* Perm' 1978. p. 17–25. 1 ref.

The operational flexibility of an Information Support Subsystem (ISS) depends greatly on the organization of the ISS thesaurus. The development and maintenance of the ISS thesaurus are discussed with special emphasis on the thesaurus components, development and updating programs, and logical relation tables. (Author)

4986 Leonard, L. E.: *Inter-indexer consistency studies 1954–1975: A review of the literature and summary of study results.* Urbana-Champaign, Ill.: University of Illinois. Graduate School of Library Science 1977. 51 p. Examination of inter-indexer consistency, review of criteria for

index term matches and discussion of the major summaries that have been published on the topic. An appendix summarizes all studies according to: indexer education, indexer experience, term type, indexing aids, document length, indexing depth, time revision, consistency and relationship to information retrieval effectiveness.

1987 Sparck Jones, K.: **Experiments in the relevance weighting of search terms.** In: *Inform. Proc. & Management* 15 (1979) No. 3, p. 133-144, 4 figs., 2 tabs., 13 refs. Following successful initial tests of theoretically-based schemes for relevance weighting of search terms, further experiments were undertaken to validate these results. The experiments were designed to investigate weighting for a large document set, poor matching conditions, heterogeneous data, and limited relevance information, i.e. the use of weighting in more realistic conditions than the initial ones. The results confirm the earlier ones: very striking improvements in retrieval performance were obtained, especially for the theoretically best-founded weighting formula. The experiments illustrate a much more promising application of statistical methods to indexing and searching than any studied hitherto. (Author)

## 4 On Universal Systems

### 41 On Universal CS in General

See also 4735, 4822, 4834, 4898

1988 Kedrov, B. M.: **Classification of sciences.** (In Serbo-Croatian). In: *Informatika* 12 (1978) No. 1, p. 5-20

The principles used in the classification of science discovering mutual relationships among the sciences are presented. The historical aspect of the classification of the sciences is given (general classification of science, classification of human and natural sciences as well as technology). The practical importance of the classification of science is outlined. (Author, amended)

### 42 On the Universal Decimal Classification, UDC

See also 4792, 4816, 4819, 4899, 4911,

1989 Anders, M.: **Die konventionelle Anwendung der Internationalen Dezimalklassifikation (DK).** (The usual application of the UDC.) In: *DK-Mitt.* 22 (1978) No. 1-2, p. 1-5, 3 figs., 7 refs.

A short description of the UDC system is given as well as its file organization and file construction, file handling and the advantages and disadvantages of filing by UDC.

1990 Kenich, I.: **The birth of the UDC in Japan.** (In Japanese). In: *Dokument. Kenkyu* 28 (1978) No. 9, p. 395-402

1991 Leonchikova, D. T., Titenkova, V. N.: **Working subject classification schedules.** (In Russian). In: *Naučnye i techn. biblioteki SSSR* (1978) No. 6, p. 30-33  
In order to avoid inconsistent indexing with the UDC by entering the index with different terms for the same concept, Working Classification Schedules and Working Subject Classification Schedules have been produced. The article provides suggestions for the construction of such schedules regarding form, procedure for application and the alphabetical subject index to such schedules.

1992 Lloyd, G. A.: **UDC - past, present and future.** In: Hegesth, B., Thalberg, K. (Eds.): *UDC and EDP.* Oslo: Riksbibliotekstjenesten 1977. p. 7-31

1993 Nagy, L.: **Reform efforts in the Universal Decimal Classification of the legal and administrative sciences.** In: *Intern. Forum on Inform. & Doc.* 4 (1979) No. 2, p. 31-32

Describes the activities of the FID C/34 Committee on UDC revision (classes 340/343 Legal and Administrative Sciences). The work process, the results achieved, and future tasks are presented.

1994 Richter, Th.: **Mit der DK in das EDV-Zeitalter - 30 Jahre Erfahrungen als Dokumentar in einem Großbetrieb.** In: *DK-Mitt.* 22 (1978) No. 3-4, p. 7-12, 5 figs., 5 refs.

Erstellen eines DK-orientierten Schlagwortkataloges mit dem IBM KWOC-Programm - Die DK-Zahl im Recherchesystem STAIRS (IBM) -

1995 Schiopu, I.: **Metoda vizuala im C. Z. U.** (The visual method in the UDC). (In Roumanian). In: *Probl. Inform. Document.* 12 (1978) No. 2, p. 84-86

The UDC is used in all Roumanian libraries. The proposed method consists in introducing colours into the UDC card files.

1996 Seiful-Mulyukov, R. B.: **Environmental protection: a scientific classification concept and terminology.** In: *Intern. Forum on Inform. & Doc.* 4 (1979) No. 1, p. 17-20.

Discusses problems in the elaboration of classification for UDC 40 Envirology: lack of a rigorous scientific conception by which to identify classification levels; lack of universally accepted concepts; close relation between envirology and other sciences. Suggests classification and some terms for the environmental protection field. (Author)

1997 Sincai, A.: **Compatibility between traditional information systems and modern ones.** (In Roumanian). In: *Probl. Inform. Document.* 12 (1978) No. 3, p. 115-122, 26 refs.

The UDC is proposed as a common instrument for the realization of compatibility between information systems. Some examples are given.

1998 Skendzic, N.: **Changes in the structure of the UDC in the field of political economics (group 33) between 1945 and 1975.** (In Serbo-Croatian). In: *Informatika* 12 (1978) No. 3, p. 119-124

1999 Terzić, D.: **UDC application possibilities in computerised information retrieval.** (In Serbo-Croatian). In: *Nauč.-techn. pregl. VTI* 28 (1978) No. 1, p. 69-73, 6 refs.

It has been proved that the UDC can be used for machine searching if descriptor vocabularies are employed. A suitable organized system memory becomes necessary though for this. Keyword and UDC based document searching ensures highly accurate identification of the object searched for, irrespective of the document language.

2000 Varma, S. R.: **Treatment of statistics in UDC, LC and CC: a comparison.** In: *Indian Library Movement* 5 (1978) No. 3, p. 90-93, 4 refs.

None of the schemes seems to be sufficiently detailed in its subdivisions of statistics. Related subjects are scattered throughout each scheme also.

### 43 On the Dewey Decimal Classification, DDC

See also 4899, 4909, 5092

2001 Custer, B. A.: **Dewey 19.** In: *Catalogue & Index* (1979) No. 53, p. 1-2

A preview on the changes to be expected in the new, the 19th edition of the Dewey Decimal Classification.

2002 Farradane, J.: **Book review of Henderson, K. L. (Ed.): Major Classification Systems: The Dewey Centennial.** Urbana-Champaign 1976. In: *Libr. Quarterly* 47 (1977) No. 3, p. 483-484

2003 Gopinath, M. A.: **Book review on K. L. Henderson: Major Classification Systems: The Dewey Centennial.** Urbana-Champaign 1976. In: *Intern. Classificat.* 6 (1979) No. 2, p. 130

2004 **International Guide to Films on Information Sources.** 3rd. ed. The Hague: Fédération Internationale de Documentation 1979. 36 p., = FID-Publ. 577; ISBN 92-66-00577-0

One of the four groups according to which films, film strips, slide/tape presentations and video-cassettes are presented is devoted to films in classification and terminology. Although the amount covered here is not exciting (only 5), there are two filmstrips devoted to the Dewey Decimal Classification and one filmstrip devoted to the Library of Congress Classification. Unfortunately the slide collection of Idis in Bielefeld has not been included which is devoted to an introduction of the UDC.

5005 Jayarajan, P.: **Suggestion for the relation in the schedule of "General Management" of Dewey Decimal Classification.** In: *J. Libr. Inform. Sci.* 3 (1978) No. 2, p. 131–138, 1 tabl. 4 refs.

The schedule of "658 General Management" of the 18th edition of Dewey Decimal Classification, is a slightly modified one, from the 17th edition. There are few additions to the schedule, and there are few relocations. In this paper, another major relocation is suggested. The result of the suggested relocation will be a more helpful sequence at the "Shifted-From" place as well as at the "Shifted-To" place. (Author)

#### 44 On the Library of Congress Classification, LCC and LC Subject Headings

See also 4899, 4982, 5000, 5004

5006 Chan, L. M.: **The principle of uniform headings in Library of Congress Subject Headings.** In: *Libr. Resources & Techn. Serv.* 22 (1978) No. 2, p. 126–136, 24 refs.

The recent policy of the Library of Congress to adopt split files and its increasing use of duplicate entries represent a relaxation of the principle of uniform heading that has been a major principle in Library of Congress Subject Headings since the beginning of the dictionary catalogue. Split files entail the use of a new heading for an existing subject while maintaining a separate file for entries already catalogued under the old heading without recataloguing. In order to understand the ramifications and implications of this recent development, a discussion of the origin, rationale, and application of the principle of uniform heading seems to be appropriate. (Author)

5007 Clack, D. H.: **The adequacy of Library of Congress Subject headings for black literature resources.** In: *Libr. Resources & Techn. Serv.* 22 (1978) No. 2, p. 137–144, 18 refs.

Specificity of headings and the extent to which these subject headings for black literature resources are coextensive with the subject treated in the works is examined. (Author, abbr.)

5009 Steinweg, H.: **Punctuation in Library of Congress Subject Headings.** In: *Libr. Resources & Techn. Serv.* 22 (1978) No. 2, p. 145–153, 3 refs.

An analysis of the punctuation of the subject headings presented in the eighth edition of Library of Congress Subject Headings reveals that the punctuation marks most of ten used are the comma, parentheses, and hyphen. Examples of their various uses are presented and discussed. (Author)

5010 Wellisch, H. H.: **Poland is not yet defeated, or: should catalogers rewrite history? With a discourse on 'When is an island not an island?'** In: *Libr. Resources & Techn. Serv.* 22 (1978) No. 2, p. 158–167, 13 refs.

The revised instructions of the Library of Congress Subject Headings on indirect subdivision of topical headings are analysed from the points of view of the feasibility of the instructions, their cost-effectiveness, and their usefulness for users interested in historical and/or geographical aspects of a topic. It is asserted that the new practices will lead to subject headings that are incongruous and unpredictable for users not familiar with the decisions made by LC cataloguers. It is proposed instead to use direct subdivision of topical headings for all countries or regions in keeping with previous LC practice for cities, countries, and regions in the United States. (Author)

#### 45 On the Bliss Classification, BC

5011 McKeown, A. H. P.: **Book review of Bliss Bibliographic Classification.** 2nd ed. Class I: Psychology and Psychiatry. London: Butterworths 1978. In: *Catalogue & Index* (1979) No. 53, p. 5–6

#### 46 On the Colon Classification, CC

See also 4899, 4950, 5000

#### 47 On the Library-Bibliographical Classification, LBC (BBK)

5012 Meyer, G.: **Die mittlere Ausgabe der BBK.** (Medium edition of the LBC). (In German). In: *Zbl. Bibl.wes.* 91 (1977) p. 280–283

5013 Neumann, C., Schulz, E., Vogel, O.: **Die Adaptation der Teile Marxismus-Leninismus, Philosophie und Soziologie der sowjetischen BBK für die mittlere Ausgabe der DDR.** (The adaptation of the parts concerning Marxism – Leninism, philosophy and sociology of the Soviet Library Bibliographical Classification (LBC) for the medium edition of the GDR) (In German). In: *Zbl. Bibl.wes.* 93 (1979) No. 1, p. 13–17, 6 refs.

The Soviet LBC consists out of three editions, full, medium and abridged. Report on the experiences and problems of adaptation for the medium edition in the German Democratic Republic, with particular problems in the field of sociology.

5014 Pospichalova, E.: **The Soviet Library Bibliographical Classification and its possible applications.** (In Slovakian) In: *Tech. Knihovna* 22 (1978) No. 5, 137–141, 9 refs.

Presentation of the LBC which has been translated into several languages and which is used outside the USSR also, namely in Bulgaria, German Democratic Republic and Poland. The State Library (Lenin-Library) in Moscow has been working on the variants of a notation that could facilitate computer processing of this classification's notation.

#### 48 On Other Universal CS (alph.)

See also 4821

5015 Heaney, M.: **The Bodleian classification of books.** In: *J. Librarianship* 10 (1978) No. 4, p. 274–282, 6 refs. Description of the classification system of the Bodleian Library which was introduced in 1883 by E. W. B. Nicholson.

5016 McKeon, D. B.: **J. Ch. Brunet: The Classification System.** (Translation and introduction). (Dissertation) Baton Rouge, La.: Louisiana State University. Graduate School of Library Science. 1976. VII, 109 p.

### 5 On Special Objects CS (Taxonomies)

#### 51 Numerical Taxonomy

See also 4740, 4886, 4980, 4981

5017 Bock, H. H.: **Book review on D. Steinhausen, K. Langer: Clusteranalyse.** Berlin-New York 1977. In: *Intern. Classificat.* 6 (1979) No. 2, p. 127–128

5018 Goebel, H.: **Zu Methoden und Problemen einiger dialektometrischer Meßverfahren.** (Concerning methods and problems of some dialectometrical measurement procedures) (In German). In: *Germanistische Linguistik* (1977) No. 3–4, p. 335–365

Application of mathematical methods for the representation of distribution and mixing of dialects and languages in middle Europe.

5019 Rijsbergen, C. J. van: **Information retrieval.** 2nd ed. London: Butterworths 1979. ca. 200 p. In his review (in *Comp. Reviews* 20 (1979) No. 8, p. 321–322) G. Salton says that "the chapter on automatic classification is

well done. The author prefers hierarchic clustering procedures, such as the single-link process, over cheaper but theoretically less appealing clustering methods. He is especially opposed to the use of order-dependent methods (where the final classification may depend on the order in which the individual item enter into the classification process) without however going into the question of cluster evaluation to determine whether the order dependence does eventually cause problems in the use of the classes". Chapter 4 which may also be of interest to our readers, is on file structures.

### 58 On CS for Kinds of Documents

5020 Chambaud, S.: **Classification of data banks.** In: CODATA. Proc. 5th Biennial CODATA Conf., Oxford: Pergamon 1977. p. 533-535

## 6 On Special Subject CS

### 61 On CS for Mathematics and Area 1 Fields

5021 Some important statistical classifications of the European Communities. In: Statistical News No. 42 (1978) p. 42, 14-42, 16.

### 63 On CS for the Astro- and Geosciences

5022 Gasanov, R. A., Kerimov, S. K.: **Information retrieval thesaurus in oil processing and petrochemistry.** (In Russian). Elmi Eserler: Aserb. Univ. 1978. No. 1, p. 28-33, 4 refs.

Features of a thesaurus are discussed which was developed for the M. Azizbekov Azerbaijan Petrochemical Research Institute.

### 65 On CS in the Human Area (5)

See also 4962, 4978

5023 Pavlov, A. E., Gutman, O. V., Rudsit, T. M.: **Aspects of design of a problem-oriented subthesaurus - stomatology.** (In Russian). In: Med. kibernet. i informatika na službe zdravoochr. Riga 1978. p. 235-238, 5 refs. Description of the method and implementation of the stomatology subthesaurus which consists of terms from the medical thesaurus developed by the All-Union Medical Information Research Institute and compiled by the Latvian Republic Office of Scientific Medical Information.

5024 Šuvalona, I. E., Murav'ev, A. A.: **Methodical approaches to the design of linguistic support for a computer-based medical information system for infectious diseases.** (In Russian). In: Med. kibernet. i informatika na službe sdravoochr. Riga 1978, p. 246-250, 5 refs. Description of the method of term selection.

5025 Tichonova, L. N.: **Extralinguistic factors as an essential condition for defining the subject scope of a specialized thesaurus.** (In Russian). In: Med. kibernet. i informatika na službe zdravoochr. Riga 1978. p. 246-250, 5 refs.

Discussion of the steps of developing a specialized IR thesaurus in the field of phthysiology, constructed by the Moscow Tuberculosis Research Institute, Health Ministry.

5026 Fox, N., Robinson, A., Irons, P., Young, J.: **The ERIC Thesaurus: an analysis.** In: Educ. Libr. Bull. 21 (1978) No. 3, p. 14-30, 4 refs.

This analysis of the ERIC thesaurus was carried out by 4 undergraduates (now graduates) of Liverpool Polytechnic's Department of Library and Information Studies as part of their assessed course work during their final year. (1977/78). The structure of the

Thesaurus of ERIC descriptors is critically examined and comments are made on its descriptors, scope notes and multiword terms. 4 on-line searches are described and the treatment of the subjects of these searches in 3 other educational thesauri is compared with that in the ERIC thesaurus. One of the on-line searches was also carried out manually using British education index; the manual search took 24 minutes, compared with 3 minutes for the on-line search, but provided 7 additional references. (Author)

### 66 On CS in the Socio-Area

See also 4993

5027 Georgiev, Xh. C.: **'Politika', a new information language.** (In Russian). In: Ispol'z. mat modelej i elektron. vyčisl. mašin v lingvistike. Sofija 1976. p. 191-192

Treats the following: methodology of construction of a foreign policy thesaurus and of an artificial language; translation from the natural language to the artificial language 'Politika'; automatic recognition of the semantic pattern of a text; and main characteristics of the 'Politika' language.

5028 Fritz, F., Granitzer, W.: **Einsatz von STAIRS/VS-TLS in einem deskriptororientierten Dokumentationssystem.** (Implementation of STAIRS/VS-TLS in a descriptor-oriented documentation system). (In German). In: IBM Nachr. 29 (1979) No. 245, p. 123-130, 3 refs.

Description of development and application of the documentation system of the Austrian Ministry of Defense, using a thesaurus and on-line facilities.

5029 Bandur, G.; Heymann, I., Ohls, H., Wick, P.: **Thesaurus der Geschichtswissenschaften. Aufgaben und Anwendung.** (Thesaurus for the history sciences. Tasks and application). (In German). Berlin: Institut für Marxismus-Leninismus beim ZK der SED und Zentralinstitut für Geschichte der Akad. d. Wiss. d. DDR 1976, 266 p., 263 refs.

Introduction into the problems of a historical thesaurus and its possibilities in computerized application.

### 67 On CS in the Economics and Technology Area

5030 Eltarenko, E., Prochorov, I., Sumarokov, L.: **Problems in classifying managerial situations.** (In Russian). In: Probl. Sozdanija i Razvitija MSNTI 1977. No. 2, p. 3-10, 8 refs.

An algorithm for the automatic building of the system of introduced diffuse classes of managerial situation has been worked out on the base of diffuse set and relations theory. An essential peculiarity of the algorithm is the application of the operation of levelled normalization for the situational similarity relation (the operation is introduced in the paper). The algorithm has been checked by an experimental situations set. (Author)

5031 Markina, N. Ch.: **Management and updating of a keyword dictionary in the "Baikal" MIS information support subsystem.** (In Russian). In: Algoritmy i programy dlja EVM. Perm' 1978. p. 11-16, 8 refs. (Typescript No. 1803-78, VINITI).

Discusses main principles of design and updating of the keyword vocabulary, which is a component part of the system thesaurus. Suggests that business terminology be analysed using a faceted-descriptor type language, and that descriptors be identified and descriptor families established so as to resolve synonymy and homonymy. To facilitate searching and provide responses there are developed a descriptor number and search codes for every keyword. (Author)

### 68 On CS in the Science and Information Area

5032 **A common classification scheme of literature for book publishing in the USSR.** (In Russian). In: Sov. bibliografija (1978) No. 2, p. 3-9

The creation of such a scheme became necessary in order to ensure unity and coordination of work in preparing summary thematic plans for the production of printed matter, national bibliography, statistics of the press and book distribution. The common scheme is described in detail; altogether it contains 890 classes and subclasses and possesses a subject index.

## 69 On CS in the Culture Area

See also 4908

5033 Philipot, C.: **Chelsae School of Art classification scheme, nth edition.** In: *Art Libr. J.* 3 (1978) No. 2, p. 15–20, 3 refs.

During the operation of the scheme the subject analysis handled with it seemed satisfactory, however, the notation was held to be susceptible to simplification. The revised, extended notation is listed and explained. The scheme has proved itself as a shelf arrangement system.

## 7 Classification and Language

### 71 General Problems of Natural Languages, Metalanguages, Semiotics

See also 4839, 4948

5034 Michell, B. G.: **The natural language foundations of indexing language relations.** In: *Canadian J. of Inform. Sci.* 4 (1979) p. 99–104.

### 72 Semantics

See also 4860, 4922

5035 Bram, V. A.: **Sentence construction in scientific and engineering texts.** In: *IEEE Trans. Prof. Communic.* 21 (1978) No. 4, p. 162–164, 4 refs.

Scientists and technicians evaluated the understanding of technical texts and came to the conclusion that the structure of the sentences influenced significantly the understanding.

5036 Ciganik, M.: **Metainformational in action in the process of the automatic semantic analysis.** In: *Inform. Process & Management* 15 (1979) No. 4, p. 195–203, 16 refs.

Most previous attempts for semantic content recognition have used very sophisticated linguistic tools. This paper describes a recognition process based on relatively small sets of context relators, logical relators, phase and state relators, and aspect relators. These metarelators are connecting tools in describing meanings in process of concept formation and human communication. They represent the names of the categorial states, activities, and structures of the real world descriptions. The metarelators represent the arcs in a semantic net, in which the nodes are the object sublanguage terms. The recognition vocabulary can be used to describe the faceted informational patterns that occur in texts of the field/universe of discourse/. (Author)

5037 Coulon, D., Aknin, Y., Lancel, J. M., Monfils, M.: **A language to describe knowledge by a network of procedures.** In: *Institut de Recherche d'Informatique et d'Automatique: Intern. Seminar on Intelligent Question-Answering and Data Base Systems. Proc.*, Bonas, France, 21–30 June 1977. Le Chesnay 1978. p. 164–171, 12 refs.

The language described takes into account some of the major characteristics of knowledge: fuzziness, inconsistency and lack of information.

5038 Partridge, D.: **A syntactic view of semantic networks.** In: *Intern. J. of Man-Machine Studies*, (London) 10 (1978) No. 2, p. 113–119, 11 refs.

The mapping from an English sentence to a portion of a network, often claimed to be 'understanding' of the sentence, is a mapping

of one notation (the English language) to another (the 'semantic network'). This viewpoint highlights the customary arbitrariness with which the term 'syntax' and 'semantics' and hence 'understanding' are applied and leads to a more systematic application of these concepts. Second, it raises the question of why one notation (grammar, syntax) is more useful than another. The goals of a 'semantic network' notation in contrast to the usual goal: the explication of the 'semantic content' of language constructs. (Author, abbr.)

### 73 Automatic Language Processing

See also 4856, 4947

5039 Bider, I. G.: **Word form synthesis using transformational grammars: the general concept and mathematical tools.** (In Russian). In: *Naučno-techn. inform. Ser. 2* (1979) No. 6, p. 22–30, 6 refs.

Lays down the design principles of a general morphological synthesis algorithm which uses a language morphology represented by a transformational grammar. The synthesis is by a step-wise transition from one word-form representation level to another, with one and the same algorithm used to effect transformations between any two levels. Describes the structure of the grammatical tables employed by the algorithm as well as their design methodology, which strives consistently to minimise the storage space requirements of the tables. (Author)

5040 Fedosimov, V. I., Bakulov, A. D.: **Morphemic analysis of word-forms.** (In Russian). In: *Naučno-techn. inform. Ser. 2* (1979) No. 4, p. 27–30, 11 refs.

An automatic analysis algorithm is presented which describes the word-semantics reflected in the morphological properties of the natural language by identifying lexically significant morphemes of simple and complex words and by identifying morphological variants of the same root. The algorithm is tailored to the Russian language vocabulary, which does not have to be controlled. Working lists of morphemes and operating examples of programs written in the PL/I algorithmic language are illustrated. (Authors)

5041 Helbich, J.: **Some results of an experiment in statistical selection of keywords.** In: *Prague Studies Math. Linguistics* (1978) No. 6, p. 159–175, 10 refs.

The experiment reported studied the effectiveness of various functional criteria for automatic keyword extraction procedures. The corpus consisted of 146 000 words divided into 146 segments of 1000 words each. The computer used: a Minsk- 22.

5042 Onoder, N., Uchida, H., Nakai, H., Someya, K., Ono, M.: **An automatic word truncation and extraction system for chemical information retrieval.** (In Japanese). In: *Daj 14 kaj zyoho kagaku gizyutsu kenkyu happyo rombunshu* (1977) p. 123–132

The system algorithm is based on that used for editing the Chemical Titles KWIC index. It uses a dictionary to identify chemical keywords and another one to segment chemical keywords into fragments. The system was tested successfully for 8 000 words randomly selected from titles in the CA Condensates file. The test revealed that the truncation and extraction processes increased the number of keywords by as much as 25%. (Author abbr.)

5043 Volodin, K. I., Anno, I. I., Androsova, L. V., Goloma, K. V., Šumakova, L. L.: **Automatic coding of document search patterns.** In: *Naučno-techn. inform. Ser. 2* (1979) No. 5, p. 23–28

Methods of program realization of an algorithm for automatic document search patterns coding on the basis of morphological analysis of substantives and adjectives are discussed. The described morphological analysis algorithm can be also used as an algorithm for preliminary information processing when building up a syntactical analyser.

5044 Wieland, U., Haller, H.: **Verarbeitung natürlicher sprachlicher Informationen im Projekt CONDOR.** (Processing of natural-language information in the Project CONDOR.) (In German). In: *Kolloquium zur Lage der linguistischen Datenverarbeitung.* Essen: LDV Fittings 1978. p. 231–259, 12 refs.

The CONDOR Project processes natural language documents by a linguistic and a statistical component. Texts are analyzed without a dictionary, descriptors are automatically assigned and the document is classed automatically according to its topic. The retrieval process is facilitated by a dialog component permitting questions in natural language.

#### 74 Grammar Problems

See also 4952, 5035, 5038

5045 Cerny, A.: **Complexity and minimality of context-free grammars and languages.** In: Gruska, J. (Ed.): *Math. Foundations of Comp. Sci. 1977. Proc. 6th Symp., Tatranska Lomnica, Poland, Sept. 5-9, 77.* New York: Springer Verlag 1977. p. 263-271

5047 Perrot, J.: **Fonctions syntaxiques, enonciations, information.** (Syntactical functions, statements, information) (In French). In: *Bull. Soc. Linguist. (France) 73 (1978) No. 1*, p. 85-101

The syntactical theory outlined here proposes to treat a sentence as a product with a twofold structuring: one concerning the statement as the statement unit and the other one concerning the message as the communication unit.

5048 Sibuya, M., Fujisaki, T., Takao, Y.: **Noun-phrase model and natural query language.** In: *IBM J. Rs. & Development 22 (1978) No. 5*, p. 533-540, 15 refs.

Basic considerations in designing a natural data base query language system are discussed. The notion of the noun-phrase model is elaborated, and its role in making a query system suitable for general use is stressed. An experimental query system, Yachimata, embodying the concept, is described. (Author)

#### 75 Question-answering Systems

See also 4736, 4782, 4785, 4839, 4857, 5044

5049 Jones, P. F.: **Four principles of man-computer dialog.** In: *IEEE Trans. Prof. Commun. 21 (1978) No. 4*, p. 154-159

5050 Schmidt, A., Schneider, H. J.: **Natürlich-sprachliche Frage-Antwort-Systeme. Bedeutung, Realisierung und Ausblick.** (Natural-language question-answering systems. Significance, realization and future.) (In German). In: Krallmann, D. (Ed.): *Kolloquium zur Lage der linguistischen Datenverarbeitung.* Essen: LDV Fittings 1978. p. 216-229, 13 refs.

Mainly description of the Berlin question-answering system called BACON (Berlin Automatic Construction of Semantic Networks). BACON consists of a translation and paraphrasing component called BEAST (Berlin Automatic Semantic-Oriented Translation) and an evaluation component SIREN (Semantic Representation and Net-Evaluator).

5051 Siklossy, L.: **Question-asking, question-answering systems.** In: *Institut de Recherche d'Informatique et d'Automatique: Intern. Seminar on Intelligent Question-Answering and Data Base Systems. Proc., Bonas, France 21-30 June 1977.* Le Chesnay 1978. p. 151-163

The author is interested in non-linear data bases, containing discontinuities. Examples are given from tax laws, freight transportation, design and in particular air fares.

#### 76 Lexicon/Dictionary Problems

See also 4851, 4884, 4974, 5031, 5062

5052 Allen, S.: **Lexical morphology. A model and an application.** In: *Universität Bielefeld: Methodological problems in automatic text processing. Proc., Bielefeld 6-14 April 1978.* Bielefeld 1978. p. 1-17, 7 refs.

Description of the main points of the project "Frequency Dictionary of Present-Day Swedish Based on Newspaper Material". It is claimed that the result is relevant for word-formation of Swedish concerning morphology as well as semantics.

5053 Ellis, H. C.: **Developing the conceptual data model to show the way data is used.** In: *Comp. Bul. 18 (1978) No. 2*, p. 13-15

There is an increasing awareness of the need for data dictionaries to include a conceptual data model as well as a description of the data stored in computer files and databases. One popular form for this model uses the three concepts: entity, attribute and relationship. This paper describes a number of developments of this basic model arising from the following two objectives: to simplify the task of data analysis, and to increase the practical value of the conceptual data model as an aid to systems design. The author is indebted to the members of the British Computer Society Data Dictionary Systems Working Party whose meetings helped to crystallize many of the ideas contained in this paper (Author)

5054 Guckler, G.: **Maschinelle Lexikographie.** In: Krallmann, D. (Ed.): *Kolloquium zur Lage der Linguistischen Datenverarbeitung.* Essen, 22-24 Febr. 1978. Essen: LDV Fittings 1978. p. 165-200, 9 refs.

Report on the "Investigations concerning the semantic structure of natural languages through electronic data processing" (Projekt Semstruktur, Universität Mainz), especially on the formal organization of the lexicon entries and their transfer into the data bank system STAIRS.

5055 Henne, H., Metrup, W., Möhn, D., Weinrich, H. (Eds.): **Interdisziplinäres deutsches Wörterbuch in der Diskussion.** (Interdisciplinary German Dictionary discussed) (In German). Düsseldorf: Schwann 1978, 284 p. = *Sprache der Gegenwart*, 45.

This volume comprises papers and discussions of some colloquies held in Bad Homburg concerning the preparation of a new 20 volume German dictionary including also volumes for the terms of special subject fields.

5056 Nussen, G. M.: **A framework for future data dictionary systems.** In: *Comp. Bull. 18 (1978) No. 2*, p. 10-12

One of the sources for major problems in the design, implementation and use of information systems, databases and data dictionaries is the lack of a unified view on various aspects of information systems, databases and data dictionaries. In this paper we will describe a conceptual framework which permits a "common" view on several aspects of information systems, databases and data dictionaries. (Author)

5057 Pottier, B.: **Organisation sémantique de l'article de dictionnaire.** (Semantic organization of a dictionary article). (In French). In: *Bull. Soc. Linguist. (France) 73 (1978) No. 1*, p. 339-366

It is proposed to connect sense and form (semantic and syntagmatic criteria) where the former should be given priority. Example used: the verb 'changer'.

5058 Sterkenburg, P. G. J. van (Ed.) et al.: **Lexicology.** Een bundel opstellen voor F. de Tollenaere ter gelegenheid van zijn 65e verjaardag door vrienden en vakgenoten. Groningen: Wolters-Noordhoff 1977. 375 p., 215 refs. ISBN 90-01-81212-0

This Festschrift with contributions concerning dictionary structures and lexicography comprises also the one by G. Wahrig on "Informationsklassen in Wörterbüchern" (Information classes in dictionaries) which is a description of the categories or fields according to which his dictionary of the German language (München 1978) is organized. (p. 295-304, 5 refs.)

#### 77 General Problems of Terminology

See also 4861, 4882, 4949, 5093

5059 Arntz, R.: **Die Studienkomponente Terminologielehre in der Ausbildung von Übersetzern und Dolmetschern.** (The course component 'terminology' in the syllabus of translators and interpreters. (In German). In: *Lebende Sprachen 24 (1979) No. 1*, p. 1-3

At the University of Saarbrücken courses are prepared on the following subjects: genesis, nature and function of languages for special purposes (Fachsprachen); methods of recording, organiz-

ing and handling mono- and multilingual fonds of technical terms (with special regard of language standardization and equivalence problems); mechanical aids. The article shows how this subject can be combined with other subjects, gives reasons for the introduction of this teaching of terminology, extends on what had to be considered in the preparatory phase and outlines the possibilities connected with this new subject-field.

5060 Beier, R.: **Zur Theorie und Praxis der Fachsprachenarbeit in der DDR.** (Gerhard Wahrig zum Gedenken). (Concerning theory and practice of terminology work in the GDR. In memory of Gerhard Wahrig). (In German). In: *Muttersprache* 88 (1978) No. 4, p. 232–259, 118 refs.

Subheadings: Significance and organization of terminology work in the GDR. Status of theoretical works on terminology. Attempt at a definition of terminology (Fachsprache) and discussion of some related problems. Concerning the role of stylistic investigations in terminology. Concerning application fields of terminological research in the GDR.

5061 Benassi, P.: **International connections of the Terminology Bureau and their significance for improving the collaboration with the authors.** (In Italian). In: *Bull. Terminol.* (1977) No. 30, p. 75–79

The author shows the connections of the Terminology Bureau of the Commission of the European Communities in Luxembourg with large national organizations, both in various branches of technology and in language subjects. Many Italian institutions are described as close collaborators with this Bureau.

5062 Dubuc, R.: **Terminologie et Lexicographie** (In French). In: *Sprachmittler* 16 (1978) No. 2/3, p. 32–45, 10 refs.

Paper presented at the 5th International Congress for Applied Linguistics, 20–26 Aug. 1978, Montreal, Canada giving a comparison between the common and differing features of terminology and lexicography with regard to nature, matter, situation, finality, function, term-selection, unity, analysis, definition, information unit, product, neologism, standardization. These features are also displayed in a table.

5063 Reese, Th., Pool, J.: **Guide to information resources in language planning.** In: *Language Planning Newsletter* 5 (1979) No. 2, p. 1–3, 10–12

The comprehensive article is divided into 4 chapters: A. Serial publications and related resources (Newsletters, journals, bibliographies, abstracting and indexing services), B. Monographic publications and related resources. C. Professional conferences and D. Research projects.

5064 Sager, J. C.; Johnson, R. L.: **Terminology, the state of the art.** In: *Sprachmittler* 16 (1978) No. 4, p. 82–95, 11 refs.

Background – The present situation – Future trends – Teaching of terminology.

### 78 Special Terminology Problems

5066 **Actual significance of the terminological collection on information industry.** (In Japanese). In: *Zyoho kagaku* 14 (1978) No. 1, p. 102–103

For the first issue of the Collection, 25 124 words taken from magazines, and 10 599 words from newspapers have been identified, with 16 717 terms having occurred only once.

5067 Drozd, L.: **Von der Wirtschaftslinguistik zur heutigen Fachsprachenforschung.** (In memoriam Gerhard Wahrig) (From economics linguistics to present-day terminology research. In memory of Gerhard Wahrig). (In German). In: *Muttersprache* 88 (1978) No. 4, p. 203–208, 9 refs.

The contribution is based on the introductory paper which the author presented at the First European Symposium "Language for Special Purposes (LSP)" in Wien, 26–28 Aug. 1977.

5068 Gejvandov, E. A., Fel'dman, V. M., Šelimov, I. N.: **Entering names of products in material properties and application information systems.** (In Russian). In: *Naučno-techn. inform. Ser. 2* (1979) No. 2, p. 16–20, 5 refs.

The names of products to be entered in material properties and applications information systems are analysed. Several substantial aspects are identified in product names. Based on these aspects three name entry languages are proposed: (1) an aspect-controlled vocabulary language, (2) an incomplete reference vocabulary language, and (3) a thesaurus. The choice of a particular entry system depends on the proportion of material applications information in the overall document flow being processed by the Material and Substance Property Data Centre and on the relative importance of this information for the Centre. The above-mentioned languages can be used in combinations. (Author)

5069 Klasson, K.: **Developments in the terminology of physics and technology.** Stockholm: Almqvist & Wiksell 1977. 202 p. = *Stockholm Studies in English*, 42.

5070 Lutz, H. D.: **Projekt PLIDIS.** (In German). In: Krallmann, D. (Ed.): *Kolloquium zur Lage der linguistischen Datenverarbeitung.* Essen: LDV Fittings 1978. p. 260–290

Since 1971 a problem-solving information system PLIDIS is being developed at the Institut für Deutsche Sprache, Mannheim with German as its interaction language. Description of the PLIDIS idea, the application field of the system (industrial sewage control), its major components, its extension and its transferability. Its programming language is INTERLISP.

### 79 Problems of Translation (incl. Multilingual CS)

See also 4784,

5071 Kirkman, J., Snow, C., Watson, I.: **Controlled English as an alternative to multiple translations.** In: *IEEE Trans. Prof. Communic.* 21 (1978) No. 4, p. 159–161, 4 refs.

5072 Schott, G.: Book review on H. E. Bruderer: **Handbuch der maschinellen und maschinenunterstützten Sprachübersetzung.** (Handbook of mechanical and computer supported translation) (In German). In: *Intern. Classificat.* 6 (1979) No. 2, p. 131–132

5073 Šrejber, B. T.: **Multilingual communication with the data bank.** (In Russian). In: *Naučno-techn. inform. Ser. 2* (1979) No. 4, p. 24–26, 3 refs.

An approach to user-data bank communication is described which provides for ease of access where the users speak different languages – Russian, German, English, etc. In one case, a user speaking a certain language is given access to a part of the data base which is inaccessible to a user whose query is formulated in another language. In another case, each of the system's languages provide access to a specified data base portion. A query can be presented in any of these languages, with the answer coming in the same language. This approach can be used to overcome the language barrier and to speed up the delivery of information to interested persons. Examples of Russian and English queries to a data bank and the respective answers are illustrated. (Author)

## 8 Applied Classing and Indexing

### 81 General Problems and Indexing Rules

See also 4901, 4966

5074 Fasihuddin, M.: **Study of indexing policies and practices and the literature of toxicology.** (PhD Thesis) Pittsburgh: University of Pittsburgh 1976. 155 p.

5075 Manecke, H.-J.; Schramm, R.: **Aspects of subject and source orientation in information processes.** In: *Intern. Forum on Inform. & Doc.* 4 (1979) No. 2, p. 19–30, 6 tabs., 6 figs., 17 refs.

The authors show that peculiarities of certain subject areas or source types must be taken into account in order to rationalize

and improve the efficiency of information processes, above all, indexing and abstracting. The theoretical base was a study of publications scattering and structural composition of documentary sources in shipbuilding. Recommendations are given on methods for developing subject-oriented indexing rules and their presentation, including an evaluation of their efficiency. Source-oriented indexing and abstracting were studied for invention specifications of the GDR. Recommendations based on data obtained provide for labour savings in these processes and quality improvement of resulting products. Possible directions for further investigations are outlined. (Authors)

5076 Popovich, C. J. (ed.): **Business data bases: the policies and practices of indexing.** In: RQ Reference Services Div. Amer. Libr. Assoc. 18 (1978) Fall, p. 5-15 (ALA Conference Program, Detroit)

5077 Romeyk, H.: **Indexierarbeit im Archiv.** In: Archiv 31 (1978) No. 2, p. 195-203, 12 refs.

Considerations on how to establish an index to the archival materials, e.g. through repertoire indexing or by setting up an organization model for the indexing by computer. There are no practical experiences as yet.

5078 Sawyer, D. C.: **The Canadian Education Index: a view of index editing.** In: Canadian Libr. J. 35 (1978) No. 4, p. 277-281

## 82 Data Indexing

See also 4973

5079 Gadiokov, V.: **Data indexing in INIS: Problems and approaches.** In: Proc. of the 5th Biennial CODATA Conference. Oxford: Pergamon 1977. p. 203-208

5080 Pappé, I. Ja., Archangelskaya, N. V.: **Index of structural components of chemical compounds for an abstract journal in chemistry.** (In Russian). In: Naučno-techn. inform. Ser. 2 (1979) No. 5, p. 19-22, 5 refs.

Describes a permutational index of structural components of organic compounds developed for an abstract journal in chemistry and serving to retrieve compounds that contain definite cyclic systems, characteristic groups, chemical elements and multiple carbon-carbon bonds in open chains. The index is oriented towards computerized preparation. (Author)

5081 Rush, J. E.: **Handling chemical structure information.** In: Ann. Rev. Inform. Sci. Technol. 13 (1978) p. 209-262, 27 p. refs

## 83 Indexing of and by Titles, Phrases

See also 4952, 4953, 4977

5082 Matter, R.: **PRECIS als zwischensprachliches System.** (PRECIS is an interlingual system) (In German). In: Nachr. Dok. 30 (1979) No. 3, p. 117-122, 5 figs., 1 ref.

The aim of the PRECIS/Translingual Project is the design of a set of routines to allow the automatic conversion of a "string" of indexing terms in a source language into appropriate terms in a chosen target language. Each string of indexing data is "switched" term by term, and then manipulated by a standard program to provide index entries in the target language or languages. (Author abbr.)

5083 Verdier, V.: **PRECIS Translingual Project.** In: British Library Bibliographic Services Div. Newsletter No. 10 (1978) p. 2-3

## 84 Indexing of Texts

5084 Conger, L. D.: **Codes and content in the CIS data base.** In: Database I (1978) No. 1, p. 42-43, 47-49, tables.

The U. S. Congressional Information Services Index to Congressional Publications has an on-line version which is the CIS Index

data base. Access to the files is a. o. through a number of codes for individual concepts and their names and to document types, date of publication, bill numbers, etc.

## 86 Indexing and Indexes of CS

See also 4796

5086 Alsheimer, R.: **Der Schlagwortindex (SWI) der Universitätsbibliothek Bremen.** (Index to the systematic catalog of the university library of Bremen). (In German). In: Habermann, A. (Ed.): Die wissenschaftliche Bibliothek 1977. 67. Dt. Bibliothekartag, Bremen 1977. Frankfurt: Klostermann 1978. p. 188-190

The systematic catalog of the university library of Bremen can be approached by an index which serves several functions. Brief description of the organization of this index and its state of development.

## 87 Indexing of Secondary Literature

See also 4814, 4954

## 88 Indexing of Primary Literature and Documents

5087 Bander, E. J.: **Indexing for publishers.** In: Law Libr. J. 71 (1978) p. 463-6

5088 Mockey, S. M., Jones, A., Mandel, G.: **Indexing Hebrew periodicals with the aid of the FAMULUS documentation system.** In: Jones, A. (Ed.) et al.: The computer in literary and linguistic studies. Proc. 3rd Intern. Symp. Cardiff, GB: University of Wales Press 1976. p. 38-46

The FAMULUS documentation system has been developed by the University College London Computer Centre.

# 9 Classification "Milieu" (Org. & Econ.)

## 91 General Problems of Organization of Classification

See also 4836

5089 Roberts, D. C.: **Organization of personal index files.** In: Use of medical literature. 2nd ed. London: Butterworth 1977. p. 441-452

## 92 Persons and Institutions in Classification

See also 4861, 5061

See also 4861, 5061

5090 Miksa, F. L. (Ed.): **Charles Ammi Cutter. Library Systematizer.** Littleton, Colo.: Libraries Unlimited 1977. 344 p. = The Heritage of Librarianship Series 3. ISBN 0-87287-112-6

5092 Vann, S. K.: **Melvil Dewey. His enduring presence in librarianship.** Littleton, Colo.: Libraries Unlimited 1978. 273 p. = The Heritage of Librarianship Series 4. ISBN 0-87287-134-7

5093 Fortin, J. M.: **La banque de terminologie du Québec, un instrument d'information scientifique et technique de langue française.** (The terminology bank of Quebec, a scientific and technical information instrument of the French language.) (In French). In: Colloque franco-québécois sur l'information scientifique et technique de langue française, 1978, Montréal, P. Q. Montréal: Informatech France-Québec 1978. p. 97-103

5094 Malhan, I. V.: **James Duff Brown and his contributions.** In: *Herald Libr. Sci.* 17 (1978) No. 1, p. 53–58, 23 refs.

States the life, service with publishers, marriage and the rare qualities of head and heart of James Duff Brown. Mentions him the founder of the Library world and as editor of various publications, his role in the revision of ALA Cataloguing Rules, visits abroad, and as pioneer of "open access." Examines Quinn-Brown Classification, his Adjustable and Subject Classification schemes, his improved form of shelf catalogue, his library quarterly guide, his capacity to organize Islington Public Library as chief and its Select Catalogue. Describes him inventor of indicators and other library appliances. (Author, abbr.)

5095 Mooers, C. N.: **Rigors of pioneer in information science.** In: *Bull. Amer. Soc. Inform. Sci.* 5 (1979) No. 3, p. 14–16

The article is the author's acceptance speech upon receiving the 14th ASIS Award of Merit during the 1978 ASIS Annual Meeting. His contributions to the field (through mathematization, coding methods, invention of the terms 'information retrieval' and 'descriptor', and programming) started already in 1947. For the future he admonishes to overcome the complexity in incompatibility of "all these wondrous systems."

5096 Venkatappaiah, V. (Ed.) together with Subba Rao, C. V., Chatterjee, A. (Eds.): **March of Library Science. Kaula Festschrift.** New Delhi, etc.: Vikas Publ. House 1979. XII, 626 p.

Volume of 52 papers in honor of Prof. P. N. Kaula, Varanasi, at his 50th birthday, 1974. The papers are arranged in 12 sections, one of which deals with the organization of knowledge and contains the following papers: 5097 Dale, D. C.: Melvil Dewey in the year 1890. 5098 Parameswaran, M., Rajan Pillai, C. V.: Crystallography: the need for the recognition of a new basic subject. 5099 Trehan, G. L.: Organization and classification of knowledge in Vedic India. 5100 Shukla, M. M.: Book number – a difference in opinion. 5101 Man Mohan Das, T. K.: Extrapolation and interpolation in array and chain. – His personal bibliography covers 47 books and monographs, 17 schedules of depth classification, over 600 articles and reviews. The latter are not listed at the end, only the journals are mentioned in which these have appeared. A separate list gives the articles in publications and the enormous amount of bibliographies, compiled by him (Bibliographical and documentation work).

#### 94 Organisation on the National and International Level

See also 4835

5102 The Subject-Catalogue Committee of the Library Bureau: **Information on the work and proposals of the Subject-Catalogue Committee.** (In Danish). Copenhagen, December 1978. 19 + 21 p.

Report on committee-work as prolegomena to a series of conferences, which the Library Bureau has had in mind, before decisions can be made as to the future subject-catalogue organization in public and school libraries in Denmark. The proposals concern the bibliographic data-base existing at the Library Bureau, and PRECIS is regarded as the best possibility among the indexing languages known to the committee. A number of reservations are introduced, together pointing to further investigations, before any decision is taken. If PRECIS does not fulfill the requirements mentioned, other systems should be further investigated, for instance NEPHIS. (Authors)

#### 95 Education and Training in Classification and Indexing

See also 4859, 4974, 5059

5103 Gopinath, M. A.: **Classification teaching in India.** In: *Intern. Classificat.* 6 (1979) No. 2, p. 117–118  
Syllabus for advanced courses in classification and indexing in India. (Courses at Masters and Post-Master's level in Information Science in India; courses conducted at DRTC, Bangalore; INS-DOC, New Delhi; Delhi University; Madras University, Bangalore University). (See also *Intern. Classificat.* 6 (1979) No. 3, p. 181)

5104 Menou, M.: **Teaching of indexing and indexing languages in less developed countries.** In: *Education and Training: theory and provision, with a look at new developments and an example of the challenge confronting information workers.* The Hague: FID 1979.

Paper presented at the 1978 Pre-Congress FID/ET Seminar.

5105 Römer, G.: **Classification teaching for students of librarianship.** Reflections and proposals. In: *Intern. Classificat.* 6 (1979) No. 2, p. 104–108

As a contribution towards an improved teaching of classification knowledge in German library schools some seven problem areas are outlined among which the lacking clarity as to the teaching objectives, the training deficits of teachers, their isolation and the lack of teaching aids. Against these, some seven proposals for improvement are submitted. In the annex a list of topics concerning the teaching of classification and subject indexing at the Library School of Baden-Württemberg, Stuttgart are given.

#### 98 User Studies

5106 Melanson, R. G.: **Using the SIC (Standard Industrial Classification) in business reference.** In: *RQ Reference Services Div. Amer. Libr. Assoc.* 18 (1978) Fall, p. 16–18.

#### 99 Standardization in Classification

See also 4966

5107 Dahlberg, I.: **Normung und Klassifikation.** (Standardization and Classification) (In German). In: *DK-Mitt.* 22 (1978) No. 5–6, p. 13–17, 11 refs.

Historical aspects of classification standardization – Possibilities for more efficient organization of classification work – Standardization in the construction of classification systems – Standardization in the application of classification systems – Activities of the German Standardization Institute in this regard.

5108 Friis-Hansen, J. B., Weitemeyer, M.: **One common classification system and one common indexing system in the Danish libraries?** A review to the Committee on Classification Systems and Subject Catalogues for Public and School Libraries. (In Danish). Copenhagen: July 1978. 37 p., 39 refs.

Report on the functions of classification systems in libraries, existing systems in Danish libraries, compatibility and convertibility between systems and the relations to international databases and networks as well as on the functions of indexing languages, convertibility between them and the role of PRECIS. The report concludes in a recommendation of PRECIS as the best offer in the indexing language market, based on a number of reasons. Whereas PRECIS is considered a joint possibility for all Danish libraries, several systems must be in use for the classification: DK5 in the public and school libraries, Dewey and DK5 in the national bibliography, Dewey, UDC or special systems in the other general and special libraries (Author)

5109 Heinrich, G.: Book review of **Regeln für den Schlagwortkatalog "Erlanger Regelwerk"**. (Rules for the subject-headings catalog "Erlanger Regelwerk"). München: Verl. Dokumentation 1977. (In German). In: *Bibliothek. Forschung und Praxis* 2 (1978) No. 3, p. 217–219

5110 Sutter, E.: **International dissemination of standards information.** Tools needed to operate the network: the ISO Thesaurus and the ISONET Manual. In: *Indexer* 11 (1979) No. 3, p. 157–159.

Description of the tools prepared for the exchange of information on standards and standard-type documents in the frame of the International Standardization Organization (ISO). The ISONET Manual as well as the ISO Thesaurus have already been tested and may become operational soon. (Paper had been delivered at the Unesco Symposium on ISONET, 5–7 Oct. 1977).

5111 Yamanouchi, C.: **Uniform classification in industrial libraries.** (In Japanese). In: *Dokument. Kenkyu* 28 (1978) No. 7, p. 251–260