

## 0 Form Divisions

### 01 Bibliographies

5847 Häfner, C. (Comp.): **Bestandsverzeichnis Thesauri. Stand 1.7.1980.** (Catalog of thesauri existing in the library of GID-IZ). Frankfurt: Gesellschaft für Information und Dokumentation (GID). Informationszentrum für Inform. wiss. u. Praxis (GID-IZ) 1980. 29 p. = GID-IZ 80-01

List of 372 thesauri covering all subject fields.

5848 Rizzo, St.: **Bibliografia Internazionale di Thesauri** (International Bibliography of Thesauri). Roma: Centro per la Documentazione Automatica 1979. VIII, 64 p.

The bibliography is in two parts. Part I lists approx. 300 thesauri and related works, classed under twenty general headings. Part II is divided into a number of sections for (1) bibliographies of thesauri, (2) guidelines for thesaurus development, (3) general works on thesauri, (4) centers and activities in the area of terminology, thesauri, bibliography and documentation, (5)-(7) works on related issues. Alphabetical name index.

5849 Soerensen, J. (Comp.): **A bibliography of PRECIS.** 2nd ed. Copenhagen: The Royal School of Librarianship 1979. 75 p. ISBN 87-7415-063-4.

Lists items (titles and abstracts) in chronological order until 1974 and in a systematized way after 1974 with three indexes: author, language and index of microfiches and video-tapes.

5850 Tittenbrun, K.: **Basic lexicographical sources of scientific information.** (In Polish). Warszawa: Pr. IINTE 1979. 109 p.

Bibliographical list of 80 terminology vocabularies, terminology standards, encyclopedias, thesauri with annotations and of some 40 items serving as an aid in studies on general problems of technical and scientific terminology.

### 02 Literature Reviews

See also 6116, 6162.

5851 Bock, H.-H.: **Clusteranalyse — Überblick und neuere Entwicklungen.** (Cluster analysis — survey and recent developments.) (In German.) In: OR Spektrum 1 (1980) p. 211-232, 229 refs.

This article gives an overview on the mathematical methods of cluster analysis. It describes algorithms for constructing homogeneous classes of objects, several criteria for the evaluation of classifications, and some examples of application.

5852 Clack, D. G.: **Year's Work in Subject Analysis: 1979.** In: Libr. Resources & Techn. Serv. 23 (1980) No. 3, p. 235-246, 83 Qu.

Survey on the achievements in the fields of "general subject analysis", "classification", "subject headings", "indexing", resulting in the conclusion that the major event of the year must be seen in the publication of Dewey 19.

### 03 Dictionaries, Terminologies

5854 Carlson, J. R., Thomson, G. R., et al: **Compendium of test terminology.** Washington, D.C.: Air Force Systems Command 1978. 58 p. NTIS: AD-A065412/9GA

A source document which lists the most commonly used defini-

tions for standard test terms meant to serve all interservice dialogue concerning test and evaluation.

5855 Weik, M. H.: **Vocabulary for fiber optics and light-wave communications.** Washington, D.C.: National Communications System 1979. 140 p. = NTIS: AD-A068510/7GA

A dictionary of some 1430 entries including inversions and cross-references, covering the fields mentioned, providing definitions to their terms.

5856 Milk and milk products: **terminology.** In: Terminol. Bull., ITA (1979) No.31, 100 p., refs. 3 p.

5857 Laubacher, M. R. (Comp.): **A glossary of ERIC terminology.** Syracuse, N.Y.: Syracuse University. ERIC Clearinghouse on Information Resources 1978. 25 p. = EDRS 168 506

The glossary provides brief definitions of more than 60 terms associated with the ERIC data base and the search process. These include titles of indexes, agencies, and acronyms peculiar to ERIC as well as terms used to describe computer search strategy.

5858 Titmus, C. et al: **Terminology of adult education.** (Title also in Spanish and French.) Paris: Unesco/IBE 1979. 154 p., ISBN 92-3-001683-7

The third specialized glossary to appear in the Ibedata series, the previous two having focused on the Terminology of special education and the Terminology of technical and vocational education.

5859 Transportation Research Board: **Glossary of urban public transportation terms.** Washington, D.C.: Transportation Research Board 1978. 45 p. = NTIS: PB-290 350/8GA, ISBN 0-309-02666-0

The approx. 1200 definitions cover transit planning and operation terms. Prior to the acceptance of the terms and their definitions extensive reviews and comments were obtained from many sources.

5860 Gendlina, I. E.: **Definitions of some terms in classification theory.** (In Russian.) In: Naučno-techn. inform., Ser. 2 (1980) No. 7, p. 1-6

In the course of practical lexicographic work two groups of terms in classification theory have been isolated: (1) taxonomy, taxon, taxonomic feature, meronomy, meron, archetype, subject field, classification field; (2) facet, facet classification, facet formula, facet analysis. Definitions or explanations of these terms known from literature are analysed in comparison, and finally edited versions of definitions are proposed. These definitions may be used while compiling terminological guides, uni- and multilingual technical dictionaries, etc. (Author)

5861 Pepermans, R.: **Pré-archivage ou gestion des documents? Le problème de la terminologie des archives administratives.** In: Actual terminol. 13 (1980) No.4, p. 1-3, 12 refs.

State of the archivistic terminology. Glossary of English terms with French equivalents and French definitions.

5862 **A glossary of library networking.** Washington, D.C.: Library of Congress 1978. 34 p. ISBN 0-8444-0270-2

5863 Kolleck, B., Hertwig, J.: **Glossar zur DV-Terminologie für die BID-Ausbildung.** (Glossary concerning EDP-terminology for education in library science, information and documentation) (In German). Berlin: Freie Universität. Inst. f. Bibliothekarausbildung und Inst. f. Publizistik und Dok.wiss. 1979. 220 p., 20 refs.

Pt. 1 contains 501 alphabetically arranged terms with their defi-

nitions and translations into English from the area of electronic data processing, Pt. 2 contains the stop words and Pt. 3 is an index to all the terms used in Pt. 1.

5864 Althaus, H. P., Henne, H., Wiegand, H. E. (Ed.): *Lexikon der germanistischen Linguistik*. (Lexicon of Germanistic linguistics.) (In German.) Tübingen: Niemeyer 1980. 2nd ed. 870 p., ISBN 3-484-10393

5865 Lewandowski, T.: *Linguistisches Wörterbuch*. (Linguistic dictionary.) (In German.) Heidelberg: Quelle und Meyer 1979. 3 vols., 1132 p., ISBN 3-494-02020-5

#### 04 Classification Systems and Thesauri

5866 Numerical and alphabetical subject headings for primary schools. Wellington: National Library of New Zealand 1978. 1 vol.

List of all the Dewey numbers that may be used to classify material in a New Zealand primary or intermediate school and of subject headings with their appropriate DDC numbers attached.

5867 Savage, H. (Ed.): *Library of Congress Classification Schedules: a cumulation of additions and changes through 1978*. Detroit: Gale Research Co. 1980. 32 vols., ISBN 0-8103-1150-X. \$ 1.175.-

5868 Lyle, St. P.: *Library of Congress career-related subject headings*. In: RQ 19 (1980) No. 3, p. 254-255

5869 Library of Congress. Subject Cataloging Div.: *Classification: Class M: Music and books on music*. 3rd ed. Washington, D.C.: Library of Congress 1978. 228 p.

5870 Библиотечно-библиографическая классификация. Таблицы для массовых библиотек. (Library-bibliographic classification: tables for public libraries.) (In Russian.) Moskva: Kniga 1977. 439 p.

5871 *Broad System of Ordering*. In: Informatol. Yugosl. 11 (1979) No. 3-4, p. 25-31  
Translation of the main areas included in the BSO into Croatian.

5872 *Subject Headings for Secondary School Libraries*. Wellington: National Library of New Zealand 1978. 58 p.

5873 Revelli, C.: *Nuovo soggetto italiano*. (New alphabetical list of Italian subject headings.) In: Ass. Ital. Bibl., Boll. Inform. 19 (1979) No. 3, p. 195-200, 2 refs.

5874 *Der neue systematische Katalog der Universitätsbibliothek Berlin. T.1-* (The new systematic catalog of the university library of Berlin.) Berlin: Universitätsbibliothek 1979-, = Schriftenreihe d. Univ.bibl. Berlin, 30.  
Vol. 1 edited by B. Millik a.o. 1979 contains the general auxiliaries, geographic auxiliaries and rules for the management of the subject headings catalog.

5875 Zentralinstitut für Bibliothekswesen (Ed.): *Klassifikation für staatliche Allgemeinbibliotheken und Gewerkschaftsbibliotheken*. Wissenschaftliche und Fachliteratur. Belletristik. Bd. 1, 2. (Classification scheme for public general libraries and union libraries.) (In German.) Leipzig: Bibliogr. Inst. 1979. 126 p. + 195 p.  
Contains the schedules and an alphabetical index.

#### Special Classification Systems

5876 Koch, H.: *Klassifikation der Darstellungen der multiplikativen Gruppe einer zentralen Divisionsalgebra über einem p-adischen Zahlkörper vom Index p*. (Classification of representations of the multiplying group of a central division algebra on a p-adic number of the index p.) (In German.) Berlin: Akademie d. Wissenschaften d. DDR. Zentralinst. f. Mathematik u. Mechanik 1979. 16 p.

5877 *INIS Thesaurus*. Wien: Intern. Atomic Energy Agency 1980. 748 p., = IAEA-INIS-13 (Rev. 18)

Contains 15931 accepted and 4576 forbidden terms in alphabetical order. Covers nuclear physics, reactor technology, physics and astrophysics, isotope technology, fabrication and use of nuclear materials and instruments, radiochemistry, radiobiology and administrative, legal and regulatory aspects of the management and control of nuclear energy.

5878 *Lexique U4: physique-chimie*. (Lexicon U4: physics-chemistry.) (In French.) Paris: Centre National de la Recherche Scientifique, Informascience; Centre de Documentation Scientifique et Technique 1980. 222 p.  
List of controlled descriptors and their relationships in the fields of crystallography, atomic and molecular physics.

5879 *List of chemical index terms 1980 and Chemical mini-thesaurus 1980*. New York: American Petroleum Institute 1980. 8 and 86 p.

5880 Renard, T. L., Gončaruk, G. P., Ševjakova, L. A. (Comp.): *IR thesaurus in polymer classes*. (In Russian.) Moskva: VINITI 1979. 42 p.  
consists of the following sections: Introduction, lexico-semantic list of descriptors and non-descriptors, systematic index of genus-species relations, and the structural fragments of polymer classes.

5881 *Energy Information Data Base; subject categories*. Oak Ridge, Tenn.: U.S. Department of Energy. Technical Information Center 1978. 82 p., = NTIS: TID-4584-R3

Verbal description of the six-digit subject category numbers used in the preparation of printed documents (bibliographies and abstract journals) and as searching aids in the online system, RECON.

5882 *Energy Information data Base; subject thesaurus*. Oak Ridge, Tenn.: U.S. Department of Energy. Technical Information Center 1978. 709 p., = NTIS: TID-7000-R3

The terminology of this thesaurus is used for the subject control of information announced in DOE Energy Research Abstracts, Energy Abstracts for Policy Analysis, Solar Energy Update, Geothermal Energy Update, Fossil Energy Update, Fusion Energy Update, Energy Conservation Update, and Power Reactor Docket Information. It also facilitates subject searching of the DOE technical information data base, a research in progress data base describing energy-related research, and a general and practical energy information data base on the DOE on-line retrieval system, RECON.

5884 *Information retrieval thesaurus in geodesy and cartography*. (In Russian.) Moskva: CNII Geodezii, Aëros'emki i kartografii 1979. 344 p.

The thesaurus is intended to aid in the document indexing in an IR system based on optical coincidence cards. It contains a total of 2523 descriptors and some 4500 non-descriptors or words and phrases occurring in documents on geodesy, air and space photography, photogrammetry, cartography and allied fields. It includes the following sections: Introduction, major dictionaries, reference sources and regulatory documents used, index of descriptor groups and fields, alphabetical lexico-semantic index, classified index of descriptors.

5885 Popova, M. A., Semenova, Z. D.: *Information retrieval thesaurus in hydrometeorology*. (In Russian.) Obninsk 1979. 239 p.

The thesaurus is used for the processing and computer searching of hydrometeorological information in the Gidromet information retrieval system, which provides a regular information service for the users of the State Hydrometeorological Committee of the USSR and in allied fields. It comprises the following sections: Introduction, lexico-semantic collection of terms, list of identifiers including the subsections: place names, hydrometeorological service research institutions, automatic hydrometeorological stations, names of research ships, names of typhoons, chemical element radioisotopes and units of measurement and their numerical values.

5886 *Microthesaurus of air pollution terms*. 5th rev. Washington, D.C.: U.S. Environmental Protection Agency. Office of Air and Waste Management 1976. 10p.

5887 Halpin, P.: *Standard air pollution classification*

**network: a thesaurus of terms** (as used in the APTIC data base). 2nd ed. Research Triangle Park, N.C.: Environmental Protection Agency. Office of Air Quality Planning and Standards 1978. 185 p., = NTIS: PB-292 038/7GA

The thesaurus contains all of the standardized terminology and rules for its use as applicable to the Air Pollution Technical Information Center (APTIC) bibliographic file on air pollution.

**5888 Lexique U0: metallurgie.** (Lexicon U0: metallurgy.) Paris: Centre National de la Recherche Scientifique, Informascience. Centre de Documentation Scientifique et Technique 1980. 79 p.

French-English descriptor list for metals and alloys, welding and soldering of metals and alloys and for nonmetallic materials.

**5889 Wartenberg, A.: Systematik der niederen Pflanzen; Bakterien, Algen, Pilze, Flechten.** Einführung für Botaniker, Mikrobiologen. (Taxonomy of primitive plants: bacteria, algae, fungi, lichenes; introduction for botanists, microbiologists.) (In German.) 2nd rev. and enlarged ed. Stuttgart: Thieme 1979. VIII, 404 p., 245 ill., DM 24,80 ISBN 3-13-478702-4

**5890a Frohne, D., Jensen, U.: Systematik des Pflanzenreichs; unter besonderer Berücksichtigung chemischer Merkmale und pflanzlicher Drogen.** (Taxonomy of plants with special regard of chemical characteristics and plant drugs.) (In German.) 2nd rev. and enlarged ed. Stuttgart/New York: Fischer 1979. X, 308 p., DM 38,— ISBN 3-437-30274-4

**5890b Weberling, F., Schwantes, H. O.: Pflanzensystematik; Einführung in die systematische Botanik; Grundzüge des Pflanzensystems.** (Plant taxonomy; introduction into systematic botany; foundations of the plant system.) 3rd rev. ed. (In German.) Stuttgart: Ulmer 1979. 395 p., 116 ill. = Uni-Taschenbücher 62.

**5891 ASFIS subject categories and scope descriptions.** Rome: FAO, Aquatic Sciences and Fisheries Information System 1979. 42 p. = ASFIS Reference Series, No. 2

**5892 Shriner, C. R., Dailey, N. S. et al: Environmental/chemical thesaurus.** Environmental impact statement. Oak Ridge, Tenn.: Oak Ridge National Lab. 1978. 311 p. = NTIS: PB-284 310/0GA.

This thesaurus was compiled on the bases of terms found in 13 environmental protection agency data bases. The scope of this thesaurus was broadened over that of the Environmental Biomedical Terminology Index to include also the physical sciences with emphasis placed on chemistry, although specific chemical compounds are not included, only classes of chemicals are given.

**5893 Bostel, F.: Schlüsselsystem zur Erfassung und Klassifikation von Medikamenten.** (Taxonomy for the description and classification of drugs.) (In German.) Heidelberg: Universität. Medizinische Gesamtfakultät 1979. 68 p. (Dissertation)

**5894 Health care microthesaurus** — a hierarchical list of indexing terms used by NTIS. Data base reference aid. Springfield, Va.: National Technical Information Service. Information Analysis Branch 1979. 48 p. = NTIS: PB 290 776/4GA.

More than 900 main terms and their hierarchies are listed, expressing health care concepts including those for health care costs, education, delivery, and occupations. Also included are terms covering resources, manpower, technology, services, use, and legislation.

**5895 Wiggins, E. (Ed.): National Library of Medicine classification:** a scheme for the shelf arrangement of books in a field of medicine and its related sciences. 4th ed. Bethesda, Md.: National Library of Medicine 1978. 431 p. EDRS: ED 160 440.

In this system, each preclinical science, such as human anatomy, biochemistry or pathology, and each medical subject, such as infectious diseases or pediatrics, receives a twoletter code. Under each of these main headings numbered, minor headings are

found. Under human anatomy, e.g. one finds general works, addresses, essays and lectures, dictionaries and encyclopedias. The volume gives also a special classification scheme for nineteenth century publications and an index to the classification system.

**5896 Medical Subject Headings, Tree Structures 1980.** Bethesda, Md.: National Library of Medicine 1979. 447 p. NTIS: PB-300498

All medical subject headings currently in use by the National Library of Medicine's indexers, catalogers, and searchers are arranged in a hierarchical manner showing relationships between broader and narrower terms. Included are minor and geographic descriptors. (NTIS)

**5897 Charen, Th.: Medical subject headings: tree annotations, 1980.** Technical notes. MEDLARS indexing instructions, Bethesda, Md.: National Library of Medicine 1979. 126 p. = NTIS: PB-80-104706.

Tree Annotations has a two-fold purpose: first, to give a general statement on the approach an indexer or searcher should pursue to a given tree, and second, to advise them of special features within that tree that they should be aware of before indexing or searching.

**5898 Medical Subject Headings: annotated alphabetic list 1980.** Bethesda, Md.: National Library of Medicine 1979. 715 p.

**5899 Permuted Medical Subject Headings. 1980.** Bethesda, Md. National Library of Medicine 1979. 349 p., = NTIS: PB-300 499.

A computer-generated display of all terms in the alphabetic list of the National Library of Medicine's Medical Subject Headings (MeSH) for 1980, as well as all citation type, check tag, and geographic descriptors in the Annotated Alphabetic MeSH 1980. (NTIS, abbr.)

**5900 Degkwitz, R. (Ed.): Diagnoseschlüssel und Glossar psychiatrischer Krankheiten.** (Diagnostic key and glossary of psychiatric diseases.) Chapt. V: Mental disorders. 9th rev. (In German.) 5th ed. Berlin/Heidelberg/New York: Springer 1980. 120 p. ISBN 3-540-09840-2 and ISBN 0-387-09840-2

German translation of the International Classification of Diseases of the WHO, translation was done by G. Kockott and W. Mombour under the auspices of the Deutsche Gesellschaft für Psychiatrie und Nervenheilkunde (DGPN).

**5901 Liste de base pour la mise en tableaux suivie d'un index alphabétique.** 9th rev. (In French.) Genf: OMS 1979. 292 p., ISBN 92-4-254133-8

International classification of diseases.

**5902 TNM: Klassifikation der malignen Tumoren.** (Taxonomy of cancerous tumors.) 3rd rev. and enlarged ed. (In German.) Berlin/Heidelberg/New York: Springer 1979. XIII, 179 p. ISBN 3-540-09024-X

**5903 Chaplan, M. A., Downey, B. F. et al. (Comps.) Harper, S. F. (Ed.): Thesaurus of descriptors for public sector labor relations.** Ithaca, N.Y.: Cornell University 1976. 364 p.

**5905 Bieberstein, J. R. v.: Fachbibliothek Soziologie. Systematik.** (Department library for sociology. Classification system.) (In German.) Bielefeld: Universitätsbibliothek 1980. 176 p.

The system consists of some 30 main classes with subdivisions. Notation is a mixed one: the main classes are coded with a 2-letter code, the subdivisions with 3 numbers each. There is a recurrent form-division going with each of the 30 main classes, the notation of which starts with 0. A code for the geographic units is given as well. The system is concluded by a subject index and a demonstration on how to apply the notations.

**5906 Beck, C., McKechnie, T., Peters, P. E.: Political Science Thesaurus.** 2nd ed. Pittsburgh, Pa. University of Pittsburgh. Center for International Studies; Amer. Political Science Assoc. 1979. 700 p., ISBN 0-916002-47-0

The thesaurus comprises some 6000 descriptors and is presented



in the following parts: alphabetical listing, geographical terms, rotated descriptor display, hierarchical displays.

5907 U. S. Office of the Federal Register: **Thesaurus of indexing terms**. In: Federal Register, March 7, 1977. p. 12986-13007

5908 Institute for the Study of Drug Dependence: **Thesaurus of subject headings relating to drug dependence and the non-medical use of drugs**. London: Institute for the Study of Drug Dependence 1978. 138 p.

5909 **Thesaurus of terms**. London: British Insurance Association 1979. 30 p.

5910 Kuvsinoff, B. W. (Ed.): **Fire Thesaurus**. Washington, D.C.: U.S. Department of Commerce 1977. 230 p. = PB 288 600  
The thesaurus was prepared for the National Fire Prevention and Control Administration.

5911 Mudge, Ch. R., Garrett, N. G. (Comps.): **Subject headings for criminology, criminal justice and police science collection**. Toronto: University of Toronto. Centre of Criminology 1977. 351 p. = ISBN 0-919584-357

5912 Gull, C. D., Baxter, J. G., Wardlow, M. M.: **Thesaurus for the National Neighborhood Information Exchange**. Final and two interim reports. Kensington, Md.: Gull and Assoc. Inc. 1979. 90 p., NTIS: PB-296 412/0GA.

Description of a survey of thesauri and neighborhood development materials using selected materials. The report includes directions for preparation and maintenance of descriptors on cards and the manual layout for camera ready typewritten page copy as well as a flow chart for the searcher's and indexer's use of the thesaurus and the development of additional descriptors. The thesaurus itself consists of an alphabetic list, a category list and a KWIC index.

5913 Swett, M.: **The 'U' Military Science Library Classification Schedule of the Morris Swett Library, ASAFAS**. Fort Sill, OK: Army Field Artillery School 1979. 193 p., NTIS: AD-A076 142

5914 Deacon, J. E.: **Low intensity conflict thesaurus**. Ottawa: Canadian Department of National Defence 1976. 129 p. = DSIS Technical Memorandum 4/75 (DIP).

5915 Statistisches Bundesamt (Ed.): **Systematik der Wirtschaftszweige mit Erläuterungen**. (Taxonomy of economic branches with descriptions.) (In German.) Ed. 1979. Stuttgart, Mainz: Kohlhammer 1980. 508 p., DM 31,60

5916 Askew, C. (Comp.): **Thesaurus of consumer terms**: Pt. 1: classified display. London: Consumers' Association; The Hague: International Organization of Consumers Unions 1979. 314 p., ISBN 0-85202-153-4; ISBN 90-70241-01-3

5917 Bystrov, E. A. (Ed.): **Information retrieval thesaurus in shipbuilding**: Russian/German, German/Russian. Leningrad: CNII Rumb 1979. 132 p.

The thesaurus contains 886 descriptors, it is presented in two parts: a lexico-semantic part and a classified part. The monolingual thesauri from which this bilingual thesaurus was derived, are listed as well as normative-technical documents considered during the thesaurus development period.

5918 Rozo Rios, D. S., Garzon Herran, M. E.: **Tesauro en documentacion e informacion**. (In Spanish.) Bogota: ICFES 1980. XXIX, 238 p., = FID 587

Contains apart from the alphabetical thesaurus and an English-Spanish vocabulary, a list of definitions, a permuted index, and a bibliography. (Information: ICFES, Calle 17, No. 3-40, Apartado aereo 21817, Bogota, D.E., Colombia.)

5919 Moulds, M.: **Classification scheme for literature on film and television**. London: Aslib 1980. 85 p., ISBN 0-85142-131-8

The scheme is derived from the UDC. The main subject groups covered are: reference and general material, institutes, festivals, conferences; film industry; TV industry; distribution, exhibition; society and cinema/TV; education; aesthetics, theory; history, genres; biography; miscellaneous, special collections.

5920 **RILM thesaurus**: subject headings for cumulative index of RILM abstracts. New York: RILM. International Musicological Society 1979. 54 p. = International Repertory of Music Literature

## 06 Conference Reports, Proceedings

See also 6173, 6178, 6194

5921 Salimei, M., Vladutz, G.: **Politica della documentazione**. (Politics of documentation) Seminari sull'organizzazione e sviluppo dei servizi d'informazione. (In Italian.) Roma: Ed. dell'Ateneo & Bizarri 1978. 175 p.

Collection of texts of some seminars organized by the Istituto di Studi sulla Ricerca e Documentazione Scientifica of the Consiglio Nazionale delle Ricerche. The following lectures fall within the field of interest of classification: 5922 Leatherdale, D.: The use and preparation of thesauri and other controlled vocabularies. 5923 Vladutz, G.: Problems of compatibility between thesaurus and classification in information retrieval: advantages and disadvantages. 5924 Todeschini, C.: Thesauri: construction and use. 5925 Houghton, B.: Automated services for information retrieval in the United Kingdom.

5926 Galloway, P.: **Report on Informatics 5: The Analysis of Meaning**. Queens' College, Oxford, 26-28 March 1979. In: ALLC Bull. 7 (1979) No. 2, p. 182-183

5927 Goetschalckx, J.: **Première conférence internationale sur les banques de terminologie**, Vienne, le 2-3 avril 1979. (First international conference on terminological banks, Vienna, 2-3 April 1979. (In French.) In: Bull. terminol. (1979) No. 33, p. 1-2

5928 Galinski, Ch. (Ed.): International Information Centre for Terminology (Infoterm): **Terminological data banks**: Proceedings of the 1st Intern. Conference, Vienna 2-3 April 1979. München/New York/London/Paris: Saur 1980. 206 p. ISBN 3-598-21365-4, Infoterm Series, 5.

Contains the 16 papers and their discussions, the list of participants and papers distributed, recommendations, an analysis of questionnaires by M. Krommer-Benz and "A plan for data management within TermNet" by H. Felber. The papers: 5929 Rondeau, G.: Typologie des banques de terminologie. 5930 Sundström, E.: Transfer modalities of terminological data. 5931 Brinkmann, K. H.: Quality criteria for the exchange of terminological data. 5932 Felber, H.: Report on TermNet. 5933 Bothe, A. A. P.: La classification systematique des stocks terminologiques. 5934 Krommer-Benz, M.: State-of-the-art report. Project "Vocabulary of terminological data banks". 5935 Al-Kasimi, A.: Towards a central terminological data bank in the Arab world. 5936 Dovbenko, M. A.: Content and presentation of data elements for terminological data interchange. 5937 Dovbenko, M. A.: Gosstandart activities in terminology and terminological data banks interaction. 5938 Food and Agricultural Organization of the United Nations, FAO: International cooperation between terminological data banks. Views and expectations of the organizations of the United Nations system. 5939 Goffin, R.: The vocabulary of terminological data banks. 5940 Khafagy, M. T.: Aleco and its efforts at unifying Arabic terminology and the standardization of its application. 5941 Krommer-Benz, M.: TermNet and Interconcept. 5942 Riggs, F. W.: Preliminary suggestion with reference to Interconcept. 5943 Rondeau, G.: The terminology bank of Canada. 5944 Schewe, W. H. U.: Recent experiences with the establishment of a terminological data bank within DIN. 5945 Terminology Directorate, Ottawa, Canada: The Canadian Government Terminology Bank. An Overview; Subject-field descriptions.

5946 Rost, G.: **Internationale Tagung zur Problematik von Informationsrecherchesprachen im Bibliotheksweisen**. (International Conference on the problems of information retrieval languages in library science.) (In German.) In: Zbl. Bibl.wes. 94 (1980) No. 3, p. 141-142  
Report on this international conference which was held from 18-21 Sept. 1979 in Bratislava.

5947 Nacke, O. (Hrsg.): **Zitatenanalyse und verwandte Verfahren.** (Citation analysis and related procedures.) (In German.) Bielefeld: Idis. Inst. f. Dokument. u. Inform. über Sozialmedizin u. öff. Gesundheitswesen 1980. 192 p., ISBN 3-88139-024-3

7 papers of a session during the 32nd conference of the Deutsche Gesellschaft für Dokumentation, Oct. 1979. Nacke, O.: Zitatenanalyse im engeren Sinne. (Citation analysis in a narrower sense.) 5948 Gerdel, W.: Datentechnische Methoden in der Referenzanalyse. (Data processing methods in reference analyses.) 5949 Eisenhardt, O.-H.: Ergebnisse der Referenzanalyse. (Results of a reference analysis.) 5950 Krug, G.: List-Analyse. 5951 Lange, H.: Requestanalyse. 5952 Henzler, R. G.: Bibliometrische Methoden der Termanalyse. (Bibliometrical methods of term-analysis.) 5953 Nacke, O.: Fehlerquellen bei der Zitatenanalyse. (Error sources in citation analysis.)

5954 Sickmann, L. (Ed.): **Das Fach Sacherschließung in der bibliothekarischen Ausbildung.** (Subject indexing in library education). (In German.) Köln: Greven Verlag 1980. 107 p. = Arb. Bibliothekar-Lehrinst. NW, H. 10, ISBN 3-7743-0550-1.

6 lectures of 2 seminars of the Bibliothekar-Lehrinstitut, the first one in connection with the Gesellschaft für Klassifikation (Society for Classification), Dec. 7-8, 1978 and the second one in connection with the Verband der Bibliotheken des Landes Nordrhein Westfalen (Library Association of Northrhine-Westfalia), 28-29 March 1979. 5955 Silvestri, G.: Klassifikationsausbildung in Österreich. (Education in classification in Austria.) 5956 Römer, G.: Grundsätzliche Überlegungen zur theoretisch-systematischen Ausbildung im Fach Sacherschließung. (Principles concerning the theoretical-systematic education of the subject 'subject indexing'.) 5957 Lewe, B.: Lernziele und Lerninhalte des Faches Sacherschließung für Diplom-Bibliothekare an wissenschaftlichen Bibliotheken. (Learning aims and contents of the subject 'subject indexing' for librarians of public libraries.) 5958 Fischer, F.: Lernziele und Lerninhalte im Fach Sacherschließung für Diplombibliothekare an wissenschaftlichen Bibliotheken. (Learning aims and contents of the subject 'subject indexing' for librarians of scientific libraries.) 5959 Heinrich, G.: Lehrmethoden und Lernmittel im Fach Sacherschließung an bibliothekarischen Ausbildungsstätten. (Teaching methods and learning aids for the subject 'subject indexing' at library schools.) 5960 Erpf, Ch.: Anforderungen der Öffentlichen Bibliotheken an die Ausbildung im Fach Sacherschließung. (Requests from public libraries concerning the educational program of the subject 'subject indexing'.)

5961 Dahlberg, W.: **Structures of Knowledge and Patterns of Order.** In: Intern. Classificat. 7 (1980) No. 2, p. 79-80.

Report on the 4th Annual Conference of the Society for Classification (Gesellschaft für Klassifikation e.V.) in Salzburg, April 16-19, 1980.

5962 Dahlberg, W. (Ed.): **Gesellschaft für Klassifikation e.V.: Wissensstrukturen und Ordnungsmuster.** Proceedings der 4. Fachtagung der Ges. f. Klassifikation e.V., Salzburg, 16-19 April 1980. (Structures of knowledge and patterns of order.) (In German.) Frankfurt: IN-DEKS Verlag 1980. 468 p., DM 65,- = Studien zur Klassifikation, Bd. 9, ISBN 3-88672-008-X.

Contains the 21 lectures and papers of the 4th Annual Conference of the German Classification Society on structures of knowledge and patterns of order as these may be found in six main areas of human knowledge and activity. Discussions are included also, as well as reports on the parallel sessions and on the activities of the SIGs of the Society. 5963 Dahlberg, W.: Structures of knowledge and patterns of order. Introduction into the themes of the 4th Annual Conference. 5964 Oberschelp, W.: Structures of order and order of structures in the dimensions of physical reality. 5965 Körner, H. G.: Optimal class-size, the mathematical constant  $e$  and questions of notation. 5966 Zwirner, W.: Knowledge patterns in physics. 5967 Degens, P. O.: Hierarchic classification. 5968 Jochum, F.: On the determination of distances between semantic representation languages. 5969 Koch, M.: Natural measures of distance and similarity. Examples from economics and the social sciences. 5970 Bresch, C.: Evolution and patterns. 5971 Rösch, S.: *Natura e scritta in lingua mathematica.* Numbers in nature and art. 5972 Weinberger, Ch.: Homology and analogy as a basis for hypothesizing in biology. 5973 Haase, R.: Patterns of order and order of patterns in displaying a harmonic picture of the world. 5974 Seitelberger, F.: The space-time structure of human world ex-

perience as a problem of brain research. 5975 Totok, W.: Knowledge of organization and organization of knowledge in the time of the Renaissance until beginning of Enlightenment. 5976 Müller, A.: Holton's methodological principles and their significance for structural changes of scientific concepts. 5977 Sechser, O.: Information and truth, false information and untruth? 5978 Hölzl, J.: System theory and classification. 5979 Petöfi, J. S.: Knowledge of structure in natural languages, structure of knowledge in natural language communication. 5980 Mönke, H.: Definitions as knowledge structures of conceptual statements. 5981 Panyr, J.: Automatic thematic text classification and its interpretation in rough information retrieval. 5982 Dahlberg, I.: Patterns of knowledge and knowledge of patterns in comprehending classificatory totality. 5983 Weinberger, O.: Concept structures and classification. 5984 Maassen, B.: Subject cataloguing at the Deutsche Bibliothek.

5985 **11th Annual Meeting of The Classification Society. NAB.** In: Intern. Classificat. 7 (1980) No. 2, p. 81-82. Announcement and program of this meeting which was held June 1-3, 1980 at Boulder, Colorado, comprising some 50 papers presented in 11 sections.

5986 Riggs, F.: **Unesco Meeting on an Integrated Social Science Thesaurus.** In: Intern. Classificat. 7 (1980) No. 2, p. 86-87 (COCTA News). Report on that meeting which took place in Paris, June 9-11, 1980.

## 08 Other Monographs

5987 Serrai, A.: **Del catalogo alfabetico per soggetti.** Semantica del rapporto indicale. (On the alphabetical subject catalogue. Semantics of indexing.) (In Italian.) Roma: Bulzoni 1979. 163 p., 311 refs.

5988 Cochetti, M.: **Book review of Serrai, A.: Del catalogo alfabetico per soggetti.** (On the alphabetical subject catalogue) Roma: Bulzoni 1979. In: Intern. Classificat. 7 (1980) No. 2, p. 91-92

5989 Kotov, R. G., Jakušin, B. V.: **The languages of information systems.** (In Russian.) Moskva: Nauka 1979. 304 p.

The volume consists of six parts: Information and sign systems. Automated information systems and their linguistic tools. The main linguistic tools of an information processing system. Information-semiotic peculiarities of languages in information accumulation and retrieval systems. The language designing methods in documentary IR systems. The language designing methods in factographic systems.

5990 Bakewell, K. G. B.: **Book review of Maltby, A., Gill, L.: The case for Bliss.** London 1979. In: J. Doc. 36 (1980) No. 1, p. 92-93

5991 Hutchins, W. J.: **Book review of MacCafferty, M., Gray, K. (Eds.) The analysis of meaning: Informatics 5.** London: Aslib 1979. In: J. Doc. 36 (1980) No. 1, p. 89-92

5992 Soergel, D.: **Book review of Wersig, G.: Thesaurus Leitfaden.** (Thesaurus guideline. An introduction into the thesaurus principle in theory and practice.) München etc.: Saur 1978. In: Intern. Classificat. 7 (1980) No. 2, p. 90-91

5993 Stevens, J. E.: **Book review of Bakewell, K. G. B.: Classification and Indexing Practice.** In: Spec. Libr. 70 (1979) No. 1, p. 60-61

5994 Wellisch, H. H.: **Book review of Borko, H., Bernier, Ch. L.: Indexing Concepts and Methods.** New York 1978. In: J. Amer. Soc. Inform. Sci. 31 (1980) No. 1, p. 126-127

Sharp criticism, especially regarding the authors' assumption that article indexing demands the same principles as book indexing and that the examples are all taken from chemistry, physics, biology and computer technology, none from any of the social sciences or humanities.



## 09 Standards, guidelines

See also 6025

5995 **Documentation-Directrices para el Establecimiento y Desarrollo de Tesoros Monolingües.** (Guidelines for the Establishment and Development of Monolingual Thesauri.) (In Spanish.) Bogota: Columbia FID/CLA/ICFES (Calle 17, no. 3-40, Apartado aereo 21817) 1980. XII, 71 p. = FID 582

Columbian Standard 1476 containing the following chapters: Object of standard, Definition, Classification in relationship to other documentary languages, construction of a thesaurus, presentation and display of a thesaurus, method for the elaboration of a thesaurus.

5996 **UNISIST principes directeurs pour l'établissement et le développement des thésaurus multilingues.** (Guidelines for the establishment and development of multilingual thesauri) (In French.) Prepared by D. Austin and J. Waters, translated into French by D. Menillet. Paris: Unesco 1980. 88 p.

French version of document 5997.

5997 **UNISIST Guidelines for the Establishment and Development of Multilingual Thesauri.** Revised text. Prep. by D. Austin and J. Waters, Bibliographic Systems and Standards Office. The British Library, London. Paris: Unesco 1980. 85 p. = PGI/80/WS/12

Comprises the following chapters: Introduction. Scope and limitations. Definitions. Abbreviations and symbols. Vocabulary control. General problems. Management decisions and Language problems (regarding) establishment of a multilingual thesaurus. Equivalent terms in different languages. Other language problems. Relationships between terms in a multilingual thesaurus. Display of terms and their relationships. Form and contents of a multilingual thesaurus. Organization of work. 2 Appendices: Symbolization of thesaural relationships. Examples of displays.

## 1 Theoretical Foundations of Classification

### 12 Conceptual Basis of Classification

See also 5860

5998 Kluge, E.-H. W.: **Frege, Leibniz and the notion of an ideal language.** In: *Studia Leibnitiana* 12 (1980) No. 1, p. 140-154

A sketch of the nature and extent of the influence of Leibniz's notion of an ideal language on Frege's project of a *Begriffsschrift*.

5999 Kononov, B. P.: **Aspect methods of objects comparison.** In: *Naučno-techn. inform. Ser. 2* (1980) No. 7, p. 24-29, 15 refs.

A mathematical analysis of a multiaspect comparison of objects of any kind is presented, supposing that the value of similarity (distinction/difference) to depend upon the number of aspects in which the objects compared are similar (distinct/different). It is shown how to replace the simple binary estimation "similar - non similar" by the quantitative measure of similarity (distinction/difference). Characteristics of corresponding measures are investigated.

6000 Martin, W. A.: **Descriptions and the specialization of concepts.** In: Winston, P. H., Brown, R. H. (Eds.) *Artificial intelligence: an MIT perspective. Vol. 1.* Cambridge, Mass.: 1979. p. 377-419

Description of OWL II, a system that computes with expressions that describe an object from a particular point of view. The partial descriptions form a tree structure under the specialization operation, which preserves intensional properties.

6001 Neill, S. D.: **Mysteries of the deep: Models of the universe of knowledge.** In: *J. of the Amer. Soc. for Inform. Sci.* 31 (1980) No. 5, 375-377, 13 refs.

Evidence of the use, by scholars and others, of mental constructs or models of spatial and temporal relationships is presented to

illustrate a nonverbal knowledge structure. The relationship of this kind of structure to efforts to construct models of the universe of knowledge is stated, noting the danger in such models. (Author)

6002 Šaislamov, S., Sobirov, E.: **The content and meaning of general-scientific concepts.** (In Russian.) In: *Sb. nauč. tr., Taškent. gos. ped. inst.* (1979) No. 230, p. 26-37, 18 refs.

General scientific concepts are, e.g. 'set', 'value', 'function', 'algorithm', 'information', 'prognosis', 'system', 'element', 'model', 'control', etc. which can be employed in all sciences to represent some qualitative aspects of an object.

6003 Sowa, J. F.: **Definitional mechanisms for conceptual graphs.** In: Claus, V., Ehrig, H., Rozenberg, G. (Eds.): *Graph grammars and their application to computer science and biology. Lecture notes in computer science, No. 73.* Berlin: Springer Verlag 1979. p. 426-439

This paper presents mechanisms for defining new types of concepts, conceptual relations, and composite entities having other entities as parts.

6004 Stock, W. G.: **Wissenschaftliche Informationen - metawissenschaftlich betrachtet. Eine Theorie der wissenschaftlichen Information.** (Scientific information under a metascientific aspect.) (In German.) München: Minerva Publikation 1980. 147 p.

### 15 Psychology and Epistemology of Classification

6005 Zvonkin, A. K., Frumkina, R. M.: **Free classifying: behavior models.** (In Russian.) In: *Naučno-techn. inform., Ser. 2* (1980) No. 6, p. 1-6, 8 refs.

Results of a series of modelling experiments on free classifying of objects with different degrees of complexity are expounded. The authors of the present article proceed from the conjecture that some essential regularities of the human classifying behavior do not depend directly upon the specific character of the activities, part of which is the classifying act. This conjecture allows to investigate the classifying behavior as such. The general task to be solved by the experiments described is formulated as follows: if there are some different classifications equally suitable from a logical point of view, which of them would a man choose in the present situation and why? (Authors, amend.)

### 17 Classification Problems

6006 Bauer, G.: **Erfahrungen bei der Gestaltung und Anwendung thesaurusartiger (semantischer) Hilfsmittel in der Forschung.** (Experiences in design and application of thesaurus-like (semantic) aids in research.) (In German.) In: *Informatik* 26 (1979) No. 6, p. 19-22, 8 refs. The method utilized shows a possible way for the presentation of knowledge or information so that relevant meaning structures may be recognized much easier within an information collection and also that the creative classification, combination and evaluation of information can be supported.

6007 Brachman, R. J., Smith, B. C. (Eds.): **Special issue on Knowledge Representation.** In: *SIGART Newsletter* (1980) No. 70, 138 p.

The issue supplies a survey on current knowledge representation research. The results from a questionnaire action with 83 replies are displayed in 5 chapters: (1) Project register, listing Personnel, Address, Project Name, Project description and References of each participant, (2) Project Profiles, provides synoptic characterizations of each of the projects, (3) Individual position statements, (4) Questionnaire analysis, (5) Some non-standard hypotheses. App. A gives the questionnaire introduction, App. B the Cross Reference Tables.

6008 Mount, J. E.: **Demise of a classified catalogue: victim of progress?** In: *Libr. Res. & Techn. Serv.* 23 (1979) No. 4, S. 422-425, 3 refs.

The classified catalogue at Laurentian University in Sudbury, Ontario, has been closed despite its unique contribution to bilingual access (English/French). An alphabetic English subject catalogue covering material in English and other languages exclusive of French and a separate French subject catalogue for French material now cover monographs received since 1975.

Internal maintenance problems and the attempt to provide equivalent access in two languages, plus the pressure to standardize when joining a cooperative cataloguing system, led to the demise of the classified catalogue, its inherent strength in a bilingual situation notwithstanding. (Author)

6009 Small, H., Greenlee, E.: **Citation context analysis of a co-citation cluster: recombinant-DNA**. In: *Scientometrics* 2 (1980) No. 4, p. 277–301

The techniques of co-citation clustering and citation context analysis are combined to concretely define the shared knowledge within a research specialty. The cluster for a large and fast moving biomedical specialty, recombinant-DNA, is presented in terms of the highly cited documents comprising it and their co-citation links. By examining citation contexts in the papers citing the highly cited documents, it is possible to label each of the documents in the cluster with its specific cognitive meaning for the citing authors. Co-citation contexts are used to reveal the relationships among the concepts symbolized by the highly cited documents, providing a cognitive equivalent of the co-citation links. This may open a new way to the investigation of the logic of conceptual change at the specialty level. (Author)

## 19 History of Classification

See also 5975, 5998

6010 Drazan, J.: **Indexing as hard labor: 'Convict indexing' in the 1880s**. In: *Indexer* 12 (1980) No. 1, p. 27–28, 5 refs.

Summary of experiences about indexing as revealed in 5 Letters to the Editor published in the newsweekly called "The Nation" in 1883.

## 2 Structure & Construction of CS

### 21 General Questions of Structure

See also 5973, 5989, 5992

6011 Antopol'skij, A. B., Kazakov, E. N., Klykov, L. V., Cukerman, E. M.: **The development and application of the GASNTI List of Subject Headings**. (In Russian.) In: *Vopr. inform. teorii i prakt.* (1979) No. 40, p. 33–44

The functions of the List, its design criteria, composition and structure, notation, syndetics, use principles, interaction with other information classifications, and maintenance are described.

6012 Baruškova, R. I.: **Subject headings lists as STI classification systems**. (In Russian.) In: *Teorija i praktika nauč.-techn. inform.*, Moskva 1979. p. 141–149, 10 refs. The classification scheme employed in the USSR Abstracting Publications Subject Headings List is considered.

6013 Beloozerov, V. N., Vajsberg, A. M., Antopol'skij, A. B.: **A method for index language optimisation**. (In Russian.) In: *Vopr. inform. teorii i prakt.* (1979) No. 40, p. 96–104, 8 refs.

6014 Černyj, A. I., Paščenko, N. A.: **The ASSISTENT linguistic support**. (In Russian.) In: *Vopr. inform. teorii i prakt.* (1979) No. 40, p. 18–32, 20 refs.

The ASSISTENT linguistic support is presented which is based on three main IR languages – the VINITI Information Publications Subject Headings, the UDC, and a descriptor language.

6015 Dahlberg, I.: **The Broad System of Ordering (BSO) as a basis for an integrated social sciences thesaurus**. In: *Intern. Classificat.* 7 (1980) No. 2, p. 66–72, 8 refs.

Investigation into the possibility to use the relevant parts of the Broad System of Ordering (BSO) to construct on its basis an integrated thesaurus of the social sciences (SS) comprising all existing thesauri and classification systems in this area. The SS coverage of the BSO was found to be relatively small compared with the corresponding classes of the Dewey Decimal Classification, the Bliss Classification and the Unesco Thesaurus. The BSO falls short also in its structural features as exemplified by its method of class formation and concept arrangement with its reversing rule for citation order. The BSO not having been designed

for the purpose of integrating other systems, it cannot be blamed for its non-suitability for such an application purpose. (Author)

6016 Dvorakova, H.: **Descriptor-type IR languages and trend towards thesaurus standardisation and compatibility**. (In Czech.) In: *Techn. knih.* 23 (1979) No. 10, p. 277–284, 19 refs.

The advantages and shortcomings of descriptor-type IR languages are discussed. The Unesco activities in the field of IR languages and international regulative materials for thesauri are described. The ISTIS IR languages complex and thesaurus-related technical and regulative documents are presented. The general state-of-the-art in descriptor languages in Czechoslovakia is reviewed. The future of descriptor-type IR languages is projected. (Orig.abstr.)

6017 Kristal'nyj, B. V., Antopol'skij, A. B.: **Composition, structure and functions of linguistic support for the Network of Automated STI Centres**. (In Russian.) In: *Tez. dokl. 9-go Nauč. seminaru po sistem. issled. GASNTI. Č. 1.* Moskva 1979. p. 43–46.

Discussion of the structure of the linguistic support (a complex of IR languages), the compatibility and the utilisation of the language of each type.

6018 Litoukhin, J.: **Toward an integrated thesaurus of the social sciences**. In: *Intern. Classificat.* 7 (1980) No. 2, p. 56–59

Introductory remarks concerning papers and deliberations of a meeting of the Unesco Division for the International Development of the Social Sciences, Paris, June 9–11, 1980, intended to pave the way toward an Integrated Thesaurus of the Social Sciences. Developmental steps toward clarification of SS terminology had been undertaken at Unesco already in 1952. Ever since then dictionary projects and attempts at concept identification have been undertaken, but the non-existence of an overall classification system of the SS identifying its scope and interrelationships has hampered the terminology work considerably. Proposals for valid methods were sought therefore in order that within 1981–1983 a macrothesaurus/classification system for the SS could be worked out possibly based on an integration of existing thesauri and classification systems in these fields. LC.

### 22 Elements and Special Structures of CS

See also 5965, 5967, 5980, 5982, 5983, 6025, 6089

6019 Bechtel, H.: **Semantic prefixes to diminish false drops due to lack of context in controlled documentation languages**. In: *Intern. Online Inform. Meeting 1979/3*, London. Oxford: Learned Information (Europe) 1979. p. 251–258

Proposal for an anticipated postcoordination in order to improve the SDIM (Système de Documentation et d'Information pour la Métallurgie) by adding prefixes to descriptors.

6020 Cesarino, M. A. da Nobrega, Pinto, M. C. M. L.: **Subject headings as indexing languages**. (In Portuguese.) In: *Rev. da Escola de Biblioteconomia da UFMG* 7 (1978) No. 2, p. 268–288, 12 refs.

6021 Kent, William: **Data and reality**. Amsterdam/New York/Oxford: North-Holland Publ. Co. 1978. (2nd printing 1979) ISBN 0-444-85187-9

The contents list gives the following outline: 1. Entities, 2. The nature of an information system, 3. Naming, 4. Relationships, 5. Attributes, 6. Types and categories and sets, 7. Models, 8. The record model, 9. The other three popular models, 10. The modelling of relationships, 11. Elementary concepts: another model? 12. Philosophy.

6022 Marusenko, M. A.: **On the uniformity of empirically selected sublanguages and the law of scientific and technical terms distribution**. (In Russian.) In: *Naučno-techn. inform.*, Ser. 2 (1980) No. 8, p. 1–6, 16 refs.

The statistical parameter – length of a scientific/technical term is considered for a number of terminological systems. It is shown on the base of empirical data that terminological systems of empirically selected sublanguages fixed in terminological dictionaries are statistically heterogenous. Complex terms in a real scientific/technical text and in the dictionaries are distributed according to different laws of the theory of probability. The known ways of scientific and technical terms fixation do not take into account objective laws of terms functioning, thus

lowering its effectiveness and hampering sublanguages selection.  
(Author)

6023 Podlesskaya, V. I.: **On the presentation of semantical-syntactic characteristics of lexical units in an automated vocabulary.** (In Russian.) In: Naučno-techn. inform., Ser. 2 (1980) No. 8, p. 18–21, 4 refs.

Semantical-syntactic characteristics of lexical units are described concerning certain structures of the sentence. One of the possible ways to explicate these characteristics is the indexing of a lexical unit according to its probable positions within the sentence. The suggested approach is illustrated with the examples from Russian and Japanese languages.  
(Author)

6024 Zajdberg, Ch. M.: **The problems of faceting the main tables of general classifications.** (In Russian.) In: Tr. GPNTB SSSR (1979) No. 13, p. 142–174, 11 refs.

Characterizes the technique of faceting in the following stages: identification of the faceting conditions; determination of faceting methods; building up the collection of fundamental notions; sectoral-subsectoral organisation; category-type organisation; linguistic-terminological editing; the sign-indexing organisation, and adaptation of the new structure to the old one.

## 23 Construction of CS

See also 5922, 5924, 5989, 5992, 5995–5997, 6011

6025 Antopol'skij, A. B., Kristal'nyj, B. V.: **On the normative-methodological documents of the GASNTI linguistic support.** (In Russian.) In: Naučno-techn. inform., Ser. 2 (1979) No. 9, p. 5–8, 7 refs.

The composition and structure are described of the set of normative-methodological documents which determine the procedure of creation, maintenance and use of GASNTI linguistic support materials. The contents of some of the documents are presented, their status, application area and terms of introduction are determined. Special attention is paid to documents which regulate the use of the linguistic support materials under network conditions.  
(Orig. abstr.)

6026 Bielicka, L. A.: **Fundamentals of development of disciplinary and subdisciplinary thesauri for SINTO.** (In Polish.) In: Aktual. probl. inform. i. dok. 24 (1979) No. 3, p. 47–48

Description of 16 thesauri developed or to be developed within a common national programme in Poland. They should be coordinated and brought together under a roof thesaurus together with a General Problems Thesaurus to include terms in economics, labour organisation and hygiene, the science of science, scientific information, patents, and standardisation.

6028 Grin'ov, S.: **Compiling a thesaurus.** In: Fachsprache 1 (1979) No. 4, p. 154–161, 6 refs.

A brief survey of the stages of terminological work involved in compiling a thesaurus shows that there is a very close connection between the two kinds of linguistic activity. About 80–90% of operations in the course of thesauri development in most cases have a purely terminological character, so that these two kinds of work could be done side by side by the same specialists.  
(Author, abbr.)

6029 Kazlauskas, J., Holt, Th. D.: **The application of a minicomputer to thesaurus construction.** In: J. Amer. Soc. Inform. Sci. 31 (1980) No. 5, p. 363–368, 14 refs.

The use of a minicomputer in various phases of creating the thesaurus for the National Information Center for Special Education Materials (NICSEM) database is described. The minicomputer is used to collect, edit, and correct candidate thesaurus terms. The use of the minicomputer eases the process of grouping terms into files of similar concepts and facilitates the generation of products useful in vocabulary review and in term structuring. Syndetic relations, indicated by assigning coded identification numbers, are altered easily in the design phase to reflect restructuring requirements. Because thesaurus terms are already in machine-readable form, it is simple to prepare print programs to provide permuted, alphabetic, hierarchical, and chart formatted term displays. Overall, the use of the minicomputer facilitates initial thesaurus entry development by reducing clerical effort, editorial staff decisions, and overall processing times.  
(Author)

6030 Lavrik, V. V.: **Computer-aided development of IR thesauri from second-generation permutation indexes.**

(In Russian.) In: Tez. dokl. 9-go Nauč. seminaru po sistem. issled. GASNTI, Č. 2. Moskva 1979, p. 110–111

6031 Leski, K.: **Thesaurus construction principles.** (In Polish.) Warszawa: Pr. OIN PAN 1978. 284 p.

Comprehensive study of thesaurus construction methods and procedures, with particular attention to computerised design of IR thesauri. Included are also a number of aspects of thesaurus design falling outside of information science, as e.g. linguistics, science of science and manpower training.

6032 Foster, W. R., Beckhard, E. J., Hart, C. S.: **The co-ordinated development of health-related clearinghouse vocabularies.** A proposed technique. In: Tally, R. D. (Ed.) et al: Information choices and policies. Proc. 42nd ASIS Ann. Meeting, Minneapolis, Minn., 14–18 Oct. 1979. Washington, D.C.: ASIS 1979. p. 160–167, 1 ref.

For a number of clearinghouses dealing with specific problem areas, such as a single disease or other single focus, a coordinated development and use of a source health education thesaurus would serve to preclude the otherwise inevitable confusion caused by disparate and overlapping vocabularies. (Author, abbr.)

6033 **Multilingual thesaurus in geology.** English-Russian part, construction methodology. (In Russian.) Leningrad: Vsesojusnyi Naučno-issledovatel'skij geologičeskij inst. 1979. 16 p.

Presentation of a methodology for the construction of the English-Russian part of a multilingual geology thesaurus, to be developed in six languages (Russian, German, French, English, Spanish and Italian).

6034 Popowska, H.: **Construction of thesauri according to the method of A. V. Sokolov.** (In Polish.) In: Aktual. Probl. Inform. Dokument. 24 (1979) No. 6, p. 21–26, 15 refs.

The construction method using facets in blocks is presented. The criteria for compatibility are shown and Sokolov's method is discussed as well as the possibilities of a realisation of such a thesaurus.

6035 Springl, W.: **Die Erarbeitung eines mehrsprachigen Informationsrecherche-Thesaurus für das Fachgebiet Schwarzmetallurgie.** (Elaboration of a multilingual IR thesaurus for the subject-field of steel metallurgy.) (In German.) In: XI. Kolloquium über Information und Dokumentation v. 14. bis 16. Nov. 1979. Institut für Informationswissenschaft, Erfindungswesen und Recht d. TH Ilmenau. Ilmenau 1980. p. 26–31

## 24 Relationships

See also 6021

6036 Bechtel, H.: **„Vorweggenommene Postkoordination“ zur Minderung des Problems der variablen Wortbedeutung in kontextfreien Dokumentationssprachen.** (Anticipated postcoordination to minimize the problem of varying meanings in context-free indexing languages.) (In German.) In: DFW Dokumentation Information 28 (1980) No. 2, p. 43–57, 15 refs.

Extended version of a lecture presented at the 3rd Annual Conference of the Gesellschaft für Klassifikation in Königstein, April 1979 with a proposal to introduce prefixed codes which may facilitate in combination with element-descriptors, retrieval of pertinent information, especially with respect to terms denoting chemical compounds.

6037 Gerd, A. S., Bogdanov, V. V., Dinareva, S. S.: **Paradigmatic relationships in the semantics of natural and IR languages.** (In Russian.) In: Vest. LGU (1979?) No. 14, p. 72–79, 16 refs.

Summary of the work in index language development carried out at the Chair of Mathematical Linguistics, Leningrad University with special emphasis on paradigmatic relationships.

6038 Maniez, J.: **Le rôle de la syntaxe dans les systèmes de recherche documentaire: Tome II: Etude critique de quelques S.R.D. (The role of syntax in information retrieval systems. Critical study of several systems.)** (In French.) Dijon: I.U.T. de Dijon, Département “Carrières de l'Information” 1977. 182 + 30 p.



The first part (see Class. Lit. 4159 in 1979-1) treated the semantic-linguistic aspect of the syntax of documentary formulae, the second part examines the concrete solutions for the integration of the syntax into the techniques of document retrieval. Examines the syntax of SYNTOL, Farradane's, of the Colon Classification, of PRECIS, and DOKILIS. Conclusions.

## 26 Notation, Codes

6039 Cooper, D., Lynch, M. F.: **Compression of Wiswesser Line Notations using variety generation.** In: J. Chem. Inform. Comp. Sci. 19 (1980) No. 3, p. 165-169, 14 refs.

Compression methods of data were studied and it is shown how the use of symbols with varying lengths permits to comprise the Wiswesser notation. The results can be compared with the one which can be stated if one applies the same technique to texts in natural language.

## 28 Compatibility & Concordances of CS

See also 5923, 5986, 6016, 6017, 6026, 6034, 6177

6040 Mechido, L. S., Mišin, V. A.: **Linguistic support for the Lenin State Library automatic system in the context of its interaction with the Network of Automated STI Centres.** (In Russian.) In: Tez. dokl. 9-go Nauč. seminaro po sistem. issled. GASNTI, Č. 2. Moskva 1979. p. 106-109

Description of the characteristics, composition and structure of the linguistic support for the Lenin State Library's centre which depend on the conditions of work at the library and the present-day state of IR development.

6041 Cahn, D. F., Herr, J. J.: **Automatic database mapping and translation methods.** Berkeley, CA: University of California at Berkeley, Lawrence Berkeley Lab. 1978. 13 p.

Automatic methods for content-directed translation and information mapping among machine-readable databases are considered. Multicategory decision algorithms, tested against the classification decisions of human experts in a bibliographic document classification task, matched human performance to the 88% level and showed several key parametric sensitivities. The algorithms tested were based on prior state (experiential) descriptor and category usage, and can be configured to provide incremental adaptation or learning. Techniques used emanate from the pattern recognition and artificial intelligence fields.

(Author)

6042 Richard, P., Virville, M. de: **L'automatisation de la construction de tables de correspondance entre nomenclatures économiques.** (Automatic construction of correspondence tables between economic nomenclatures.) (In French.) In: R.A.I.R.O., Informat., Fra 13 (1979) No. 4, p. 375-392

## 29 Evaluation of CS

See also 6146

6043 Meyriat, J.: **Social science information languages: a comparative analysis.** In: Intern. Classificat. 7 (1980) No. 2, p. 60-65

Preliminary report of an analysis of some 60 existing information languages of the social sciences, especially with respect to the distribution of these languages within the social sciences. Purpose and empirical method used are discussed. For each of 41 subject fields the number of terms in significant information languages are given. Suggestions for further investigations and for the preparation of a General Indexing Language in the social sciences are made. Annex A lists the fields in English and French, Annex B the 60 information languages included in the analysis.

I.C.

6044 Willett, P.: **Document retrieval experiments using indexing vocabularies of varying size. II. Hashing truncation, digram and trigram encoding of index terms.** In: J. Doc. 35 (1979) No. 4, p. 296-305, 28 refs.

This paper describes the use of fixed-length character strings for controlling the size of indexing vocabularies in reference retrieval systems. Experiments with the Cranfield test collection show that trigram encoding of words performs noticeably better than

the use of digrams; however, use of the least frequent digram in each term produces more acceptable results. Hashing of terms gives a better performance than that obtained from a vocabulary of comparable size produced by right-hand truncation. The application of small indexing vocabularies to the sequential searching of large document files is discussed.

(Author)

## 3 Classing and Indexing (Methodology)

### 31 Theory of Classing and Indexing

See also 5852, 5984, 5987, 5993

6045 Donbroski, L.: **Life without Dewey.** In: Catalogue & Index (1980) No. 57, p. 3-6, 3 refs.

Report on the 'Reader Interest' arrangement of stock in East Sussex County Library.

6046 Harding, A. F., Willett, P.: **Indexing exhaustivity and the computation of similarity matrices.** In: J. Amer. Soc. Inform. Sci. 31 (1980) No. 4, p. 298-301, 3 refs.

Some of the automatic classification procedures used in information retrieval derive clusters of documents from an intermediate similarity matrix, the computation of which involves comparing each of the documents in the collection with all of the others. It has recently been suggested that many of these comparisons, specifically those between documents having no terms in common, may be avoided by means of the use of an inverted file to the document collection. This communication shows that the approach will effect reductions in the number of interdocument comparisons only if the documents are each indexed by a limited number of indexing terms; if exhaustive indexing is used, many document pairs will be compared several times over and the computation will be greater than when conventional approaches are used to generate the similarity matrix.

(Author)

6047 Langridge, D. W.: **Book review of Knight, G. N.: Indexing, The art of: a guide to the indexing of books and periodicals.** London: Allen & Unwin 1979. In: J. Librarianship 12 (1980) No. 1, p. 65-66

6048 Nowak, C.-G.: **Marginalien zu einer Konvergenztheorie der Sacherschließungsverfahren.** (Some remarks on a convergency theory in the field of subject cataloguing.) (In German.) In: Bibliothek. Forschung u. Praxis 3 (1979) No. 3, p. 159-169, 25 refs.

The thesis of a convergency of classification systems on the one hand and thesauri on the other is proved by giving a short survey of the development in the field of subject cataloguing. The author, both dealing with theory and with practical aspects of information systems, further points to some pertinent activities of universal libraries.

6049 Pötzsch, M.: **Indexiertiefe und Übereinstimmung der Ergebnisse bei Verwendung modifizierter Richtlinien.** (Indexing depth and degree of correspondence of the results in the case of application of modified directives.) (In German.) In: Informatik 27 (1980) No. 2, p. 29-30, 5 refs.

Problems encountered in the literature analysis by indexing for the automated document retrieval system of AGROSELEKT are discussed. Apart from the organization of the analysis, priority is given to problems of improving indexing quality. Tests are made to study indexing depth and the degree of correspondence of the indexing result.

(Author)

6050 Rosenthal, F. J.: **Managing the subject access problem in a legislative research environment.** In: Hennepin County Public Library Cataloging Bull. 38 (1979) p. 1-3.

### 32 Subject Analysis

See also 5852, 5947, 6009

6051 Buder, J.: **Die Inhalterschließung von Zeitungen.** Eine internationale Übersicht über Zeitungsindizes und

Zeitungsinhaltsbibliographien. (The content analysis of newspapers. An international survey on newspaper indexes and bibliographies of newspaper contents.) (In German.) Berlin: Arbeitsstelle für das Bibliothekswesen, Dt. Bibl.-Verb. 1978, 119 p. = Bibliotheksdienst, Beiheft 133, ISBN 3-87068-133-0

6052 Gresova, V. I.: **Accounting of semantical characteristics of the inquiry object in information retrieval.** (In Russian.) In: Naučno-techn. inform., Ser. 2 (1980) No. 8, p. 10–12, 10 refs.

6053 Milstead Harris, J. L., Clack, D. H.: **Treatment of people and peoples in subject analysis.** In: Libr. Res. & Techn. Serv. 23 (1979) No. 4, p. 374–390, 4 refs.  
Parallel investigations of Library of Congress subject analysis of minority groups were carried out at St. John's University and Florida State University. Titles were randomly or systematically selected from bibliographies on ethnic groups, the handicapped, age groups, women, gays, and alternative life-styles. The subject headings and the LCC and Dewey classification numbers applied by LCC were examined to determine: (1) if the subject analysis is prejudiced, (2) if the vocabulary is objective, (3) if the analysis is offensive to the affected group, and (4) if the analysis provides access via the terms likely to be used by the intended audience. The updating performed on subject headings in recent years was found to have corrected many problems; recommendations are made for further updating and for changes in application policies. The Dewey classification, with a few minor problems, was found to be quite unbiased, but the Library of Congress classification was found to be quite outdated, at least in the versions available for public use. (Author)

6054 Wildgrube, W.: **A FORTRAN IV program for quantitative content analysis.** In: Educ. psychol. Measur., USA 39 (1979) No. 3, p. 695–696

### 33 Classing and Indexing Techniques

See also 5987, 5993, 5994, 6010, 6091, 6139, 6153

6055 Lenz, R.: **Leichenpredigten und die Methoden ihrer Erschließung.** (Funeral sermons. History and methods of cataloguing.) (In German.) In: Bibliothek. Forschung u. Praxis 3 (1979) No. 2, p. 112–121, 19 refs.  
Printed funeral sermons are important sources of cultural history esp. of the 17th and 18th centuries. Formal and subject cataloguing of collections of funeral sermons in German libraries is insufficient. A cataloguing sheet is being introduced for the automated generation of alphabetical catalogs and various indexes, finding its first application in the cataloguing of the funeral sermons' collection in the University Library of Marburg (West Germany).

6056 Onomura, H.: **Indexing and retrieval.** (In Japanese.) Dokumentasyon kenkyu 29 (1979) No. 6, p. 248–251, 3 refs.  
Discussion of ways of indexing with the help of classification tables and thesauri.

### 34 Automatic Classing and Indexing

See also 5981, 6069

6057 Kambayashi, Y., Hayashi, T., Tanaka, Y., Yajima, Sh.: **A linear storage space algorithm for a reference structure index.** In: Information Processing Letters 7 (1978) No. 2, p. 66–71  
The new indexing procedure proposed handles reference citation structures of papers.

6058 Buhalova, E. I., Zajdenman, M. A., Stroganova, I. Ja.: **Lexical and semantical topic analysis based on formal rules.** (In Russian.) In: Naučno-techn. inform., Ser. 2 (1980) No. 6, p. 20–23, 9 refs.  
The present article closes the cycle of these authors' publications devoted to the problems of document automated classifying. The methods of realizing the classification's last stage, viz. the way of formal choice of taxon name and its attribute description are proposed. (Orig. abstr.)

6059 Lea, G., Shearer, J., Paterson, D.: **Computerized indexing of the Institute of Geological Sciences (UK) geological map collection.** In: Spec. Libr. Assoc. Geography & Map Div. Bull. (1978) No. 112, p. 27–46, 19 refs.

6060 Parker, M., Thorpe, P.: **GRIP – a personal online indexing system using a minicomputer.** In: Program 13 (1979) No. 1, p. 14–22, 11 refs.  
Describes the development and use of GRIP, an online information storage and retrieval system for personal indexes, using a Hewlett Packard 2100S minicomputer. Users are able to compile their own files consisting of completely unformatted records, and searching is carried out online from remote terminals often in the user's own laboratory. The potential use of the system is indicated and further possible developments outlined. (Author)

### 35 Manual and Automatic Ordering

See also 6009

6061 Greenberg, St. P., Larsen, E. J.: **An automated medical record ordering and tracking system at the Cleveland Clinic Foundation.** In: Med. Record News 50 (1979) No. 4, p. 31–37

6062 Gubmann, N.: **Collection organization in a mathematical research library.** Washington, D.C. 1978. 7 p. EDRS: ED 160 121  
Description of the way in which the Courant Institute of Mathematical Sciences Library at New York University with a collection of 30 000 books, 13 000 bound periodicals and 450 current periodical subscriptions and other materials organises its collection.

6063 Maier, M.: **POMR guides for filing order.** In: Med. Record News 50 (1979) No. 3, p. 62–78.

### 36 Coding

6064 Freeman, H.: **The generalized chain code for map data encoding and processing.** Troy, N.Y.: Rensselaer Polytechnic Inst., Computer Research Laboratory 1978. 32 p., = NTIS: AD-A060 690/5GA  
The concept of chain coding for map data based on the well-known 8-direction coding matrix is generalized to coding schemes involving 16, 24, 32, 48 and even more permissible directions for the line segment links in the chain representation. General methods for quantization and encoding are described. The different schemes are compared with respect to compactness, precision, smoothness, simplicity of encoding, and facility for processing. The resulting coding schemes appear to have desirable characteristics for map data processing applications because of their improved storage efficiency, smoothness, and reduced processing time requirements. (Orig. abstr.)

6065 Modestino, J. W., Daut, D. G.: **Combined source-channel coding of images.** Troy, N.Y.: Rensselaer Polytechnic Inst., Communication and Inform. Process. Group 1978. 71 p., = NTIS: AD-A061 133/5GA.  
Description of a combined source-channel coding approach for the encoding, transmission and remote reconstruction of image data.

6066 Raev, A. G., Ehl'man, I. B.: **Coding of bibliographical descriptions of printed works.** (In Russian.) In: Naučn. techn. bibl. SSSR (1978) No. 11, p. 22–26, 11 refs.

### 37 Reclassification

6067 Mattison, D.: **Library classification conversion.** In: Ark. Lib. (1979) No. 36, p. 14–15

### 38 Index Generation Programming

See also 6077

6068 Dufton, S. P., Talbot, R.: **The computerised production of Dewey subject indexes for the libraries of HERTIS.** In: Program 14 (1980) No. 1, p. 24–35.

This paper describes the development, through three versions, of a computer-based subject-index production scheme designed as a complement to a system producing MARC-based catalogues for a library cooperative. The scheme provides an individual subject index to each member of the cooperative and a union subject index to the whole, or any part, of the group. The major advantages of the scheme are simplicity and attention to practical detail. The disadvantages are an eighty-character limitation on record length and complete dependance on manually produced records. The scheme is designed to handle records carrying Dewey classification numbers. (Author)

6069 Malthouse, N. S.: **INDEXGEN: index term generation heuristics. Software documentation.** Oak Ridge, Tenn.: Oak Ridge Natl. Lab. 1978. 106 p. = NTIS: ORNL/EIS-104

Discussion of the theory, design and implementation of techniques like the Term Discrimination Model for evaluation of potential index terms and the use of low and high document frequency groupings of terms for suggested thesaurus and phrase terms for use in the ORCHIS system.

### 39 Evaluation of Indexing

See also 6073

6070 Bennion, B. C.: **Performance testing of a book and its index as an information retrieval system.** In: J. Amer. Soc. Inform. Sci. 31 (1980) No. 4, p. 264-270, 18 refs. The retrieval performance of book indexes can be measured in terms of their ability to direct a user selectively to text material whose identity but not location is known. The method requires human searchers to base their searching strategies on actual passages from the book rather than on test queries, natural or contrived. It circumvents the need for relevance judgment, but still yields performance indicators that correspond approximately to the recall and precision ratios of large document retrieval system evaluation. A preliminary application of the method to the subject indexing of two major encyclopedias showed one encyclopedia apparently superior in both the finding and discrimination abilities of retrieval performance. The method is presently best suited for comparative testing since its ability to yield absolute or reproducible measures is as yet not established. (Author)

6071 Glasov, Ju. M.: **Analysis of assignment of keywords in information cards received by VNTIT center.** (In Russian.) In: Vopr. inform. teorii i prakt. (1979) No. 41, p. 51-55, 2 refs.

Investigation into the adequacy of author-assignment of keywords in the field of machine-building on the basis of 1680 documents. The research has shown that the authors have done a good enough assignment work and that the keywords rendered the essence of an abstract satisfactorily.

6072 Moeller, B. A.: **Vidensklassifikation. En komparativ analyse af Statsbibliotekets systematiske katalog.** (Classification of knowledge: A comparative analysis of the classified catalogue of the State Library.) (In Danish.) Aarhus: Statsbiblioteket 1979. 53 p.

In the catalogue production of the Danish State Library within a period of 6 weeks some 180 monographs were found to have been catalogued by the British National Bibliography also. A comparison of the class marks showed a wide divergence in the subject analysis of one and the same monograph. On the basis of the hierarchical contexts it became obvious that the knowledge content of the classes arrived at for the same document could not be identical. The reasons for this divergence can be shown to exist in the different world views of M. Dewey and A. Vannerus on whose Vetenskapsklassifikation 1907 the Danish State Library classification system is based. (Acc. to author)

## 4 On Universal Systems

### 42 On the Universal Decimal Classification, UDC

See also 6014

6073 Fetisova, N. N., Pančenkova, I. T., Orlinkova, O. L.: **Concerning the indexing quality on the basis of UDC notation assignment.** (In Russian.) In: Naučn. techn. bibl. SSSR (1979) No. 6, p. 19-20

6074 Hindson and Partners: **The use of the Universal Decimal Classification in Scotland** with an appendix listing the names of users with addresses and other details. Bridgport: Hindson and Partners 1980. 13 p. = UDC Survey UK 1979/1980 Report No. 1, £ 3.-

6075 Hindson and Partners: **The use of the Universal Decimal Classification in South West England and the Channel Islands** with an appendix listing the names of users with addresses and other details. Bridgport: Hindson and Partners 1980. 11 p. = UDC Survey UK 1979/1980, Report No. 2, £ 3.-

6076 Lazurkina, V. B., Maslovets, R. D., Nekrasov, B. V.: **Comparative analysis of the Library Bibliographical Classification and the UDC in the divisions of the biological sciences.** (In Russian.) In: Bibl. Akad. Nauk SSSR. Akad. Nauk. Sojuz. Respubl., Sbor. nauč. Trud. (1979) No. 2, p. 27-41, 3 refs.

6077 Walser, M.: **Das Programmsystem EDIS-1 für On-line-Sachrecherchen nach der Dk im Katalog der Eidgenössischen Technischen Hochschule Zürich.** (The EDIS-1 Program-System for online subject searches in the systematic UDC based catalogue of the SFIT Library.) (In German.) In: Nachr. Dok. 31 (1980) No. 4/5, p. 193-197, 9 refs.

The catalogue has been produced in machine-readable form since 1976 (130000 title-entries). UDC numbers are used for searches and indexing. The search-concepts can be automatically extended into related areas.

6078 Wellisch, H. H.: **Book review of General Classification Systems in a Changing World: Proceedings of the FID Classification Symposium Held in Commemoration of the Dewey Centenary.** The Hague: FID 1978. In: Libr. Quarterly 50 (1980) No. 1, p. 146-148

### 43 On the Dewey Decimal Classification, DDC

See also 5852, 6053, 6068, 6078

6079 Berman, S.: **DDC 19: an indictment.** In: Libr. J. 105 (1980) No. 3, p. 585-9

6080 Calvert, Ph. J.: **Expanding the Fiji numbers in the Dewey Decimal Classification.** In: Fiji Libr. Assoc. Journ. (1979) No. 1, p. 63-70

6081 Crocetti, E.: **La classificazione decimale Dewey tra 18a e 19a edizione.** (The Dewey Decimal Classification between the 18th and 19th edition.) (In Italian.) In: Ass. Ital. Bibl., Boll. Inform. 19 (1979) No. 3, p. 201-204, 9 refs.

Comparison of the 18th DDC edition with the one of 1965 as well as presentation of the planned changes of the 19th ed.

6082 Custer, B. A.: **The view from the editor's chair.** In: Libr. Res. & Techn. Serv. 23 (1980) No. 2, p. 99-105, 2 refs.

A brief history of the last four editions of the Dewey Decimal Classification from the personal viewpoint of its seventh editor.

6083 **Dewey Decimal Classification: comparison between 18th and 19th editions.** In: Rissalat-Al Maktaba (The Message of the Library) 14 (1978/79) No. 4 (Jordanian page numbering)

Outlines the 3 main changes in the 19th ed. of Dewey. Nearly every main class witnessed some kind of modification from the 18th ed., such as expansion, reassignment, improved wording, and brevity. (Orig. abstr.)

6085 Sharma, P. S. K.: **Dewey Decimal Classification for Indology.** New Delhi: Uppal Publ. House 1979. 294 p., refs. (Diss.)

Expansion and modification of the Dewey Decimal Classification (18) for classifying Indological books with special reference to Indian philosophy and Indian religion.



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

See also 6053, 6140

6086 Changing subject headings and closing the catalogs. In: *Cataloging Serv. Bulletin* 4 (1979) p. 11-15.

"The Library of Congress has been quite responsive to suggestions from the library community, but its policies are tempered by its own needs. The decision to delay the closing of the catalog until Jan. 1, 1981, also altered the library's plans to make changes in subject headings in a separate machine-readable file of subject headings without incorporating them in the LCSH supplements. Instead, changes will now be implemented gradually, with major changes occurring close to 1981. An order of priority has been established as to the headings to be changed first."

6087 Davis, E.: *Disability-related Subject Cataloging: Defective, deformed, degenerate, delinquent*. In: *Hennepin County Public Libr. Cataloging Bull.* 38 (1979) p. 69-74.

6088 Faith Pankin, M.: *A fresh look at Library of Congress Subject Headings*. In: *West Virginia Libraries* 32 (1979) p. 41-44.

6089 O'Neill, E. T.: *Research report on subject heading patterns in OCLC monographic records*. Columbus, Ohio: OCLC 1979.

6090 Preston, G. A.: *Coping with subject heading changes*. In: *Libr. Res. & Techn. Serv.* 23 (1980) No. 1, p. 64-68, 5 refs.

The Library of Congress will adopt numerous new subject headings when it closes its card catalogs in 1981. Libraries without subject authority control need to take steps to prevent the problems caused by having both obsolete and new subjects in their card catalogs. Three methods - Standard, Interfiling, and Split Files - are offered for preserving card catalog integrity. Tools and routines for subject maintenance are discussed. Each library must decide its own approach, but a minimum of subject control is recommended for libraries not switching to on-line catalogs in the near future. (Author)

6091 Rose, L. D.: *Cataloging of children's materials*. In: *Library of Congress Inform. Bull.* 38 (1979) p. 400-401.

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

See also 6076

6093 Fröschner, G.: *Probleme der Anwendung der sowjetischen bibliothekarisch-bibliographischen Klassifikation in den Bibliotheken der DDR*. (Application problems of the Soviet library-bibliographical classification in the libraries of the German Democratic Republic.) (In German.) Berlin: Method. Zentrum f. Wissenschaftl. Bibliotheken und Informations- u. Dokumentationseinrichtungen d. Ministeriums f. Hoch- und Fachschulwesen 1979. VIII, 227 p., M 33,50

6094 Perevošikova, L. M.: *Extensions and corrections in the sections 'VZ Physics' of the Library-Bibliographical Classification at the Library of the Physics Institute Lebedev of the USSR Academy of Sciences*. (In Russian.) In: *Bibl. Akad. Nauk. SSSR. Akad. Nauk Sojuz. Respubl., Sbor. nauč. Trud.* (1979) No. 2, p. 65-88, 2 p. refs.

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

See also 6012, 6015

6095 Kofnovec, L.: *Broad System of Ordering: a switching language*. (In Czech.) In: *Čs. inform.* 21 (1979) No. 9, p. 245-248, 4 refs.

Description of structure and usage of the BSO.

6096 Travis, I.: *Book reviews of BSO. Broad System of Ordering*. The Hague: *Féd. Intern. Doc.* 1978, and Coates, E., Lloyd, G., Simandl, D.: *The BSO Manual: the development, rationale and use of the Broad System*

of Ordering. The Hague: *Féd. Intern. Doc.* 1979. In: *Intern. Classificat.* 7 (1980) No. 2, p. 92-93

6097 Claus, P., Hansson, B.: *The International Patent Classification*. In: *World Patent Information* 2 (1980) No. 1, p. 13-20

On Jan. 1, 1980 almost 50 Industrial Property Offices throughout the world started applying the notations of the third edition of the IPC on their published patent documents and in their official gazettes. The article gives detailed information on the IPC and its application.

6098 Libedinskaja, M. N.: *International Patent Classification: evolution and library applications*. (In Russian.) In: *Nauč. u techn. Biblioteki SSSR* (1979) No. 11, p. 9-18, 14 refs.

The salient characteristics of the IPC are discussed and its structure and composition are described. The USSR adopted the IPC as the main national patent classification system on 1 Jan. 1970.

6099 Taube, U. F.: *Die internationale Patentklassifikation (IPC) und ihre Anwendung in der Bibliothek des Deutschen Patentamtes*. (The International Patent Classification and its application in the library of the German Patent Office.) In: *Bibl.Forum Bayern* 7 (1979) No. 3, p. 179-206, 25 refs.

6100 *The International Scientific and Technical Information System Subject Headings List*. (Rubrikator...) (In Russian.) 1st ed. Moskva: MCNTI 1979. 251 p.

The ISTIS Subject Headings List is a pragmatic classification covering the fields of the social sciences, the natural and exact sciences, technical and applied sciences and disciplinary and interdisciplinary problems. It was designed for use in the ISTIS subsystems as a classification tool, an ordering system and an information exchange and retrieval tool. It is thus a multi-thematic classification scheme and comprises up to three levels of hierarchy. (Acc. orig. abstr.)

6101 Poole, H.: *Fremont Rider and his international classification: an interesting tale of American library history*. In: *Libr. Res. & Techn. Serv.* 23 (1980) No. 2, p. 106-113, 15 refs.

Fremont Rider died approximately seventeen years ago. He was a librarian of many talents, the possessor of an inventive mind, and an intellectual competitor of such other contemporary frontiersmen of American librarianship as Cutter, Biscoe, and Dewey. One of his last and least known contributions to what has eventually become history instead of practice was his International Classification for the Arrangement of Books on the Shelves of General Libraries, the only totally enumerative classification scheme yet devised. The present paper sketches Rider's life, describes critically his classification system, and posits several explanations for its publication as well as its character. (Author)

6102 Sandison, A.: *The Science Reference Library Classification for books on shelves*. In: *J. Librarianship* 12 (1980) No. 1, p. 26-41, 16 refs.

Information in books - which are not normally covered by indexing services - can be rediscovered at the shelf; a main objective of the SRL Classification Scheme is to make such discovery easier. Any book is a cluster of information, which should overlap the contents of both its neighbours on the shelf. The SRL scheme adopts a ribbon (Wyndham Hulme's "chain") principle, interweaving sciences and technologies (25 per cent more compact in actual searches than Dewey or UDC). Books are placed by their inherent subjects, not by the audience or application. The mixed subject notation averages 4.4 characters per title. (Author)

#### 5 On Special Objects CS (Taxonomies)

##### 51 Numerical Taxonomy

See also 5851

6103 Abbott, L. A., Mitton, J. B.: *Diagnoses generated by numerical taxonomic methods applied standard blood variables*. In: *Meth. Inform. Med.* 19 (1980) No. 4, p. 205-209, 38 refs.

Data taken from the blood of 262 patients diagnosed for malabsorption, elective cholecystectomy, acute cholecystitis, infectious hepatitis, liver cirrhosis, or chronic renal disease were analyzed with three numerical taxonomy (NT) methods: cluster analysis, principal components analysis, and discriminant function analysis. Principal components analysis revealed discrete clusters of patients suffering from chronic renal disease, liver cirrhosis, and infectious hepatitis, which could be displayed by NT clustering as well as by plotting, but other disease groups were poorly defined. Sharper resolution of the same disease groups was attained by discriminant function analysis. — (Author)

6104 Ahuja, N., Rosenfeld, A., Haralick, R. M.: **Neighbor gray levels as features in pixel classification.** In: Pattern Recognition 12 (1980) No. 4, p. 251–260, 6 refs.

In segmenting an image by pixel classification, the sequence of gray levels of the pixel's neighbors can be used as a feature vector. This yields classifications at least as good as those obtained using other local properties (e.g., averages or values of difference operators) as features. (Author)

6105 Ambrosi, K.: **Aggregation und Identifikation in der numerischen Taxonomie.** (Aggregation and identification in numerical taxonomy.) (In German.) Königstein/Ts.: Hain 1980. 104 p., DM 29,—, = ISBN 3-445-02043-4, = Quantitative Methoden d. Unternehmensplanung 15

6106 Daudin, J. J.: **An iterative algorithm for analysis variance.** In: Int. J. of Bio-Medical Computing 10 (1979) No. 6, p. 507–518

6108 Eckes, Th., Rossbach, H.: **Clusteranalysen.** (Cluster analyses) (In German.) Stuttgart/Berlin/Köln/Mainz: Kohlhammer 1980. 124 p., DM 22,—, ISBN 3-17-001361-0

6109 Farver, T. B., Dunn, O. J.: **Stepwise variable selection in classification problems.** In: Biometrical Journal 21 (1979) No. 2, p. 145–153

6110 Formann, A. K., Mazanec, J. A., Oberhauser, O. C.: **Numerische Klassifikationsprobleme in 'großen' Datensätzen der demoskopischen Marktforschung: ein empirischer Methodenvergleich von Latent Class- und Cluster-Analyse.** (Numeric classification problems of demoscopic market research: an empiric comparison of the methods of latent class analysis and cluster analysis.) (In German.) Wien: Wirtschaftsverlag Dr. A. Orac 1979. 113 p. 56 refs. = Arb. P. No. 12/1979 of the Institut für Werbewissenschaft und Marktforschung der Wirtschaftsuniversität Wien.

6111 Grotian-Steinweg, I., Schüler, L., Wolff, H.: **De-komposition von Mischungen und Klassifikation mit Gradientenverfahren.** (Decomposition of mixtures and classification with grading procedures.) (In German.) Bonn: Dokumentationszentrum der Bundeswehr (DOK-ZENTBW) 1979. VI, 146 p., DM 40,— = Forsch. Ber. aus der Wehrtechnik 79/7

6112 Isogawa, Y., Okamoto, M.: **Linear prediction in the factor analysis model.** In: Biometrika 67 (1980) No. 2, p. 482–484

6113 Jovine, R.: **Cluster analysis: a strategy in management problems.** In: Rev. Inf. 9 (1979) No. 2, p. 137–155

The approach includes statistical analysis, preprocessing, correlation matrix, dissimilarity matrix, positioning information, measure of the position of the N-set toward a status vector, and two versions of clustering methods.

6114 Kittler, J., Pau, L. F.: **Automatic inspection by lots in the presence of classification errors.** In: Pattern Recognition 12 (1980) No. 4, p. 237–241, 12 refs.

The paper is concerned with the application of pattern recognition to the problem of automatic inspection of products by lots. It is shown that in the presence of classification errors, the clas-

sical approach to the design of acceptance sampling plans cannot be used. An alternative quality control procedure is proposed for the model assuming an arbitrary distribution of patterns in the lot. (Author)

6115 Krzysko, M.: **Discriminant variables.** In: Biometrical Journal 21 (1979) No. 3, p. 227–242

6116 Lachenbruch, P. A., Clarke, W. R.: **Discriminant analysis and its applications in epidemiology.** In: Meth. Inform. Med. 19 (1980) No. 4, p. 220–226, 36 refs.

This review article discusses current use of discriminant analysis in epidemiology. Contents include historical review, simple extensions and generalizations, examples, evaluation of rules, logistic discrimination, and robustness. (Author)

6117 Lange, N. de, Steinhäuser, D.: **Programmpaket zur automatischen Klassifikation.** Verfahren zur Clustierung quantitativer und qualitativer Daten. (Program package for numerical taxonomy. Procedures for the clustering of quantitative and qualitative data.) (In German.) Münster: Rechenzentrum der Universität 1979. 54 sheets, = Schriftenreihe. Rechenzentrum Univ. Münster, Nr. 36.

6118 Mudholkar, G. S., Trivedi, M. C.: **Normal approximation for the distribution of the likelihood ratio statistic in multivariate analysis of variance.** In: Biometrika 67 (1980) No. 2, p. 485–488.

6119 Moussa, M. A. A.: **On analysis of two-way contingency tables with some sampling zero cell counts — application to human reproduction wastage according to age.** In: Meth. Inform. Med. 19 (1980) No. 3, p. 164–169, 11 refs.

6120 Opitz, O.: **Numerische Taxonomie.** (Numerical Taxonomy.) (In German.) Stuttgart/New York: Fischer 1980. ca. 208 p., ca. DM 16,80, ISBN 3-437-40079-7; Uni-Taschenbücher 918

6121 Paul, S. R.: **A clumped beta-binomial model for the analysis of clustered attribute data.** In: Biometrics 35 (1979) No. 4, p. 821–824.

6122 Selove, St. L.: **The occurrence of fingerprint characteristics as a two-dimensional Poisson process.** Chicago, Ill.: Univ. of Illinois at Chicago Circle 1978. 19 p. = NTIS: AD-A055 617/5GA.

6123 Stoddard, A. M.: **Standardization of measures for cluster analysis.** In: Biometrics 35 (1979) No. 4, p. 765–773

6124 Williams, J. S.: **A synthetic basis for a comprehensive factor-analysis theory.** In: Biometrics 35 (1979) No. 4, p. 719–733.

6125 Wingert, F.: **Medizinische Informatik.** (Medical informatics.) (In German.) Stuttgart: B. G. Teubner 1979. 272 p., 178 refs. ISBN 3-519-02453-5

Of the six chapters of this introductory text one is devoted to problems of classification (p. 43–111) and another one to 'medical linguistics' (p. 112–138). In another chapter the special data models and data structures as well as relationships and indexing are treated — among other partial areas of 'medical informatics'. The classification chapter is concerned with characteristics, numerical classification, classification of concepts, and sequential decision strategies. There is a subject index, a glossary, and a list of tables and figures.

## 52 On Taxonomies & Nomenclatures for Chemicals

6126 Drane, J. W., Daly, D. M., Daly, D. D.: **Analysis of the perception and classification of the synthetic sounds.** In: Computers and Biomedical Research 12 (1979) No. 4, p. 351–377

6127 Magrill, D.: A name for every chemical. In: *New Scientist* (1980) July 3, p. 16–18

#### 54 On Taxonomies for Area 4

6128 Sekya, T., Saito, M., Ikeda, K.: Chromosome classification system based on banding technique. In: *Med. Progress through Technology* 6 (1979) No. 4, p. 169–177

#### 55 On Taxonomies for Area 5

6129 Scherer, K. R., Wallbott, H. G., Scherer, U.: Methoden zur Klassifikation von Bewegungsverhalten: Ein funktionaler Ansatz. (Methods concerning the classification of movement behaviour. A functional approach.) (In German.) In: *Z. für Semiotik* (1979) No. 2/3, p. 177–192, 37 refs.

Nonverbal signs in communicative behaviour are difficult if not impossible to "transcribe" since their coding is continuous, iconic, and probabilistic rather than discrete arbitrary, and invariant as is the case for most verbal signs. Therefore we suggest that coding systems for nonverbal behaviour be employed that rely on the segmentation of movements into functional units. A coding system for hand, head, and body movements based on the work of Ekman and Friesen is described and reliabilities (Cohen's Kappa) are reported. Preliminary results from two studies using these systems suggest interesting relationships between nonverbal behavior and personality traits of actors and the attribution of personality traits by raters. In addition, a computer-generated multi-channel behavior score containing verbal, nonverbal, and paralinguistic indices is presented. It serves as an example for the use of these coding categories in micro-analyses of the relationships between behavior patterns in different communication channels. (Authors)

6130 Gersch, W., Martinelli, F., Yonemoto, J. et al: A Kullback Leibler-Nearest Neighbor Classification of EEGs: The EEG population screening problem, an anesthesia level EEG classification application. In: *Computers and Biomedical Research* 13 (1980) No. 3, p. 283–296.

6131 Chow, C. K., Wang, S. S. M., Siegel, J. H.: Sequential classification of patient recovery pattern after coronary artery bypass graft surgery. In: *Computers and Biomedical Research* 12 (1979) No. 6, p. 589–613

6132 Gardner, M. A.: The development of a patient classification system for medical/surgical patients in an acute care setting. Monterey, CA: Naval Postgraduate School 1979. 88 p., = NTIS: AD-A072 582  
The classification developed was meant to be used as a tool for the determination of nursing care workload.

6134 Bohl, K., Stooss, F., Troll, L., Marienfeldt, A.: Berufs- und Tätigkeitsinhalte im Wandel; eine Zwischenbilanz zu vorhandenen Klassifikationen und einsetzbaren Instrumenten. (Professional and activity characteristics in a changing world: an interim statement on available taxonomies and usable aids.) (In German.) Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung der Bundesanstalt für Arbeit; Landesarbeitsamt Nordbayern, Geschäftsstelle 1980. V, 242 p., DM 20,-, = Beiträge zur Arbeitsmarkt- und Berufsforschung 12.

6135 Güttler, E., Below, F. v.: Klassifikation von Arbeitsplatzanforderungen durch Clusteranalyse. (Classification of place of work demands by cluster analysis.) (In German.) Opladen: Westdeutscher Verlag 1979. 134 p., DM 23,50, ISBN 3-531-02837-5

#### 57 On Commodity CS

6136 Illig, A.: Konkurrenzanalyse mit Hilfe multivariater Klassifikation. (Competition analysis with the help of multivariate classification.) (In German.) Thun/Frankfurt/M.: Verlag Harri Deutsch 1980. 170 p. = Reihe Wirtschaftswissenschaften, Bd. 194; DM 29,80, ISBN 3-87144-553-3

#### 58 On CS for Kinds of Documents

6137 Belak, B.: The semantic aspect in determining the type of a document. (In Slovak.) In: *Knižn. a ved. inform.* 11 (1979) No. 4, p. 157–159

A systems-oriented typology of documents depends on the correct choice of criteria for classification of documents and their consecutive application. The most optimal typology of documents will be one reflecting the main aspects of a document: subject matter, structure and importance from the user's viewpoint. (Author)

### 6 On Special Subject CS

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

6139 Gödert, W.: Verbale Sacherschließung im Fach Mathematik. (Subject indexing by verbal descriptors in mathematics.) (In German.) In: *Bibliothek, Forsch. u. Praxis* 3 (1979) No. 3, p. 170–190, 87 refs.

In the theory of subject indexing by verbal descriptors very little work has been done in studying the characteristics of a special subject field, its terminology, and the information needs of its users. In this paper we tried such a study for mathematics. First we give a detailed analysis of the terminology used by mathematicians, we propose a connection of verbal indexing by subject headings with the subject classification scheme of the American Mathematical Society in order to increase quality and consistency of indexing. Some practical applications are given. (Author)

6140 Gödert, W.: Subject headings for mathematics literature. In: *J. Doc.* 36 (1980) No. 1, p. 11–23

In this paper we will try to reach a twofold goal. First we will give an analysis of mathematical terminology in order to give practical hints for assigning subject headings to a book. Secondly, we will propose a method which could be helpful for the subject analysis of a given document. The main basis for this method is the connection between a special classification scheme, the Subject Classification Scheme of the American Mathematical Society, and the task of indexing books by subject headings. Examples of this method are given, and they are compared with Library of Congress Subject Headings and PRECIS entries. With both the study of the terminology and the proposed method, it should be possible to increase quality and consistency of the library indexing results for mathematical books. A thesaurus for mathematics with entries along the lines of the PRECIS rules and connected with the subject classification scheme of the American Mathematical Society, would be desirable, as would the printing of appropriate classification data, assigned to them by their authors, inside the books. (Author)

6141 Hörner, W., Mathy, A.: Statistisches Bundesamt Wiesbaden: Erarbeitung eines Thesaurus für das Statistische Informationssystem des Bundes als Modell für numerische Informationssysteme (Statistik-Thesaurus.) (Compilation of a thesaurus for the Statistical Information System of the Federal Government as a model for numerical information systems (statistics thesaurus).) (In German.) Karlsruhe: Fachinformationszentrum, Energie, Physik, Mathematik GmbH 1980. 159 p. 16 refs. = BMFT-FB-ID 80-010

The report describes the conceptual considerations and the determinations which led to the compilation of the statistics thesaurus, and shows the differences existing between a thesaurus intended for the documentation of literature and the statistics thesaurus. The main effort in the project was concentrated on the compilation of definitions of statistical concepts which may facilitate the appropriate use and correct interpretation of stored data. In addition to establishing the meanings of the concepts, the definitions provide for changes in the concepts over time and for relationships between similar concepts. (Author)

#### 62 On CS for Physics and Chemistry (incl. Electr.)

6142 Renard, T. L., Kendz'er, E. M., Gončaruk, G. P., Fedorova, I. V., Ševjakova, L. A.: Chemical fibre classi-



fication and its use in constructing an information retrieval thesaurus. (In Russian.) In: Vopr. inform. teorii i prakt. (1979) No. 40, p. 91–95, 16 refs.  
Only after having established a classification system of chemical fibres a thesaurus could be constructed for this field.

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

See also 6033

6143 Kerimov, S. K., Gasanov, R. A.: **The index language and the data base logical organisation of an integrated IR system for oil processing and petrochemistry.** (In Russian.) In: Naučno-techn. inform., Ser. 2 (1979) No. 11, p. 1–7, 8 refs.

Discusses a descriptor language of the object-characteristic type which is used for the indexing of documents in oil-processing and petrochemistry. Presents the indexing methodology based on this language. Describes the logical organisation of the data base which contains both factographic and documentary information. The proposed data base organisation ensures the data independence from processing programs and data presentation in a form suitable for the user. The work results are being applied in an MIS which is being developed for Azerbaijan's Ministry of Oil and Chemical Industry. (Orig. abstr.)

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

6144 Dubuc, P., Brunet, L.: **Un outil pour le partage des ressources: le thésaurus de l'enfance inadaptée.** (A tool for the sharing of resources: the thesaurus of mal-adjusted childhood.) (In French.) In: Canadian Assoc. for Information Science. Proc. of the 7th Annual Canadian Conf. on Inform. Sci., Ottawa 1979. p. 375–383

6145 Csiszar, K.: **A systematized nomenclature of pathology at a department of pathology.** (In Hungarian.) In: Az Orvosi Konyvtaras 18 (1978) No. 1, p. 104–121, 7 refs.

Description of the use of the SNOP thesaurus for the processing of literature, slide collections, biopsy and autopsy findings at the Pathological Department of the Hospital of Satoraljaújhely.

6146 Soudek, M.: **On the classification of psychology in general library classification schemes.** In: Libr. Res. & Techn. Serv. 23 (1980) No. 2, p. 114–128, 30 refs.

The high level of theoretical, methodological, experimental and professional achievements in psychology during the last hundred years contributed to its general acceptance as an independent scientific discipline. The traditional general classification systems, such as the widely used Dewey Decimal Classification and the Library of Congress Classification, are in many respects inadequate to handle psychological literature. Historical analysis reveals that no substantial changes can be achieved within the restrictive frameworks of these schedules. The fact that psychology is a widely differentiated discipline indicates that new theoretical approaches to bibliographic organization, especially in relation to developing a general classification scheme for use in computer systems, will have to be established. (Author)

### 66 On CS in the Socio-Area

See also 6015, 6043, 6050

6147 Reynolds, D., Thorson, C. C.: **A scheme for the temporary classification of materials on foreign law.** In: Libr. Res. & Techn. Serv. 23 (1980) No. 2, p. 129–134  
Since Library of Congress (LC) classification schedules for Class K "Law" have not been completed for most countries of the world, libraries using LC classification must devise local solutions for dealing with materials on foreign law. Some libraries locally classify such materials into classes other than Class K, while other libraries have drawn up their own temporary, usually simplified, local schedules. This paper describes a temporary scheme used at Knox College that allows for rapid and simple temporary classification. The scheme also allows for country subdivision and the possibility of subject division. (Author)

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

See also 6042

6148 Potkowik, G.: **Revision der Systematik der Wirtschaftszweige.** (Revision of the classification of branches of the economy.) (In German.) In: Wirtschaft und Statistik (1980) No. 7, p. 437–445

Report on the changes in the classification scheme which appeared for the first time in 1961 and in a later version in 1970. The changes refer in part to a harmonization with the system used for the European Communities (NACE).

6149 Vernon, K. D. C.: **Classification of business and the business of classification.** In: Catalogue & Index (1980) No. 57, p. 8–12, 7 refs.

Report on the new form of the London Classification of Business Studies (LCBS), on its need and need for revision, the kind of changes made and the necessary reclassification following.

6150 Tieffin Dutfoy, F.: **Etude du thésaurus de l'I.T.A. et utilisation de ce thésaurus dans le centre de documentation d'Air France.** (Study of the I.T.A. thesaurus and utilisation of this thesaurus in the documentation center of the Air France.) (In French.) Paris: I.N.T.D., Sci. Techn. Inform. Doc. 1979. 46 and 14 p.

Presentation of the structure of a thesaurus which is used in the Institut du Transport aérien (ITA) and discussion of the problems posed by this thesaurus.

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

6151 Daly, R.: **A taxonomic classification of research documents, or, how ERIC saved the Institutional Research Library.** Santa Ana, CA: Santa Ana College 1978. 15 p., = EDRS: ED 152 380

Description of the Santa Ana College Research Office cataloging system based on ERIC subject descriptors and on an internally developed document source and author index. Each document entering the office is assigned a classification number which includes a subject index code, a source index code, the publication data, and a unique sequence number from which computerized document listings by subject index number, source and alphabetic titles are generated. (Author, abbr.)

### 69 On CS in the Culture Area

6152 Cartwright, D. S., Nickerson, C. A.: **An empirical thesaurus: meaning norms for ninety common words.** In: Modern Language J. 63 (1979) No. 8, p. 442–447, 13 refs.

Investigation of the distinctions which can be attributed to the meanings of a word. Empirical data and frequency counts of 90 English terms were furnished. The method is presented, the procedures, the coding of the responses and the results of the study.

6153 Anderson, J. D.: **Contextual indexing and faceted classification for databases in the humanities.** In: Tally, R. D. et al (Ed.): Information choices and policies. Proc. 42nd ASIS Ann. Meeting, Minneapolis, Minn., 14–18 Oct. 1979. Washington, D.C.: ASIS 1979. p. 194–201, 6 refs.

Description of the Contextual Indexing and Faceted Taxonomic Access System (CIFT) of the Modern Language Association which produces computer-generated classifications and context-preserving alphabetical indexes from strings of descriptors assigned to documents by indexers. (acc. Author)

## 7 Classification and Language

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

See also 5979

6154 Harweg, R.: **Metasprachenkonzepte.** (Meta language concepts.) (In German.) In: Z. f. Phonetik, Sprachwiss. u. Kommunik.forsch. 32 (1979) No. 2, p. 150–162, 10 refs.

6155 Hoffmann, L., Peotrowski, R. G.: **Beiträge zur Sprachstatistik.** (Contributions to language statistics.) (In German.) Leipzig: VEB Verlag Enzyklopädie 1979. 214 p.

6156 Kühn, P.: **Der Grundwortschatz: Bestimmung und Systematisierung.** (The basic vocabulary: determination and systematization.) (In German.) Tübingen: Niemeyer 1979. IX, 192 p., DM 44,— ISBN 3-484-10335-3

6157 Kolvenbach, M., Lötscher, A., Lutz, H. D. (Eds.): **Künstliche Intelligenz und natürliche Sprache.** (Sprachverstehen und Problemlösen mit dem Computer. Artificial intelligence and natural language. Language understanding and problem solving using the computer.) (In German.) Tübingen: Narr 1979. 326 p., 140 refs., ISBN 3-87808-642-3

The theme of the nine contributions of this volume is PLIDIS, an information system, developed by the authors since 1976 at the Institut für Deutsche Sprache. The system components, as e.g. morphological and syntactic analysis, internal representation language, translation grammar, theorem prover, term interpreter and data base management, are described.

6158 Lobas, V. Ch.: **The functions of the natural language in scientific cognition.** (In Ukrainian.) In: *Filos. dumka* (1979) No. 4, p. 64–70

Attempts to totally emancipate the language of science from natural language are doomed to failure because they ignore the social nature of scientific cognition. Polymorphism (irregularity) of the natural language matches the polyfunctionality of the active subject and articulates selection situations without which information processes are impossible. The language of science has its polymorphisms also (metaphoric terms, multiple meanings, vague concepts) ... The meaningfulness of certain scientific formulations is guaranteed by inclusion into the culture which can be viewed as a communicative system to store and disseminate non-hereditary information through natural language as the control medium for human activity. (Author, abbr.)

6159 Switalla, B.: **Die Identifikation kommunikativer „Daten“ als sprachtheoretisches Problem.** (The identification of communicative "data" as a theoretical linguistic problem.) (In German.) In: *Z. f. Semiotik* 1 (1979) No. 2/3, p. 161–175, 40 refs.

## 72 Semantics

See also 5926, 5991, 6152

6160 Hafner, C. D.: **An information retrieval system based on a computer model of legal knowledge.** Ann Arbor, Mich.: University of Michigan 1978. PhD Thesis. Warren, Mich.: Computer Science Department. General Motors Res. Labs.

Six semantic relations are used to define a semantic network model of legal knowledge in the area of Negotiable Instruments Law. These are: set/member relations, superclass/subclass relations, constituent relations, property relations, role relations, and event-condition relations. A formal language is developed that allows the user to create complex relational expressions describing situations of interest to lawyers. A data base of 400 cases and statutes is defined using this language, called the Situation Description Language (SDL), to describe the situations that are discussed in each document. (Author, abbr.)

6161 Hafner, C. D.: **Representation of knowledge in a legal information retrieval system.** Warren, Mich.: Computer Science Department. General Motors Research Lab. 1979. Technical Report.

The paper analyzes some of the reasons why subject area knowledge is needed in an information retrieval system, describes how legal knowledge is encoded in the Legal Research System, and gives examples of the kind of inference the system can perform.

6162 Horlitz, B.: **Lexikalische Semantik.** (Lexical semantics.) (In German.) In: *Z. f. germanist. Linguistik* 8 (1980) No. 1, p. 106–115

Report on the state of research, trends of development and perspectives of the research area "lexical semantics" by critically analysing selected works since 1975.

6163 Mal'žikov, V. A., Abramov, Ju. F.: **The logico-semantic bases for categorial-conceptual means of science' class building.** (In Russian.) In: *Metodol. žastn. nauk. Irkutsk* (1979) p. 76–82

6164 Rieger, B.: **Linguistic semantics and the problem of vagueness: on analyzing and representing word meaning.** In: Ager, D. W., Knowles, F. E., Smith, Joan (Eds.): *Advances in computer-aided literary and linguistic research.* Birmingham, U.K.: Dept. of Modern Languages, Univ. of Aston 1979. p. 271–288

6165 Volfengagen, V. E., Voskresenskaja, O. V., Gorbanev, Ju. G.: **A knowledge representation system using semantic networks.** (In Russian.) In: *Vopr. kibernet.* (1979) No. 55, p. 49–69, 8 refs.

A graphic representation of the semantic network is considered. The network is described in terms of a structural logical language based on the  $\lambda$ -calculus with types. An extended semantic network notation is considered complete with concepts, frames, logical and quantitative quantifiers, quantifiers on predicates, logical copulae and modal operators. The definitional and the temporal dimensions of the network are discussed. A semantic network is treated as a semantic model of a relational data-bank. (Orig. abstr.)

## 73 Automatic Language Processing

6166 Krause, J.: **Natural language processing and information retrieval.** The problem of complexity. Heidelberg: IBM Scientific Center (Tiergartenstr. 15) 1979. = Techn. Report 79.04.002

It is argued that research in powerful grammar structures opens one possible way to solve the problem of growing complexity in natural language processing for endusers. In automatic indexing there are first indications that analysis can be reduced to "powerful grammar structures", which are seen as function of statistical frequency, simplicity of algorithmic solution and high information value. In the area of query languages the idea of using a subset of language proves feasible. This was shown by evaluating USL, a natural language based question answering system. (Author)

## 74 Grammar Problems

6167 Birnbaum, L., Selfridge, M.: **Problems in conceptual analysis of natural language.** New Haven, Conn.: Department of Computer Science. Yale University 1979. = Research Report 168

This paper reports on some recent developments in natural language analysis. We address such issues as the role of syntax in a semantics-oriented analyzer, achieving a flexible balance of top-down and bottom-up processing, and the role of short term memory. Our results have led to improved algorithms capable of analyzing the kinds of multi-clause inputs found in most text. (Author)

6168 Sgall, P.: **Communicative dynamism and systemic ordering.** In: *Naučno-techn. inform.*, Ser. 2 (1980) No. 6, p. 24–29, 4 refs.

In the present article, the notion of systemic ordering is introduced. This ordering (or classification) of participants of the verb is accounted by different levels of the communicative dynamism of these participants. The relation between the ordering and such notions from the functional sentence perspective as topic and focus is established. The systemic ordering seems to be a language universal and together with the conception of contextual boundness makes possible to explain the choice of surface word order in a specific sentence. The article is written on the basis of examples from Czech language. (Orig. abstr.)

## 75 Question-answering Systems

See also 6166

6169 Fugmann, R., Denk, W., Nickelsen, I.: **Variations in the ordercreating power of interactive retrieval systems.** Treatise VIII on Retrieval System Theory. In: *Intern. Classificat.* 7 (1980) No. 2, p. 73–78, 36 refs.

In the interactive, mechanized literature search the phrasing of a query can be changed with great flexibility, depending on the kind of response from the search file. Thus a good deal of the

flexibility of the manual literature search is preserved. The degree to which the mechanized search is superior through its high accuracy depends crucially on (1) the expressiveness of the indexing language in operation and (2) how reliably this language has been used in the indexing procedure. The syntax of an indexing language can contribute much to its expressiveness and, hence, to the accuracy of the search. A sequential file, indexed in a highly syntactical language, can be searched with a particularly high accuracy. This is in part due to the inherently high reliability of indexing in such a language. The interactive, dialogue search, however, is almost exclusively based on the vocabulary. This is due to the inverted file organization of the interactive systems, from which syntactical relations are largely omitted. Thus, the most effective, highly syntactical languages are precisely those which are least suited for the dialogue. Documents which are indexed in such a language should be translated into another, more primitive language better suited for the interactive search. Here, part of the syntax is preserved through the introduction of composite vocabulary terms which are mechanically generated. (Authors)

6170 Hahn, W. v., Hoeppner, W., Jameson, A., Wahlster, W.: **The anatomy of the natural language dialogue system HAM-RPM.** Hamburg, FRG: Universität Hamburg. Germanisches Seminar (Von-Melle-Park 6) 1979. = HAM-RPM Report No. 12

HAM-RPM is a dialogue system which converses with a human partner in colloquial German about limited, but interchangeable, scenes. The objective of this report is to give a detailed, complete and self-contained description of the system in its present state of implementation. After a discussion of the goals and methodological principles which guide our research and a short introduction to the implementation language, an overview of the system's architecture, of its knowledge base and of the domains of discourse is given. Then each processing phase from the analysis of natural-language input to the generation of a natural-language utterance is described in detail. The examples used during these descriptions are supplemented by transcripts of complete dialogue sessions. Finally HAM-RPM's programming environment is described. (Author)

6171 Krause, J.: **Preliminary results of a user study with the 'User Specialty Languages' system and consequences for the architecture of natural language interfaces.** Heidelberg: IBM Scientific Center (Tiergartenstr. 15) 1979. = Technical Report 79.04.003

The question is asked whether the concept of using subsets of natural languages as query languages for data bases turns out to be feasible in actual applications using the question answering system 'USER SPECIALTY LANGUAGES' (USL). Methods of evaluating a natural language based information system are discussed. The results (error and language structure evaluation) give first indications of how to form the general architecture of application systems which use a subset of German as query language. (Author)

6172 Wahlster, W.: **Implementing fuzziness in dialogue systems.** Hamburg, FRG: Universität Hamburg. Germanisches Seminar (Von-Melle-Park 6) 1979. = HAM RPM Report No. 14

Techniques for dealing with fuzziness are described. First, the components of a natural language dialogue system in which fuzziness can figure importantly are enumerated and the communicative and cognitive functions of vagueness are surveyed. Second, some techniques employed within the dialogue system HAM-RPM for handling fuzziness during the analysis and generation phases are illustrated. Finally, a new model of fuzzy reasoning is presented which is based on a many-sorted fuzzy logic and includes a corroboration procedure for multiple derivations. (Author)

## 76 Lexicon/Dictionary Problems

See also 5860, 6022, 6156, 6162

6173 Hartmann, R.: **Report on the 1978 BAAL Seminar on Lexicography.** In: ALLC-Bull. 7 (1979) No. 2, p. 185

Short report on the seminar mentioned at which 23 papers were presented. The proceedings are to be published under the title: "Dictionaries and their users".

6174 Hoffmann, L.: **Häufigkeitswörterbücher der Subsprachen von Wissenschaft und Technik – Schlüssel zum Fachtext.** (Frequency dictionaries of the sublanguages of

science and technology – key to the technical text.) (In German.) In: Fachsprache 1 (1979) No. 3, p. 91–95, 11 refs.

Report on a new kind of dictionaries published by VEB-Verlag Enzyklopädie in Leipzig which are composed of the approx. 1200 most frequently occurring terms of a discipline. They are arranged according to frequency as well as alphabetically.

## 77 General Problems of Terminology

See also 5927, 5928, 5945

6175 Al-Kasimi, A. M.: **Towards a Central Terminological Data Bank in the Arab World.** In: Lebende Sprachen 24 (1979) No. 3, p. 132–133

Linguistic means used in the creation of terminologies in Arabic and reasons for duplication and inconsistencies in modern Arabic terminologies. The article speaks about the coordination and standardization of Arabic Terminology, the objectives of Arabization, the proposal for a central terminological data bank in the Arab world and about the exchange of Arabic terminology with data banks.

6176 Kabancev, G. G., Lejčik, V. M., Reznichenko, L. A.: **Problems in terminological editing of documentary data sources.** In: Scientific & Techn. Inform. Process. (1978) No. 2, p. 37–47, 21 refs.

Discussion of the objectives, tasks, principles and methods of terminological editing of documentary information sources.

6177 Ködderitzsch, W.: **Einheitliche Prinzipien der Erarbeitung von Informationssprachen und Terminologiestandards.** (Uniform principles for the elaboration of information search languages and terminology standards.) (In German.) In: Informatik 27 (1980) No. 3, p. 32–35, 15 refs.

The lack of co-ordination between information search languages (ISL) and terminology languages (TL) causes duplication of work and faulty communication. The commonly applicable base to be established according to the principle of division of labour appears to be the terminological system, comprising a vocabulary and a concept system. The terminology work done so far suffers from insufficient correspondence of methods employed and results obtained. Correspondence reached, however, in some essential factors, compatibility of the participating terminologies will be ensured. The key rôle will be performed by the concept system used as a base.

6178 Krommer-Benz, M.: **Bericht über das Internationale Symposium „Theoretische und methodologische Probleme der Terminologie“ (Moskau).** (Report on the International Symposium on Theoretical and methodological problems of terminology in Moscow.) (In German.) In: Fachsprache 1 (1979) No. 4, p. 170–175  
(The English version of this report see Intern. Classificat. 7 (1980) No. 1, p. 29–32.)

6179 Lindemann, H.: **Book review of Lejčik, V. M., Smirnov, I. P., Suslova, I. M.: Terminologija informatiki.** (Terminology of informatics. Theoretical and practical questions.) (Moskva: VINITI 1977. 138 p. (In Russian, review in German.) In: Informatik 27 (1980) No. 1, p. 40–41

6180 Nowicki, W.: **Setting up terminological work in a selected area of science.** (In Polish.) In: Prasa techn. (1979) No. 3, p. 9–12, 6 refs.

Terminological work includes the following five stages: design of a general conception of the field to be covered, compiling the initial vocabulary, creating definitions, identifying principal terms and finding the foreign language equivalents. The organizationally optimal group for such a work would be 5 collaborators one of which should be a linguist.

6181 Rasmussen, J. (Ed.): **CEBAL. Special issue on terminology.** Copenhagen: Nordisk Forlag Arnold Busck 1979. 157 p. = CEBAL (Copenhagen School of Economics and Business Administration Language Department) Publ. No. 5.

The six contributions are either in English (E) or in German (D). 6182 Spang-Hanssen, H.: **Traits and trends of terminological work in Denmark.** 6183 Engel, G.: **Organisation, Arbeitsfor-**



men und Resultate Dänischer Terminologiearbeit seit 1974. (Organisation, work forms and results of Danish Terminology work since 1974.) 6184 Picht, H.: Der Terminologiekunterricht an der Handelshochschule in Kopenhagen. (Teaching terminology at the Handelshochschule Copenhagen.) 6185 Frandsen, L.: A terminological treatment of the thermostatic valves of a heating apparatus stressing mainly the part of it. (D) 6186 Rondeau, G.: The terminology bank of Canada. 6187 Danterm Project Group: DANTERM – The Danish terminological data bank.

6188 Sager, J. C., McNaught, J.: **Feasibility study of the establishment of a terminological data bank in the U.K.** Manchester: University of Manchester Institute of Science and Technology. Centre for Computational Linguistics 1980. 20 p.

Study to propose to analyse use, cost and organisation of terminological data banks, to determine the availability of data suitable for incorporation into a British term bank, to draw up on this model specifications for such a term bank, to present this model to likely British contributors and users, and to assess the feasibility of and the conditions for the establishment of a British term bank.

6189 Schewe, W. H. U.: **Terminologiedokumentation des Deutschen Normenwerks durch Aufbau einer Terminologie-Datenbank.** (Terminology documentation of the German standards by establishment of a terminology data bank.) (In German.) In: *Lebende Sprachen* 25 (1980) No. 2, p. 49–50, 3 refs.

6190 Topulos, A.: **Scientific and technical terminology problems.** (In Polish.) Warszawa: CINTe 1979. 67 p.

The problems reviewed are grouped in two sections: building scientific and technical terminology, and controlling it. Attempts at their solution are discussed in brief. In the latter section, the terms 'classification' and 'definition methods' are described. The main types of terminological dictionaries are characterised, and the most important glossaries of terms which have been published in Poland since 1945 are listed. 'Term' and 'terminology' are defined. (Orig. abstr., modif.)

## 78 Special Terminology Problems

6191 Weis, E.: **Bemerkungen zum Problem Fachsprache.** (Some remarks on the problem of subject sublanguages.) (In German.) In: *Bull. terminol.* (1979) No. 33, p. 35–40

Brief review of the literature devoted to different aspects of the problem of subject sublanguages, especially regarding the main differences between the natural language and the subject sublanguage. A generally accepted definition of the notion 'subject sublanguage' has not as yet been worked out.

6192 Barsuk, A. I., Malevič, E. N.: **The significance of terms standardisation for bibliographic work.** (In Russian.) In: *Sov. bibliotekoved.* (1979) No. 5, p. 42–54, 18 refs.

Discussion of the content of the USSR standard GOST 7.0-77 "Bibliography: terms and definitions" including some 82 terms in the fields of the science of bibliography, bibliography as such, bibliographical work, bibliographical service.

6193 Chanpira, E. I., Rudel'son, K. I., Elpat'evskij, A. V.: **Some problems in the terminology of archives management.** (In Russian.) In: *Sov. arhivy* (1979) No. 5, p. 3–9, 22 refs.

Discussion of the terminological questions which arose together with the preparation of the 'Dictionary of the current archive terminology of socialist countries', particularly with regard to the dictionary type, its normativity, topicality, vocabulary, term equivalence etc. The glossary includes more than 400 terms. The dictionary is to be translated into several languages.

6194 **Internationale Arbeitstagung über Systematik, Geschichte und Terminologie der Semiotik.** (International Workshop on systematics, history and terminology of semiotics.) In: *Z. f. Semiotik* 2 (1980) No. 1/2, p. 159–160

Short report on the workshop mentioned which took place from 17–22 Sept. 1979 at the TU Berlin, chaired by R. Posner.

6195 Möhr, M.: **Einige Begriffe aus der Informationsökonomie und Benutzerforschung.** (Some concepts from the fields of information economy and user research.) (In German.) In: *Nachr. Dok.* 30 (1979) No. 6, p. 237–241

Proposal of definitions for 8 basic concepts, such as 'Bedürfnis', 'Bedarf', 'Nutzen', 'Wirkung', 'monetärer Nutzen', 'Dienstleistung', 'Leistungsfähigkeit' und 'Kosten' as part of a comprehensive model within an interdisciplinary research frame.

6196 Pacak, M. G., Dunham, G. S.: **Computers and medical language.** In: *Medical Informatics* 4 (1979) No. 1, p. 13–27

6198 Sager, J. C., Dungworth, D., McDonald, P. F.: **English Special Languages.** Principles and practice in science and technology. Wiesbaden: Brandstetter Verlag 1980. XXIII, 368 p., ISBN 3-87097-094-4

Contains the following chapters: Introduction (definition and description of special languages). Functions of language. Languages and sub-languages. The communication process. The nature of special reference. Special speech acts and message types. Typology of special forms. The syntagmatic level. The lexical level. The phonemic and graphemic levels. The measurement of efficacy of communication. Standardisation. Bibliography. Index.

6199 Simova, V., Nalevkova, M.: **Lexicographic work in informatics. Pt. 5: On terminological dictionaries.** (In Slovak.) In: *Knižn. a ved. inform.* 11 (1979) No. 4, p. 163–168

Report on the "Slovak-Czech terminological dictionary of informatics" published in 1975 by the Slovak Technical Library which is a subset of the ICSTI 14-language dictionary (of 2235 terms) from which 1087 terms were selected. Of these 28.4% remained unchanged, 33.5% were clarified, 29.7% were changed; 8.4% were added. The dictionary is subdivided into the main vocabulary part, alphabetic indexes (Slovak and Czech) and a classified index.

6200 Slavenas, P. P.: **The structural features of the language of science.** (In Russian.) In: *Vopr. istorii nauki i techn. Pribaltiki. Vil'njus* 1979. p. 33–36

The paper deals with the distribution frequency of phonemes and phonemic combinations in scientific terminology, with the methods of word derivation and formant abbreviation, with the use of different flexions and with the syntactic peculiarities of scientific language.

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

See also 5996–7, 6033, 6035

6201 Sager, J. C.: **The computer and multilingualism at the European Commission.** In: *Lebende Sprachen* 24 (1979) No. 3, p. 103–107, 8 refs.

6202 Van Slype, G., Pigott, I.: **Description du système de traduction automatique SYSTRAN de la Commission des Communautés Européennes.** (Description of the SYSTRAN automatic translation system of the European Community Commission.) (In French.) In: *Documentaliste* 16 (1979) No. 4, p. 150–159, 7 refs.

6203 Van Slype, G.: **Bewertung des Verfahrens SYSTRAN für die maschinelle Sprachübersetzung bei der K.E.G.** (Evaluation of the SYSTRAN procedure for the mechanical translation at the Commission of the European Communities.) (In German.) In: *Lebende Sprachen* 25 (1980) No. 1, p. 6–9

6204 Wellisch, H. H.: **Book review of 3rd European Congress on Information Systems and Networks.** Luxembourg, 3–6 May 1977. Overcoming the Language Barrier. München: Verl. Dokumentation 1977. In: *Unesco J. of Inform. Sci., Librarianship & Archives Administration* 1 (1979) No. 3, p. 215–217

6205 Zimmermann, H.: **Stand und Probleme der maschinellen Übersetzung.** (State-of-the-art of mechanical

translation.) (In German.) In: *Lebende Sprachen* 25 (1980) No. 1, p. 2-5, 27 refs.

## 8 Applied Classing and Indexing

### 81 General Problems and Indexing Rules

See also 6047

6206 Bakewell, K. G. B.: **Why are there so many bad indexes?** In: *Libr. Assoc. Record* 81 (1979) p. 330-331

6207 Buus, E.: **Statsbibliotekets systematiske katalog. En orientering.** (The classified catalogue of The State and University Library, Aarhus.) (In Danish.) In: Soeholm, E., Thomsen, K. V.: *Fra Bispetofte til Bjerget. Statsbiblioteket 1902-77.* Aarhus: Universitetsforlaget 1977. p. 221-239

The classified catalogue analyses subjects independently of the traditional branches of knowledge. It is based on the following elements (in order of priority): subject - subject in local relation - subject in temporary relation. To this must be added, as occasion requires, secondary literature: the bibliography of the subject, research history personal history, i.e. the history of the *discipline*. In other words, the subject in the most concrete form possible is the primarily constituent factor. - Outside the subject catalogue fiction and "philological" texts (Greek, Latin, Norse etc.) are classified in special catalogues. (Author)

6208 Ebinuma, Y., Yokoo, H.: **Keyword assignment rules in scientific journals and technical reports in Japan.** (In Japanese.) In: *Dokumentasyon kenkyu* 28 (1978) No. 1, p. 2-10, 6 refs.

An investigation into the author assigned keywords to their articles showed that although four-fifth of them were free terms they can be used for the subject analysis in secondary information processing. Guidelines are proposed for introduction of free-term assignment rules to scientific documents.

6209 Ebinuma, Y.: **Effect of main headings and qualifiers on manual searching in a printed subject index.** (In Japanese.) In: *Dokumentasyon kenkyu* 29 (1979) No. 8, p. 315-323

A series of manual searches were made on main heading-qualifier pairs as well as on main headings only in the subject indexes to the INIS Atomindex. The former search method is capable of achieving a recall ratio of 10% to 40% at the precision ratio of 45% to 20% in a shorter time than the latter. The latter can yield the 45% to 70% recall and 20% to 5% precision in a shorter search time than the former. These results are compared with statistics of practical flagging to the data base. Such a two-level flagging system is superior to the subject index system structured from single-term subject headings using descriptors in a thesaurus. It would also lead to a higher recall ratio in shorter searching time by assigning to a document a minimum of two main headings and two qualifiers to a main heading but limiting the search specification to seven main headings. (Orig. abstr., modif.)

6210 **Manual of classification of agricultural and forestry research.** Washington, D.C.: U.S. Department of Agriculture, Current Research Information System 1978 (?). 167 p.

Use of this manual enables the online user to search CRIS with the same codes used by the data base supplier and cuts down on online time.

6212 Richter, N.: **L'indexation alphabétique des matières.** (Alphabetical subject indexing.) (In French.) *Le Mans: Bibliothèque de l'Université du Maine* 1980. III, 62 p.

Interpretation and critical comment concerning the French standard Z44-070 (Alphabetical subject cataloguing.)

6213 Schwartz, S. R., Phillips, S. L., Perra, J. J.: **Manual for cataloging and indexing documents for database acquisition.** Berkeley, CA: Univ. of California, Lawrence Berkeley Lab. 1978. 85 p., = NTIS: LBL-4432 (Rev.1)

6214 Shaw, C. M.: **Questionnaire on the format of the British Education Index.** In: *British Libr. Bibliographic Serv. Newsl.* (1979) No. 13, p. 8

6215 Shaw, C.: **Analysis of questionnaire on the format of the 'British Education Index'.** London: British Library Bibliographic Services Division, 1979. 38 p. ISBN 0-900220-75-9

6216 Smetaček, V.: **Indexes and bibliometrics.** (In Czech.) In: *Techn. knih.* 23 (1979) No. 7-8, p. 209-219, 4 refs.

In all the continually developed catalogues and indexes, there are frequency shifts of the index entries with time. The shifts reflect not only changes in the contents of publications but they are also influenced by the processing level adopted by the information centre. For the purpose of bibliometric measurements, the time sequences of entry occurrence can be divided into several groups according to the shape of the resultant curve. Every curve is interpreted properly and only few curves are suitable to be used directly in bibliometric measurements. The time sequences of the other curves must be aggregated, i.e. the aggregation of the time sequences of a larger amount of entries is necessary. The interpretation of the meaning of the resultant curve of the aggregated sequence depends not only on distributions, but also on mutual relationships of the aggregated index entries.

(Orig. abstr.)

### 82 Data Indexing

6217 **Current knowledge on numerical data indexing and possible future developments.** Final report. Rockville, Md.: Informatics, Inc. 1978. 66 p. NTIS: PB-279 924/5GA

A comprehensive review and analysis are given of programs aimed at developing methodologies for indexing the numerical data that occur in the literature used by scientists and engineers. Based on the study results, eleven recommendations are made which focus attention on the principal issues requiring consideration in any future data indexing efforts including the need for improved guidelines for indexes, more cooperative programs, and, ultimately, increased standardization. (Orig. abstr.)

6218 Haberaecker, P.: **Classification of multispectral remote sensing data.** Oberpfaffenhofen, FRG: Deutsche Forschungs- und Versuchsanstalt für Luft- und Raumfahrt e.V. 1978. 135 p., = NTIS: N79-30697

Different concepts pertinent to classification are defined and a mathematical model, subsequently derived, is described. Various classifiers are theoretically considered. A synthetic and a natural scene, taken from a multispectral aerial photograph, are used to test and illustrate the efficiency of the various classifiers. Results are compared and performance criteria evolved. (Orig. abstr.)

### 83 Indexing of and by Titles, Phrases

See also 5849, 6139

6219 Carlsson, K. M., Christensen, J. R.: **PRECIS anvendt miljø - og forureningslitteratur registreret i Dansk Bogfortegnelse.** (PRECIS applied to environment and pollution literature in Dansk Bogfortegnelse, Danish National Bibliography 1976.) (In Danish.) København: Danmarks Biblioteksskole, 1978. 151 p.

In the context of environment and pollution literature the supplementary function of an alphabetical subject index to a systematic arrangement is demonstrated. The alphabetical subject indexing system used, PRECIS, is compared with other indexing systems and its applicability in Danish is discussed. (Orig.abstr.)

6220 Chin, F. W.: **Innovation in indexing.** In: *NELB Link* 3 (1978) No. 1, p. 2-3, 3 refs.

Description of the PRECIS Indexing System. Mentions that a set of PRECIS training materials, including a videotape of explanatory lectures by Derek Austin, is available for \$ 350 from Library Training Consultants, P.O. Box 428, College Park, Md.

6221 Madelung, H.-O.: **Indekseringssystemer: PRECIS sammenlignet med KWIC.** (Indexing systems: PRECIS compared with KWIC.) (In Danish.) København: Danmarks Biblioteksskole, 1979. 126 p.

6222 Robinson, C. D.: **PRECIS Canada: Achievements and prospects.** In: Can. Inf. Sci/RCSI 4 (1979) p. 105–114

Although Canadian libraries have been less innovative in their approach to PRECIS than British, a number of theoretical and practical projects have contributed much to the development of the system. Canadian achievements are surveyed and their contributions assessed. Future prospects for PRECIS in Canada are discussed in the light of potential translanguag facilities. (Author)

6223 Robinson Sive, M.: **PRECIS – a better way to index films.** In: Sightlines 13 (1979/1980) p. 14–17

6224 Taylor, A., McCordick, I., Burnham, B.: **A computer based catalogue linking the PRECIS subject indexing system to school library material.** Building a model for Ontario-wide information network search project. Report of Work July 1976–September 1978, funded by the Ministry of Education, Ontario through the Grants-in-Aid of Educational Research Program. Aurora, Ontario: The York County Board of Education 1978, 43 p. + 3 microfiches.

## 85 Book Indexing

See also 5994

6225 Belnap, N. D., Jr.: **BINDEX: a book indexing system.** In: Scholarly Publishing 9 (1978) No. 2, p. 167–170

Index entries can be typed into a computer under the BINDEX system and the printer's copy can be produced automatically. Changes and reorganization are very easy. The BINDEX programs are written in FORTRAN. Documentation and programs are available by writing to the author. (Orig. abstr. suppl.)

6226 Hino, Sh., Naramoto, M., Shichi, D.: **The CBR/KWIC index for conference proceedings: a practical tool for a medium-sized special library.** (In Japanese.) In: Dokumentasyon kenkyu 28 (1978) No. 11, p. 516–520, 5 refs.

The index of to nearly 1000 conference proceedings can be searched from (a) the date, (b) the place, or (c) the name of the conference in question.

## 87 Indexing of Secondary Literature

6227 Seidel, G.: **Klassifikation Bertolt Brecht. Formal-u. Sacherschließung in der Personalbibliographie.** (Form- and subject description in the personal bibliography of Bertolt Brecht.) (In German.) Berlin: Akademie der Künste der Dt. Demokrat. Republik 1980. 164 p., M 12,–

6228 Vickers, R. P., Howarth, D. A.: **The British Education Index: present and future.** In: Educ. Lib. Bull. 22 (1979) No. 3, p. 1–8.

Improvements in the coverage and currency of indexing and changes resulting from computerised production techniques of the British Education Index since 1974 are outlined. There is a discussion of the results of a survey of BEI subscribers in 1978, changes which have resulted, and a brief explanation of PRECIS indexing and why the authors think some changes should not be made. Finally, possible future developments, including the change to a one stage index, are suggested. (Author)

6229 Wynne, A.: **A computer-based index to book reviews in the physics literature.** In: Spec. Libr. 70 (1979) No. 3, p. 135–139, 3 refs.

Production of computer generated author and key word from title indexes to book reviews in physics was undertaken because such compilations were seen as useful bibliographic tools for both librarians and physicists. Included are all reviews which appeared in 1976 and 1977 from journals originally published in the English language by the American Institute of Physics. The TRIAL computer program was used to manipulate the raw data input and produce the printouts. Data elements available from the indexes are: author, title, local call number, publisher, year of imprint, month and year of the journal(s) in which the review(s) appeared, series, cost, and location(s) in the local library system. Searches could be made and/or printouts obtained for any of these data elements, singly or in combination. (Author)

## 89 Indexing of pictures, maps, etc.

See also 6059, 6223

6230 Rahnlo, H. F., Pedrick, L.: **Audio indexing for efficiency.** In: Educ. Technol. 18 (1978) No. 1, p. 52–54  
Description of ZIMDEX, an audio indexing system developed to solve the problem of indexing audio materials for individual instruction in the area of the mathematics of life insurance.

6231 Scott, R. W.: **Indexing the comics: a librarian's perspective on comics research.** Arlington, VA: Educational Resources Information Center 1978. 13 p., = ERIC Report ED-168 471

Discussion of the potential for computers in indexing popular fiction study materials. Provision of specific examples of comic book indexing through descriptions of projects and a bibliography. (Orig. abstr.-amend.)

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

### 92 Persons and Institutions in Classification

6232 Maur, H.: **Zehn Jahre Bundessprachenamt.** (Ten years' anniversary of the Bundessprachenamt – Federal Language Office.) In: Lebende Sprachen 24 (1979) No. 3, p. 97–99

Report on the tasks and the aims of the Bundessprachenamt as well as its structure.

### 95 Education and Training in Classification and Indexing

See also 5954, 6181

6233 Fédération Internationale de Documentation (FID): **Education and training for information services in business and industry in developing and developed countries: the needs, the experience, the newer trends.** The Hague: FID 1980. 122 p. = FID publ. 584

Contains the 12 papers presented at the FID Education and Training Committee Workshop, Minneapolis, Minn., 11–12 Oct. 1979.

6234 Lynn, St. W.: **Kinneavy, Mathes, Mumford, and Lynn: Teaching the classification mode in technical writing.** In: J. Techn. Writing & Communicat. 10 (1980) No. 2, p. 115–124

Kinneavy's theory of discourse and Mathes' concept of contextual editing can be effectively applied to teaching classification in technical writing. The procedure, in nine steps described, provides students with an understanding of classification as an analytical and generative tool. (Author, abbr.)

### 98 User Studies

See also 5922, 5924, 6074, 6075

6235 Jeffreys, A.: **Classification in British University Libraries.** In: Catalogue & Index (1980) No. 57, p. 6–8, 8 refs.

Survey on the results of investigations which show that half of the British libraries use DDC and the other half LCC, a small rest lie in between. Suggests research to overcome the conflict between updating and abolishment of reclassification, to optimize the labelling of the spines of books and to find out about the features for the successful deployment of shelf guides, plans of the libraries layout, and similar devices.

### 99 Standardization in Classification

See also 6025, 6123, 6177, 6192, 6212

6236 Krumholz, W.: **Kompatibilität, Normung und Terminologie.** (Compatibility, standardization and terminology.) (In German.) In: DK-Mitt. 24 (1980) No. 4, p. 11–13

Typology of standards according to formal criteria and their special significance for establishment of compatibility between standards.