

0 Form Divisions

01 Bibliographies

4386 Alves, S. C. (Comp.): *Bibliografia sobre thesaurus*. Rio de Janeiro: Instituto Brasileiro de Informação em Ciência e Tecnologia 1978. 37 p.

Lists 518 references to thesauri and literature on them. Compilation from the IBICT Library and other sources.

4387 Soerensen, J. (Comp.): *A bibliography of PRECIS*. 2nd ed. Copenhagen: The Royal School of Librarianship 1979. 75 p., 20 dkr. ISBN 87-7415-063-4

Entries consist of bibliographic descriptions, abstracts and cross references between documents associated with each other. Of the 164 items, those dealing with PRECIS before 1974 have been arranged chronologically, those after 1974 are arranged according to subject, such as theoretical basis, vocabulary control, grammar of, search with, use of, etc. PRECIS. Indexes are provided to authors, language of texts and non-print media.

4389 Wüster, E. (Begr.), Felber, H., Krommer-Benz, M., Manu, A. (Eds.): *International bibliography of standardized vocabularies*. 2nd ed. (Title also in French and German). München-New York-London-Paris: K. G. Saur 1979. XXIV, 540 p., = Infoterm Series 2, ISBN 3-598-05502-1

This enormous work lists - in systematic arrangement according to the UDC - altogether 11667 standardized vocabularies from 52 countries in 35 languages. By an intriguing system of symbols a lot of information is added to the bibliographic and language data, which one needs to learn before using, which however helps to present each title in the most succinct way. The huge book is analyzed through a number of indexes, e.g. author organizations, subjects (in English, French and German a.o.)

4390 Kühn, P.: *Deutsche Wörterbücher. Eine systematische Bibliographie* (German dictionaries. A systematic bibliography (In German). Tübingen: Niemeyer 1978. 266 p. = Reihe Germanistische Linguistik, 15.

03 Dictionaries, Terminologies

4391 International Electrotechnical Commission: *International Electrotechnical Vocabulary. General Index*. Provisional edition. (Title and Author also in French). - Clamart: CEI/IEC 1979. 1011 p.

4392 Hoffmann, L.: *Fachwortschatz Tierproduktion, Veterinärmedizin*. (Specialized vocabulary, animal breeding, veterinary medicine). (In German). Leipzig: VEB Verlag Enzyklopädie 1978. 132 p.

4394 Baeyer, A. v., Buck, B.: *Wörterbuch Kommunikation und Medienpraxis für Erziehung und Ausbildung*. Begriffe und Erläuterungen aus Praxis, Wissenschaft und Technik. (Dictionary on communication and media for education and training). (In German). München-New York-London-Paris: K. G. Saur 1979. 158 p. ISBN 3-598-10001-9

Definitions and explanations to some 2250 terms in media science and technology.

04 Classification Systems and Thesauri

4395 El-Khazindar, I. A. (Comp.): *List of Arabic Subject Headings*. 2nd ed. (In Arabic). Kuwait, Kuwait: Scientific Research House. 1978. 432 p.

4396 *Dezimalklassifikation für mittlere Bibliotheken* (Universal Decimal Classification for medium size libraries). (In German). Arbeitsgrundlage für Mittelschule, Lehrer- und Regionalbibliotheken sowie für Mediotheken; 700 DK-Zahlen, 1600 Begriffe. Bern: Schweizerische Arbeitsgemeinschaft der Allgemeinen Öffentlichen Bibliotheken, SAB 1975.

4397 Mills, J., Broughton, V. with the assistance of V. Lang: *Bliss Bibliographic Classification*. 2nd ed. Class I: Psychology and Psychiatry. London-Boston: Butterworths 1978. XXIII, 62 p. ISBN 0-408-70841-7

This special issue of the new Bliss Classification contains a second outline of the whole classification system, an introduction into class I, an outline of class I (p. XXII-XXIII), the system of class I for psychology and psychiatry and an alphabetical subject index to the schedule (p. 35-62). The notation is presented in capital letters and is non-expressive of hierarchy.

4398 Rehm, H.: *Thesaurus Mathematik. Systematischer Teil*. (Thesaurus for mathematics. Systematic part). (In German). In: DFW Dokument. Inform. 26(1978) No. 3, p. 137-151

4399 *Lexique U3: physique, informatique, électricité*. (Lexicon U3: physics, computer science, electricity). (In French). Paris: Centre National de la Recherche Scientifique. Centre de Documentation Scientifique et Technique 1979. 158 p.

List of controlled descriptors used for indexing the documents for the PASCAL system.

4400 *Lexique U4: physique, chimie*. (Lexicon U4: physics, chemistry) (In French). Paris: Centre National de la Recherche Scientifique. Centre de Documentation Scientifique et Technique 1979. 35 p.

4401 *Thesaurus for radiation chemistry*. Notre Dame, Ind.: University of Notre Dame. Radiation Chemistry Data Centre. 1977. 99 p. = PB 267 655, UND-RCDC-1
Contains 2500 terms in the field of radiation chemistry and photochemistry in alphabetical sequence with references.

4402 *Lexique U6: chimie pure et chimie appliquée*. (Lexicon U6: pure and applied chemistry). (In French). Paris: Centre National de la Recherche Scientifique. Centre de Documentation Scientifique et Technique 1979. 89 p.

Controlled descriptor list for indexing the PASCAL entered documents.

4403 *Lexique U7: énergie*. (Lexicon U7: energy). (In French) Paris: Centre National de la Recherche Scientifique. Centre de Documentation Scientifique et Technique 1979. 44 p.

Controlled descriptor list for the field of energy to index the PASCAL documents.

- 4404 Sneerson, A. Z. et al: **Descriptor vocabulary of the automated information retrieval system "Elektrotehnika"**. (In Russian). Moskva 1977. 639 p.
The vocabulary serves for the automatic indexing of documents in electrical engineering and consists of two parts: a Russian keyword list with corresponding reference numbers and an English keyword list with Russian equivalents and corresponding descriptors.
- 4405 Heckman, C. et al (Eds): **GEOREF Thesaurus and Guide to Indexing**. 2nd ed. Falls Church, Va. 22041: American Geological Institute 1978. X,456 p., ISBN 0-913312-07-X, \$ 35.—
The second edition contains 12500 terms of which 3000 are new in this edition.
- 4406 Lanier, J. A., Lawrence, F. L., Collins, E. V., Hollinger M. B.: **Aquaculture thesaurus**. Gloucester Point, Va.: Virginia Institute of Marine Science. National Aquaculture Information System 1977. 162 p. = VIM-SSR-79
Contains about 3000 descriptors in alphabetical sequence in the area of aquaculture.
- 4407 **Information retrieval thesaurus for ferrous metallurgy**. 2 vols. (In Russian). Moskva: 1978. 415 + 890 p.
The two volumes developed jointly by the Chermetinformacija Information Institute, Industry's Research Institute and the VINITI "Metallurgy" Department are divided into the parts of the hierarchical relations index (vol. 1) and the lexico-semantic index (vol. 2 in 5 parts).
- 4408 Simons, M. D. et al: **OATS: a standardized system of nomenclature for genes and chromosomes and catalog of genes governing characteristics**. Washington, D. C.: U.S. Dept. of Agriculture 1978. 40 p., 16 p. refs. = Report no. 509.
The nomenclature was worked out at the U.S. Department of Agriculture, A.R.S. in Ames, Iowa.
- 4409 **Lexique U1: biologie végétale, sciences agricoles**. (Lexicon U1: plant biology and agricultural sciences). (In French). Paris: Centre Nationale de la Recherche Scientifique. Centre de Documentation Scientifique et Technique 1979. 24 p.
Controlled descriptors list for indexing the PASCAL entered documents.
- 4410 Leatherdale, D.: **Thesaurus on tropical grain and forage legumes**. Ibadan, Nigeria: International Institute of Tropical Agriculture 1977. IX, 352 p.
Contains a categorized listing of nine broad subject fields and an alphabetical listing of all descriptors and non-descriptors in the usual thesaurus-mode.
- 4411 Mann, E. J. (Ed.): **IFIS Thesaurus**. Reading, England: International Food Information Service 1977. var. pag.
The thesaurus covers the descriptors and non-descriptors (lead-in-terms) used in the abstracting service Food Science and Technology Abstracts (FSTA) ever since its beginning.
- 4412 **Lexique U5: sciences de la vie**. (Lexicon U5: life sciences). (In French). Paris: Centre National de la Recherche Scientifique. Centre de Documentation Scientifique et Technique 1979. 199 p.
Controlled descriptor list for the indexing of PASCAL entered documents.
- 4413 **International Classification of Health Problems in Primary Care**. Chicago, Ill.: American Hospital Assoc. 1975. IV, 119 p. ISBN 0-87258-177-2
Based on the 8th Revision of the International Classification of Diseases (ICD-8) and designed for (1) classification of morbidity information in the primary care setting, for statistical purposes and (2) for the indexing of out-patient medical records by diagnoses and problems.
- 4414 **Application of the International Classification of Diseases to Dentistry and Stomatology (ICD-DA)**. 2nd ed. Geneva: World Health Organization 1978. 147 p. ISBN 92-4-154132-6
- 4415 **Tesaurus Colombiano de la Educación**. 1st Ed. (In Spanish). Bogotá, Colombia: Instituto Colombiano para el Fomento de la Educación Superior. Sección de Documentación 1978. IV, 173 p.
- 4416 **EUDISED Thesaurus Revision: descriptors suggested in issues 1-4 of the EUDISED R&D Bulletin**. Strasbourg: Council of Europe. Documentation Centre 1978. (February)
- 4417 International Bureau of Education (Ed.): **IBE Education Thesaurus**. Paris: Unesco 1978. 348 p., ISBN 92-3-101531-1
The English edition of this thesaurus contains French and Spanish equivalents of the terms, arranged in a faceted order. There is a French edition (ISBN 92-3-201531-5) and a Spanish edition (ISBN 92-3-301531-9)
- 4418 Ošavkov, Ž.: **Information thesaurus for empiric social research**. (In Bulgarian). In: Social. Probl. 9(1977) No. 6, p. 44-55
Worked out on the basis of a classification schedule and a nomenclature list of the Central Statistical Board at the Institute of Sociology.
- 4419 Miller, S. E.: **Thesaurus of terms in mortgage and consumer credit**. West Lafayette, Ind.: Purdue University 1977. VI, 112 p. \$5.—
Alphabetical arrangement of terms with references from non-preferred to preferred terms and a listing of prepositional phrases to be combined with the keywords.
- 4420 **Management Contents Data Base Thesaurus**. Skokie, Illinois: Management Contents 1978. 40 p.
- 4421 Orna, E.: **Engineering Industry Training Board Thesaurus**. Watford, Herts., England: Engineering Industry Training Board 1978. 135 p., ISBN 0-85083-422-8
The list of terms which the EITB information service uses for its mission oriented indexing in the fields of training, education, economics, employment, management industry and commerce.
- 4422 **Information retrieval thesaurus for construction and architecture**. Vol. 3: Engineering research in construction. Architectural and construction planning. Architecture of buildings and structures. Regional planning. Town planning. (In Russian). Moskva: Centr. Inst. Naučn. Inform. po Stroitel'stvu i Architekture 1977. 73 p.
- 4423 **Information retrieval thesaurus for construction and architecture**. Vol. 6: Construction materials and products. (In Russian). Moskva: Centr. Inst. Naučn. Inform. po Stroitel'stvu i Architekture 1977. 80 p.
- 4424 **List of Library and Information Science Subject Headings: a Thesaurus Project**. (In Hungarian). Budapest: Országos Széchényi Könyvtár. Könyvtártudományi és Módszertani Központ 1976. XVIII, 187 p., ISBN 963-201-033-7
Contains some 3000 terms of which 1500 are descriptors and 1500 are non-descriptors in librarianship and informationscience. Pt.1: alphabetical arrangement, Pt.2: alphabetical index to the descriptors, Pt.3: systematic index. A first supplement of 31 p. appeared in 1978.
- 4425 Smirenskij, V. B. (Comp.): **Information retrieval thesaurus for linguistics**. (In Russian). Moskva: Akad. Nauk, SSR. INION 1977. 347 p.
The thesaurus consists of two parts, an alphabetical list with relationship indications and a systematic index with notations. Every descriptor in the alphabetical part carries this notation also and refers thus to the systematic listing.

4426 Kersten, D. B.: **Subject headings for church or synagogue libraries.** Bryn Mawr, Pa.: Church & Synagogue Library Association 1978. 22p., refs.

05 Periodicals and Serials

4427 **IEEE Transactions on Pattern Analysis and Machine Intelligence.** Published by IEEE Computer Society. Ed. Prof. King Sun Fu, Purdue University. Address: Pattern Recognition, P.O. Box 639, Silver Spring, Md. 20901, USA. 1(1979) No. 1—; quarterly; \$ 10,— per copy (for nonmembers).

The Institute of Electrical and Electronics Engineers, Inc. New York intended this new journal for scientists and engineers in the fields of computer science, computer engineering, and biomedicine. It will publish research findings in the following areas: statistical and linguistic pattern recognition, image coding and processing, shape and texture analysis, biomedical pattern analysis and information systems, remote sensing, speech recognition, industrial and military applications, character and text recognition, semantic information processing, theorem proving, natural language analysis and robotics.

4428 **KODIKAS/CODE. An International Journal of Semiotics.** Editor: Achim Eschbach, Co-Editor: H. Kambouridis. Tübingen: G. Narr Verlag (1979) No. 1—; 4/ann., subscr. DM 56.—

4429 **Unesco ALSED-LSP Newsletter.** Copenhagen: The Copenhagen School of Economics 1(1977)—No. 1—; irr. (two issues in 1977, 3 in 1978)

The Unesco ALSED Program (= Anthropology and Language Science in Educational Development) has a section on modern language adult teaching which served as a bridge for the establishment of a Center for Language for Special Purposes at the Language Faculty of the Copenhagen School of Economics. This Center functions as the promoter of a cooperation between all those members of a network of teachers and schools dealing with the teaching of Languages for Special Purposes (Fachsprachen), or, in short, LSP. The Newsletter serves for the necessary information of the members.

4430 **Fachsprache. Internationale Zeitschrift für Fachsprachenforschung, -didaktik und Terminologie. Language for Special Purposes (LSP). Research — Teaching — Terminology.** (Title also in French). Wien: Wilhelm Braumüller 1 (1979) No. 1—2; 4/ann., DM 54,—/ann.

The first issue (No. 1—2) contains the following articles: 4431 Hoffmann, L.: Toward a theory of LSP. 4432 Horecky, J.: On the relation between concept and name. 4433 Felber, H.: Theory of terminology, terminology work and terminology documentation. 4434 Brinkmann, K.-H.: Der Einsatz von Terminologiedatenbanken zur Lösung von Übersetzungsproblemen im fachsprachlichen Bereich. 4435 Arntz, R.: Aufbau einer terminologiewissenschaftlichen Lehrveranstaltung im Rahmen der Übersetzer- und Dolmetscherausbildung. 4436 Littmann, G.: Zur Syntax der Fachsprachen und anderer Sprachvarianten.

06 Conference Reports, Proceedings

Jones, K., Horsnell, V. (Eds.): **Informatics 3: Proceedings of a conference held by the Aslib Co-ordinate Indexing Group on 2—4 April 1975.** London: Aslib 1978. 137 p., ISBN 0-85142-112-1

After the chairman's (Kevin Jones) introduction the following contributions are included: 4438 Sparck-Jones, K.: Artificial intelligence: what can it offer information retrieval? 4439 Fairthorne, R. A.: — atics of what? 4440 Masterman, M.: Chasing the enthymeme, Pt.III: The basic reiterative semantic patterns of language. 4441 Parker Rhodes, A. F.: Inference: a new look at an old aspiration. 4442 Dea, W., Belkin, N. J.: Beyond the sentence: clause relations and textual analysis. 4443 Winter, E.: A look at the role of certain words in information structure. 4444 McArthur, T.: Towards a theory of the English word. 4445 Robertson, S. R.: The role of theory in the testing of IR systems. 4446 Payne, R. W.: Some methods of identification. 4447 Brimelow, T.: Informatics: conceptual analysis and epistemology. 4448 Jolley, L.: Terminology of co-ordinate indexing. Sidelights on the theory of integrative levels.

4449 Waterman, D. A.; Hayes-Roth, F.: **Pattern-directed inference systems.** New York, N.Y.: Academic Press. 1978. 658 p., \$ 33.—, ISBN 0-12-737550-3

Volume contains 28 papers presented at the Workshop on Pattern Directed Inference Systems, Honolulu, Hawaii May 1977. The papers are grouped into sections on architecture and design, deductive inference, learning, cognitive modelling, natural language understanding and multilevel systems and complexity.

4450 Sukiasjan, E. R.: **All-Union conference on information retrieval languages.** (In Russian). In: *Sov. Bibliotekovedenie* (1978) No. 2, p. 106—111.

Report on the Yurmala, Latvian SSR Conference from Sept. 6—8, 1977. (See also I.C. 5 (1978) No. 3, p. 186—187)

4451 **Report of a Meeting of the European Branch, 29. Sept. 1977 on Computers, Libraries and Classification.** In: *Classif. Soc. Bull.* 4(1978) No. 2, p. 24—27

Reports about the talk given by Dr. A. J. Harley on the general topic of the meeting, the paper delivered by Prof. M. F. Lynch on "Reconciling the statistics of natural language texts with the geometry of computers" and the communication by Prof. B. C. Vickery on "Classification in information search".

4452 **X. Kolloquium über Information und Dokumentation vom 8.—11. November 1977.** Forschung, Lehre und Praxis in der wissenschaftlichen Information. Themenkreis 1, Komplex 2 und 3. Ilmenau/DDR: Institut für Informationswissenschaft, Erfindungswesen und Recht an der TH Ilmenau 1978. 179 S. = Dokumentation/Information H. 41 (Teil 2)

The volume contains the following papers: 4453 Laus-Maczynska, K.: Die Effektivität von Informationsrecherchesystemen (IRS) unter dem Aspekt unscharfer Mengen. 4454 Wyszczki, F., Selbig, J., Jarosch, H.: Über Möglichkeiten des Einsatzes adaptiver logischer Klassifikatoren bei Recherche-problemen. 4455 Zonnevend, P., Skripkin, W.: Fragen der Entwicklung des Komplexes von Informationsrecherchesprachen im Internationalen System der wissenschaftlichen und technischen Information (ISWTI). 4456 Mildner, H.: Zur Entwicklung von Informationsrecherchesprachen (IRSP) für Dokumenten-Informationssysteme im ISWTI. 4457 Neubert, G.: Zur Algorithmierung der Wortbildung in der Fachsprache der Technik. 4458 Fuchs-Kittowski, K., Groß, B., Schiemetz, W.: Die Unterscheidung zwischen semantischer und syntaktischer Informationsverarbeitung — Möglichkeiten und Grenzen der automatisierten Verarbeitung sprachlicher Informationen. 4459 Havlicek, K.: Projekt einer Datenbank zur Information der Leitung. 4460 Jankowski, L.: Fakteninformation zur Planung und Leitung des Forschungsprozesses in der Kernforschung. 4461 Scheller, B.: Qualitativ-quantitative Beziehungen in Fachtexten der Elektrotechnik. 4462 Koch, H.: Überlegungen und Vorschläge zum Begriffsfeld „Wissensspeicherung — Darbietungsform — Darstellungsform“. 4463 Mater, E.: Zur automatischen Selektion faktographischer Angaben. 4464 Baumbach, H.: Fakteninformation in der Physik. 4465 Kahler, H., Beck, L.: Automatisiertes Faktenrecherche- und Faktenverarbeitungssystem im Industriezweig Automatisierungs- und Elektroenergie-Anlagen. 4466 Walter, N., Mater, E., Siegel, K.: Quantifizierung sprachlicher Zeichenketten mit Hilfe stochastischer Verfahren.

4467 Berndt, M.: **Probleme des Schlagwortkatalogs.** Fortbildungstagung des BLI am 7. und 8.12.1977. (Problems of the subject catalog. Meeting at the BLI on 7—8 Dec. 1977). (In German). In: *Mitteilungsblatt d. Bibl.* NRW 28(1978), p. 243—244

Report on a conference of about 70 participants with lectures on present practices of subject cataloging at German universal libraries. (For the proceedings of this conference see the following entry.)

4468 Jung, R., Sickmann, L. (Eds.): **Schlagwortgebung und Schlagwortkatalog.** (Indexing and the subject catalogue.) (In German). Köln: Greven Verlag 1978. 191 p.

Contains the lectures of a seminar held at the Bibliothekar-Lehrinstitut (Librarian Training Institute) on Dec. 7—8, 1977, namely: 4469 Poll, R., Stählin, A.: Das Erlanger Regelwerk. 4470 Unte, W.: Zu den Regeln für den Schlagwortkatalog der

Universitätsbibliothek der Freien Universität Berlin. 4471 Poll, R.: Führung und Aktualhaltung eines Schlagwortkatalogs. 4472 Bartelt, F.: Standardlisten zur Schlagwortgebung. 4473 Kelm, B.: Die Schlagwortgebung in der Deutschen Bibliothek. 4474 Frankenberger, R.: Der Schlagwortkatalog der Universitätsbibliothek Augsburg. 4475 Fischer, F.: Elemente des Schlagwortkatalogs in der Methode Eppelsheimer. 4476 Niewalda, P.: Hat der Schlagwortkatalog eine Zukunft?

4477 Wiegand, H. E.: **Lexikographische Praxis – Vom Standpunkt unterschiedlicher Wörterbuchtypen und Wörterbuchkonzepte.** (II. Lexikographisches Kolloquium am 21. u. 22. Feb. 1978 in Hamburg). (Lexicographical practice – seen from the point of view of different types and conceptions of dictionaries) (In German). In: *Z. f. Germanist. Linguistik* 6 (1978) No. 3, p. 326–330; 16 refs.

Report on a Colloquy on Lexicography, especially on some of the problems raised there concerning a systematization of types of dictionaries and a theory of the lexicographical comment (Erläuterung) of an entry.

4478 **Abstracts of papers presented at a meeting of the North American Branch (of The Classification Society), 21–23 May 1978 (Clemson University, Clemson, S.C.)** In: *Classif. Soc. Bull.* 4(1978) No. 2, p. 28–59

4479 Hartigan, J. A.: Graphical techniques in clustering: sleeves. 4480 Snygg, C.: Plotting high dimensional data. 4481 Turner, D. W., Tidmore, F. E.: Clustering with Chernoff-type faces. 4482 Pinchbeck, B. R., Carmichael, J. W.: Taxometric maps. 4483 Blashfield, R., Aldenderfer, M.: Cluster analysis literature on validation. 4484 Gnanadesikan, R., Kettenring, J. R., Landwehr, J. M., McRae, J. E.: Interpreting and assessing the results of cluster analyses. 4485 Huizinga, D.: Are there any clusters? 4486 Golden, R. R.: Validity testing of taxometric models. 4487 Bailey, T.: The validity of proximity clusters. 4488 Blashfield, R.: An overview of clustering software. 4489 Rohlf, F. J., Ling, R. F.: Current software for classification. 4490 Skinner, H. A.: A vector model for psychiatric classification. 4491 Starmer, C. F., Lee, K. L.: Prognostic stratification and experience-based problem solving on chronic illness. 4492 Strauss, J. S., Mezzich, J., Docherty, J.: Combined cross-sectional and longitudinal diagnosis: clinical considerations. 4493 Kruskal, J. B.: Some results about Concor, a method of clustering. 4494 McQuitty, L. L.: Matrix classification. 4495 Slater, P. B.: Transaction flows and the assignment problem. 4496 Hamer, R. M.: Choosing a proximity measure for hierarchical cluster analysis. 4497 Singh, A., Haralick, R.: Spatial clustering by computing transitive closure. 4498 Young, F. W.: Nonmetric individual differences multidimensional scaling. 4499 Ramsay, J. O.: MDS by maximum likelihood estimation. 4500 Takane, Y.: Parametric approaches to nonmetric scaling. 4501 Carroll, J. D., Pruzansky, S.: CANDELINC-MULTILINC: bilinear and multilinear data analysis with linear constraints on parameter. 4502 Kingsley, S. J.: Comparing multidimensional configurations. 4503 Dean, R.: Comparison of BC-TRY with agglomerative hierarchical clustering methods for the dimensional analysis of psychological self-report data. 4504 Thompson, T.: Clustering the journals of science. 4505 Fuller, V.: Ways of classifying knowledge. 4506 Milligan, G. W., Isaac, P. D.: A validation study of hierarchical clustering algorithms using constructed data. 4507 Edelbrock, C.: Comparing the accuracy of hierarchical clustering algorithms: the problem of classifying everybody. 4508 Matula, D. W.; Sokal, R. R.: Properties of Gabriel graphs relevant to geographical cluster analysis and the clustering of points in the plane. 4509 Katz, R.: Cluster analysis in the study of organization behaviour. 4510 Roberts, R. J.: Consumer segmentation and product needs and benefits. 4511 Neidell, L. A.: The use of clustering in retail marketing – some preliminary results. 4512 Datta, Y.: Patterns of success in the TV industry: 1950–60. 4513 Wishart, D.: The treatment of missing values in data analysis. 4514 Symons, M. J.: Bayes modification of some clustering criteria. 4515 Enslein, K., Craig, P. N.: A toxicity estimation model. 4516 Begovich, C. L., Kane, V. E.: A probabilistic method for grouping data. 4517 Rousseau, P.: Maximum likelihood clustering of binary data sets. 4518 Gupta, A. K., Lindle, S. G.: Multinomial distribution and ascertainment models. 4519 Lenington, R. K.: CLASSY – an adaptive maximum likelihood

clustering algorithm. 4520 Shapiro, M.: C-LAB, an on-line clustering laboratory. 4521 Mezzich, J. E., Strauss, J. S., Docherty, J. P., Worthington, D. R. L.: Combined cross-sectional and longitudinal diagnosis: methodological approaches. 4522 Rohlf, F. J.: Representing clusters as “solid” objects.

4523 **First Meeting of ISO/TC 37 “Terminology. WG3” Layout of vocabularies.** In: *Intern. Classificat.* 6(1979) No. 1, p. 41

Detailed report on the results of this meeting, which took place in Paris from 22–24 May 1978.

4524 **Report on the First Nordic Terminology Seminar, held in June 1978.** In: *Intern. Classificat.* 6(1979) No. 1, p. 41–42

Short report on a 11 days seminar with a number of 70 training hours on the theory and practice of terminology.

4525 Dahlberg, I.: “**New Developments in Classification**”. In: *Intern. Classificat.* 6(1979) No. 1, p. 36.

Report on the FID-Congress’ (Edinburgh, ’78) Section on Trends in Classification with summaries of the four papers presented.

4526 **Classification topics at 41st ASIS Conference.** In: *Intern. Classificat.* 6(1979) No. 1, p. 36–37

Report on the outcome of the ASIS-SIG/CR Meetings during the 41st Conference of the American Society of Information Science, Chicago, Nov. 1978, and listing of the four sessions (of 36) with altogether 17 papers which were devoted to topics in the field of classification and indexing.

4527 Dahlberg, I.: **Classification and education.** In: *Intern. Classificat.* 6(1979) No. 1, p. 37–38

Report on a two-day seminar held at Köln, Bibliothekarlehreinstitut, Dec. 1978, devoted to basics of classification teaching in library schools as well as to comparisons and desiderata in this field.

07 Textbooks

4528 Borko, H., Bernier, C. L.: **Indexing concepts and methods.** New York–San Francisco–London: Academic Press 1978. 261 p., ISBN 0-12-118660-1

This textbook is in 5 parts: 1. The nature of indexes, 2. Structure (entries, syndetic systems, format, standards and alphabetization), 3. Indexing and editing procedures (Common indexing procedures, indexing monographs and serials, editing, typesetting and proofreading, thesauri), 4. Types of indexes (subject and author indexes, citation indexes, word indexes and concordances, special indexes), 5. Index evaluation and professionalism (including indexer qualification and training). References (4 p.). Subject index.

4529 Wüster, E.: **Einführung in die Allgemeine Terminologielehre und Terminologische Lexikographie.** Teil 1: Textteil, Teil 2: Bildteil. (Introduction into General Terminology and Terminological Lexicography.) (In German). Wien–New York: Springer-Verlag (Kommission) 1979. 145 + 70 p. ISBN 3-211-81542-2

Contains the texts of lectures held during the years 1972–1974, at the University of Vienna, Institut für Sprachwissenschaft, now published posthumously.

4530 Needham, C. D.: **Book review of Bakewell, K. G. B.: Classification and indexing practice.** London 1978. In: *Intern. Classificat.* 6(1979) No. 1, p. 46–47

4531 Richmond, Ph. A.: **Book review of Foskett, A. C.: The subject approach to information,** 3rd ed. London/Hamden 1977. In: *Intern. Classificat.* 6(1979) No. 1, p. 46

08 Other Monographs

4532 Alsheimer, R. (Ed.): **Bestandserschließung und Bibliotheksstruktur.** Rolf Kluth zum 10.2.1979 (Subject cataloguing and library structure). (In German). Wiesbaden: Otto Harrassowitz 1979. 244 p.

Festschrift in honor of R. Kluth's 65th birthday divided into three sections, of which No. 1 is devoted to classification and No. 2 to the practice of subject cataloguing. These cover the following 8 contributions: 4533 Heinrich, G.: Kriterien zur Untersuchung von bibliothekarischen Universalklassifikationen. 4534 Dahlberg, I.: Einheitsklassifikation. 4535 Kötzelwesche, C., Fischer, F.: Die Einheitsklassifikation im Spiegel der Arbeitsgemeinschaft der Hochschulbibliotheken. 4536 Meier, H.: Analyse und Kritik einschlägiger Rezensionen und Gutachten zur Einheitsklassifikation. 4537 Beaujean, M.: Die Systematik für Büchereien. Ein Beitrag zur Geschichte der Klassifikation von Freihandbeständen. 4538 Braun, H.: Sacherschließung 1978. 4539 Siefkes, F.: Das Erschließungssystem des Instituts für Weltwirtschaft und seine Umsetzung für EDV. 4540 Pauer, M.: Deckung von Aufstellung und systematischem Katalog. Wunsch und Wirklichkeit in Bibliothekssystemen der neuen bayerischen Universitäten. His personal bibliography covers 77 items, monographs and articles as well as comments.

4541 Bartelt, F.: **Standardlisten zur Schlagwortgebung.** (Authority lists for indexing.) (In German). Köln: Greven Verlag 1978. 124 p., 313 refs. = Arb. aus dem Bibliothekar-Lehrinstitut, H. 46; ISBN 3-7743-0546-3
Based on a revision of a thesis this book treats "Hilfsmittel der verbalen Sacherschließung in Bibliotheken" (aids for verbal subject access in libraries) (subtitle) from five points of view: (1) General, (2) History of universal descriptor lists in the USA, (3) Critique of the Library of Congress Subject Headings List, (4) Universal descriptor lists in the world (except USA), (5) relation of descriptor lists to the subject catalogue. Extensive bibliography.

4542 Chan, L. M.: **Library of Congress Subject Headings: principles and application.** Littleton, Co.: Libraries Unlimited 1978. 347 p., \$ 17.50 ISBN 0-87287-187-8; Research Studies in Library Science, No. 15
Introduction into the use of the subject headings of the Library of Congress (LCSH) taking into account changes including the year 1977.

4543 Wählin, E.: **Research on Classification Systems.** Summarizing report on research on classification systems and their application. Stockholm: Swedish Council for Building Research 1978. 147 p.
Account of a life's study of classification problems especially with regard to product classification. The 7 chapters treat the following contents: 1. The role of classification in society. 2. The system of the sciences – the background to classification systems for documents. 3. Analysis of our best known universal library system, the UDC. 4. Proposals for a new Universal System with a decimal structure. 5. Concept combinations and combinative subdivision. 6. Two-dimensional analysis of subject areas. The field system. 7. The AR-Complex. A programme for coordinating classification systems for different purposes. References. Summary. Appendices. Subject index.

4544 Redfern, B.: **Organising music in libraries.** Vol. 1: Arrangement and classification. London: C. Bingley; Hamden, Conn. Linnet Books 1978. 105 p. ISBN 0-85157-231-6 (Bingley)
This is a revision of the 1966 published work, to appear in two volumes, vol. II will be on cataloguing and bibliographic control. This vol. I deals with 1) problems of organising material, 2) special schemes, 3) treatment of music in some general schemes of classification, 4) a special scheme for jazz, 5) the classification of musical instruments, 6) the arrangement of sound recordings. In a 7th chapter the reader is given a conclusion which leaves it up to him how he would arrange a music library according to the choices presented. There is also a "Further Reading" section and a subject index.

4545 Heaps, H. S.: **Information retrieval. Computational and theoretical aspects.** New York-San Francisco-London: Academic Press 1978. 368 p., \$ 19.50. ISBN 0-12-335750-0
The book is meant to introduce the student of computer science to basic concepts of information retrieval and the librarian, information officers and others not well-versed in the details of

computer-science into the general structure of the relevant computer programs. Three chapters are of particular interest to classification: 1. the one on "Vocabulary characteristics of document data bases", 2. the one on "Document indexing and terms associations" and 3. the one on "Automatic Document Classification".

4546 Guha, B.: **Documentation and information. Services, techniques and systems.** Calcutta: The World Press Private Ltd. 1978. 369 p., \$ 15.-

Of the 19 chapters of this textbook in information science, six are devoted to questions dealing with the organisation of information as well as with thesauri in indexing and evaluation of indexing languages and systems. The 4 chapters dealing with the organisation of information are concerned with document description and document representation, contributions to indexing by J. Kaiser, S. R. Ranganathan, J. E. L. Farradane, E. J. Coates, J. R. Sharp, D. Austin and with other kinds of indexing systems. (p. 114-214). The very last chapter introduces into the "Documentation scene in India". – Subject index.

4547 Kümmel, P.: **Formalization of natural languages.** Berlin-Heidelberg-New York: Springer-Verlag 1979: 223 p., 110 refs., ISBN 3-540-08271-9

This comprehensive work is presented in 10 chapters with the following headings: Introduction. Historical survey on formalization efforts of natural languages. Formalizing stimuli by understanding brain functions in living organisms. Analyses of natural language morphology. Synthesis and formalization of natural language morphology. Analyses of natural language syntax. Synthesis and formalization of natural language syntax. Analyses of Natural language content. Syntheses and formalization of natural language content. Application of natural language formalizations. References. Glossary. Author and Subject Index. The volume contains 62 figures.

4548 Henderson, K. L.: **Book review of Miksa, F. L.: Charles Ammi Cutter: Library Systematizer.** Littleton, Colo.: Libraries Unlimited, Inc. 1977. 344 p. In: The Library Quarterly 48 (1978) No. 3, p. 327-329

4549 Tell, B.: **Book review of Atherton, P.: Books are for use.** In: Intern. Classificat. 6 (1979) No. 1, p. 47-49

4550 Schnegelsberg, G.: **Book review of Prinzipien der Klassifikation Frankfurt 1977.** (In German). In: Mutter-sprache 88 (1978) No. 3, p. 192-193

09 Standards, guidelines

See also 4627

4551 BS 3700:1976. **The preparation of indexes to books, periodicals and other publications.** (Title also in French and German). London: British Standards Institution 1976. 10 p.

This standard supersedes the 1964 edition from which it differs in a number of respects. It is generally concerned with basic indexing principles and practice rather than with the detailed procedure of indexing, which varies according to the type of matter indexed and the readers for whom the index is intended. (From the Foreword)

1 Theoretical Foundations of Classification

11 General Theory of Order

4552 Fugmann, R.: **Toward a theory of information supply and indexing.** In: Intern. Classificat. 6 (1979) No. 1, p. 3-15, 27 refs.

A theory of information supply and indexing is presented which rests on five axioms concerning the definability of search topic, (sufficient) degree of order to be established in the files of an

information system, predictability and fidelity of the representation of concepts and statements in these files. In the light of these axioms an indexing language is looked upon as a means of providing a sufficient degree of predictability and fidelity, which results in correspondingly high ratios of recall and precision. This is equivalent to establishing a correspondingly high degree of order on request. By virtue of the specificity and richness of its vocabulary any indexing language possesses a certain potential of performance, which however can only be realized if the language is employed in a particularly rigorous, "mandatory", not merely "controlled", mode. If especially high demands are made on the order-creating power of an indexing language, then this requires a well-considered subdivision and allotment of an indexing language's task to its vocabulary and grammar, especially its syntax. Several syntactic devices are discussed as a means to enhance the fidelity of an indexing language without any expansion of the vocabulary. It is concluded that in the long run only highly syntactic indexing languages and their mandatory employment will be able to cope with the continually increasing demands that will be made on the accuracy of the information supply. (Author)

12 Conceptual Basis of Classification

4553 Baumgartner, T., Burns, T. R., Meeker, L. D.: The description and analysis of system stability and change: multi-level concepts and methodology. In: *Quality and Quantity*, 11(1977) No. 4, p. 287

4554 Bellacicco, A.: Fuzzy classifications. In: *Synthese* 33(1976) No. 2-4, p. 273-281

4555 Dmitrevskaja, I. V.: Systems approach to abstraction. (In Russian). In: *Sistem. analiz. i nauč. znanie*. Moskva 1978. p. 153-171

4556 Fine, K.: Properties, propositions and sets. In: *J. Philosophical Logic* 6(1977) No. 2, p. 135-191

4557 Jüttner, I., Bauer, G.: Die Anwendung des kategorienorientierten Ordnungsprinzips in interdisziplinären Wissensgebieten und Thesauren. (The application of a category-oriented ordering principle in interdisciplinary subject-fields and thesauri.) (In German). In: *Informatik* 25(1978) No. 5, p. 29-31, 8 refs.
The principle was applied in the field of linguistics. It is recommended for application also in social sciences.

4558 McKay, T. J.: The principle of predication. In: *J. of Philosophical Logic* 7(1978) No. 1, p. 19-26

4559 Voronin, D. F., Michalevskaja, E. I.: Method of classification of information for multiple-aspect processing. (In Russian). In: *Naučno-techn. inform. Ser.* 2(1979) No. 3, p. 12-15, 7 refs.

Discusses a class of problems in multidimensional handling of object characteristics data, and points to the need for a conceptual model of real objects which assumes as notional-level classification of the information being processed. Outlines possible approaches to the classification task. Presents formalised frameworks for single- and multiple-aspect classifications which rely on the following notions: object, aspect, aspect representation of object, object element, set of single-aspect and multiple-aspect relationships on object elements, and base fragments of aspect representations of objects. (Orig. abstr.)

13 Mathematics of Classification

4560 Albert, Peter: The algebra of fuzzy logic. In: *Fuzzy Sets Syst.* 1(1978) No. 3, p. 203-230

14 Systemology and classification

See also 4449, 4555

4561 Anzenbacher, A.: *Analogie und Systemgeschichte*. (Analogy and history of systematics.) (In German). Wien - München: R. Oldenbourg Verlag 1978. 179 p., DM 28,-, ISBN 3-486-48551-2

4562 Gorskij, D. P.: *Systems analysis and scientific knowledge*. (In Russian). Moskva: Nauka 1978. 247 p.

4563 Husain, S. S.: *EPISTEMODYNAMICS: A theory of organization of knowledge*. In: *Annals Libr. Sci. Doc.* 23(1976)No. 2, p. 195, 2 refs.

A theoretical approach, Epistemodynamics has been made to study the dynamics of growth and behaviour of today's n-dimensional, stochastically interdisciplinary knowledge, using the concepts of general systems theory and vector analysis. (Author)

4564 Abramova, N. T.: The systematic nature of scientific knowledge and methods for exploring objects integrity. (In Russian). In: *Sistem. analiz. i nauč. znanie*. Moskva 1978. p. 142-153, 14 refs.

4565 Smirnov, C. N.: Components of the philosophic content of the concept "system" as a stage in cognition and social practice development. (In Russian). In: *Sistem. analiz. i nauč. znanie*. Moskva 1978, p. 60-83, 18 refs.

4566 Urmancev, Ju. A.: Principles of general systems theory. In: *Sistem. analiz. i nauč. znanie*. Moskva 1978. p. 7-41, 54 refs.

16 Development of Science and Classification

4567 Cukerman, E. M., Černova, T. S., Žuravel', E. S., Kureeva, N. S.: Knowledge field interrelations as reflected in the USSR Major Information Publications Subject Authority List. (In Russian). In: *Vopr. soverš. sistemj inform. izd.*, 1977. No. 2, p. 26-31

Examination of the List's syndetics in the Biology, Metallurgy and Agriculture sections. Cross references generally reflect objective relations which exist between scientific disciplines and branches of knowledge, engineering and economy. (Author, abbr.)

4568 Penkala, T.: Conditions of scientific utility of classification of sciences in the forecasting of science development. (In Polish) In: *Pr. nauk. Osrod. bad. prognost. PWr.* (1976) No. 6, p. 87-96, 15 refs.

Existing classification systems are said to use just one characteristic of division. A classification system for forecasting should be build as a dichotomous classification, multidimensional on the horizontal level (by content) and vertically divided by method.

17 Classification Problems

4569 Harris, J. L.: Terminology change: effect on index vocabularies. In: *Inf. Proc. & Manag.* 15(1979) No. 2, p. 77-88, 2 tabs., 2 figs., p. 85-88 appendix, 5 refs.

Changes in the vocabulary of information science over a period of eleven years were studied in order to determine the effect of such change on index vocabularies. The language of the *Annual Review of Information Science and Technology* was studied; the vocabulary was found to be changing at a rate of about 4% per year, with old terms leaving the vocabulary at about the same rate was found, but trends in the discipline showed up in changes in emphasis of the vocabulary. In particular, hardware-oriented terms seem to be declining in importance; there is some evidence that management and cataloging are becoming more important. (Author, abbr.)

4570 Neelameghan, A.: Expressions of time in information science and their implications: An overview. In: *Annals Libr. Sci. Doc.* 24(1977) No. 1, p. 13-33, 53 refs.

Definition - Time-binding and communion - Societal homeostasis - Time in communion process and knowledge growth and diffusion - Time and information system - Research communication: Sociological and behavioural aspects - The emerging information environment - Barriers to communication: Temporal dimensions and social consequences.

18 Classification Research

4571 Wählin, E.: **Aktiviteter för klassificeringsteori i Tyskland.** (Classification theory activities in Germany). (In Swedish.). In: *T. för Dokumentation* 34 (1978) No. 5, p. 84 and 92

The note refers to the start and existence of the journal *International Classification*, the German Classification Society and the two books "Grundlagen universaler Wissensordnung" and "Ordnung und Wortschatz des Wissens".

4572 Malhan, I. V.; Arora, R. L.: **India's contribution in the field of classification research.** In: *Herald Libr. Sci.* 17 (1978) No. 4, p. 270–275, 12 refs.

Describes the cycle of classification research as an endless process due to the characteristics of the universe of knowledge. States the beginning of classification research in India and its impact on the library world. Mentions the contribution of DRTC, Bangalore towards classification research and research on various aspects of classification in India. Indicates the classification research areas in the universe of subjects, development of schemes and theory of classification and suggests some other areas yet to be covered. (Author)

19 History of Classification

See also 4537, 4739

4573 Coates, E. J.: **Classification in information retrieval: the twenty years following Dorking.** In: *J. Document.* 34 (1978) No. 4, p. 288–299, 32 refs.

The article is devoted to Herbert Coblans. It covers developments in England mainly. It is stated that since 1957 there has been no further breakthrough in understanding of classification at a fundamental level comparable to that achieved earlier by Ranganathan. The period is characterized by practical activity in the making of new classifications, the updating of old ones and in the production of indexing tools which include classificatory elements. "Classification syntactics" is seen to have played a major role, its implementations are shown. Also – as a counter-part – "classification semantics" has been stressed and found its expression in the many thesauri developed. Although one could see "classification under fire", it "made its comeback often in the context of mechanized systems themselves".

4574 Friis-Hansen, J. B.: **A contribution to the history of the Danish literature on classification.** (In Danish). In: *Behind the mountain of the books. Festschrift to Mogens Iversen.* Copenhagen: Danmarks Biblioteksskole 1978. 286 p. (here p. 140–152)

Brief comments on 45 titles – books and articles – on classification written by Danish authors. The order is a chronological one, starting with the internationally known Frederik Rostgaard and moving on to 1978. The article is meant to be exhaustive on the subject. (Author)

4575 Schulte-Albert, H. G.: **Classificatory thinking from Kinner to Wilkins: classification and thesaurus construction, 1645–1668.** In: *Libr. Quarterly* 49(1979) No. 1, p. 42–64

In mid-seventeenth-century Britain, scholars were much interested in a universal language, which would overcome the language barrier, and in systems of classification that would organize the rapidly developing sciences. This study investigates the contributions of the Silesian physician and lawyer Dr. Cyprian Kinner, the educator George Dalgarno, and one of the first two secretaries of the Royal Society, Bishop John Wilkins. Kinner designed a special classification schema for botany, suggested a universal classification and language, proposed important elements of vocabulary control, and stressed expressive notations reflecting the nature of things and notions. Dalgarno and Wilkins constructed general conceptual classification schemes based on revised Aristotelian categories. Beyond that, Wilkins created an impressive thesaurus-like dictionary which provided various mechanisms for vocabulary control and displayed a variety of relationships of individual terms. Wilkins's scheme was used for organizing the objects of the natural history repository of the

Royal Society. The study also traces the relationship between Wilkins's thesaurus and the modern information-retrieval thesaurus. (Author)

2 Structure & Construction of CS

21 General Questions of Structure

See also 4448, 4452, 4541, 4543, 4557, 4568, 4569, 4601, 4718

4576 Foskett, D. J.: **The theory of integrative levels and its relevance to the design of information systems.** In: *Aslib Proc.* 30 (1978) No. 6, p. 202–208, 6 refs.

Paper in honor of Leo Jolley's contributions. Relates the history of the integrative level notion in the work of the British Classification Research Group, giving also examples of some findings.

4577 Fairthorne, R. A.: **Outline of Leo Jolley's holotheme.** In: *Aslib Proc.* 30 (1978) No. 6, p. 197–201, 1 ref.

Traces the mathematical contents of the concepts of Jolley's "holotheme" which is based on the integrative level theory.

4578 Parker-Rhodes, A. F.: **The potentialities of the holotheme.** In: *Aslib Proc.* 30 (1978) No. 6, p. 209–214 A rather critical appraisal of L. Jolley's intentions in his book "The Fabric of Knowledge", considering the holotheme to be a Boolean lattice which may turn out to supply too many empty elements. Suggests to test it and concludes "it would obviously be useful if so fundamentally simple a system could be made to work; it might well lead to insights into areas of knowledge where light is much needed".

4579 Pettersson, M.: **Major integrative levels and the fo-so series.** In: *Aslib Proc.* 30 (1978) No. 6, p. 215–237, 8 refs., 20 figs.

The term 'integrative levels' was introduced by Joseph Needham in 1937. He recognized a series of eight levels. Others have since proposed various different and often longer series. Now, by the rigorous application of two *ad hoc* rules or criteria for the discrimination of 'major integrative levels', the number of such major levels (on present knowledge) is found to be nine. Short terms are available for designating the members of the different levels. Having performed the formal classification of objects, according to integrative level, several new quantitative generalizations become apparent. For instance, there is now clear evidence of a general long-term acceleration throughout most of the period of biological and social evolution. (Author)

22 Elements and Special Structures of CS

See also 4468, 4636

4580 Hahn, G.: **Information and documentation of the Bundestag Library (Information und Dokumentation in der Bibliothek des Deutschen Bundestages. Teil I und II.)** (In German). In: *Nachr. Dok.* 29 (1978) No. 6, p. 232. 236, 30 (1979) No. 1, p. 31–38, 20 refs.

Description of the functional catalog system of five catalogs: person-, title-, corporations-, subject- and regional catalog. (Described in English in: *Intern. J. of Law Libr.* 5 (1977) No. 1, p. 95–103). The principle of order followed in the subject-catalog is a problem-oriented, synthetic one, in alphabetic order of groups of subject-headings (Schlagwortgruppen), with subordinated terms. Altogether 3600 subject headings are used, for each document a medium of a minimum of three.

4581 Kruger, J.: **Subject headings and semantics.** In: *Libr. Scene* (1977) No. 1, p. 15–16, 7 refs.

Discussion of the kinds of subject headings used for the subject analysis of books. Special emphasis is given to a discussion of 'meaning', 'abstraction' and 'classification'.

4582 Schreiber, H.: Vergleichende Analyse von Deskriptorenverteilungen. (Comparative analysis of descriptor distributions.) (In German). In: *Informatik* 25 (1978) No. 5, p. 32-33

The investigation was carried out using descriptors from the fields of food and nourishment and molecular biology.

23 Construction of CS

4583 Čistovič, A. S.: Developing information retrieval languages for management information systems. (In Russian) In: *Tr. Leningr. inž.-ekon.institut* (1977) No. 142, p. 76-83, 5 refs.

Demonstrates the feasibility of graph representation of the semantic model of a hypothetical roof IR language. The main lexical units of the language concerned are natural language words automatically extracted from bibliographic and analytical descriptions. (Author)

4584 Florja, L. I., Cukerman, E. M.: Formalised approach to the systemic representation of information centre authority files. (In Russian) In: *Vopr. soverš. sistemy inform. izd.* (1977) No. 2, p. 32-36, 8 refs.

Key features of information centre authority files (ICAF) are indicated and a case is presented for their systemic consideration: use of general systems theory techniques, in particular, a formalised approach. A formal ICAF model permits a mathematical investigation of authority files in force, as well as fosters the development of an exact language to be used both in the current information work and in designing new systems and services. ICAF as a hierarchic system is described in the systems meta-language as a class of sets of concepts, signs and relations, and a system of systems. By way of example, the "Organic Chemistry" section in the *USSR Major Information Publications Subject Authority List* for 1974 is discussed. (Orig. abstr.)

4585 Hiroki, M.: News thesaurus. (In Japanese). In: *Zyoho kanri* 30 (1977) No. 9, p. 729-736, 4 refs.

The thesaurus, published in 1974 has grown to 5000 words over three years. Description of the term selection procedure and of the syndetic network and relevant codes as well as of the references displaying the relations between descriptors and subtitles.

4586 Korsunskaja, G. V.: Complex problems authority list: methodological and design criteria. (In Russian). In: *Vopr. soverš. sistemy inform. izd.* (1977) No. 2, p. 37-49

4587 Morishita, S.: AIDOR on-line instruction document retrieval system. II: AIDOR system and AIDOR instruction thesaurus. (In Japanese). In: *Zyoho kanri* 20 (1977) No. 9, p. 703-712

The source of this education thesaurus was a frequency vocabulary. Discussion of the term selection rules, disambiguation, synonymy and polysemy resolution methods.

4588 Sagalovič, N. M., Bel'cova, V. V.: Development of subject index retrieval languages within the ASSISTENT total information system. (In Russian). In: *Vopr. soverš. sistemy inform. isd.* (1977) No. 2, p. 22-25, 7 refs.

Presents general recommendations on the development procedure for subject index retrieval languages and on the improvement of their vocabulary during the development and early stage of the operation of the ASSISTENT information system. Describes explicit formulas for estimating the required level of the reader's previous training and for assessing subject index retrieval language word-lists. (Author)

4589 Stoljarov, G. K., Kvačuk, K. P., Kracnova, L. V.: Thesaurus development and support tools in the information retrieval system ASPID-3. (In Russian). Minsk: *Inst. Mat. AN BSSR* 1978. 40 p., 8 refs.

Discusses thesaurus development and maintenance tools, especially an application program package called ASPID-3 (Automated System for Descriptor-oriented Search of Information) which is designed for document retrieval systems based on ES computers under the control of the DOS operating system. (Author)

4590 Waisberg, A. M.: An approach to the design of a user-oriented information classification. (In Russian). In: *Nauč.-techn. inform. Ser. 2* (1977) No. 11-12, p. 40-42, 7 refs.

Presents a method for devising an information classification. Lays down requirements for a classification development algorithm for problems handling large amounts of original data. Presents the algorithm and problems which were used in test calculations. (Author)

4591 Zlobinskij, E. I., Komaško, V. M., Navasardjanc, M. G.: Aspects of index number classification and coding reference-information systems design. (In Russian). In: *Tr. proekt.-konstrukt. NII po avtomatiz. ugo'n. prom.-sti* (1977) No. 22, p. 111-116

Discussion of formalised description of information items with reference to the design of a reference-information-system (RIS). A multi-step procedure for the identification of technical-economic indicators used in RIS documents is presented. A rationale is given for a classification of the set of indicators which recognises the peculiarities of the system in question. The classification procedure is described in steps: establishing the kinds of the controllable values, devising "aggregate" indicators and developing a hierarchy of indicators. The coding scheme used with the system's technical-economic indicators is presented, as are the codable characteristics, the code structure, and the conventional notation. Suggestions are made for use of the resulting set of codes and for employing it to develop effective procedures of RIS indicator calculations. (Orig. abstr., mod.)

24 Relationships

See also 4461

4592 Gor'kova, V. I., Šišova, L. A.: Evaluation criteria for the structural links among classification system concepts. (In Russian). In: *Naučno-techn. inform. Ser. 2* (1979) No. 1, p. 14-21

Simulation models based on electrical chain theory and defining structures of the "string", "star" and "triangle" types are used to investigate changes in infrastructural cohesion with changes in the number of structure defining parameters and cohesion parameters.

Source data are given for denining quantitative values of the criteria which determine the "separable" and "inseparable" links in the different structure types. (Author)

4593 Nikitina, L. N.: Content relations between documents identified by means of references. (In Russian). In: *Naučno-techn. Inform. Ser. 2* (1978) No. 12, p. 1-3, 7 refs.

Four types of content relations between documents are regarded: 1) direct sequential, 2) direct parallel, 3) indirect sequential, 4) indirect parallel. The types of content relations can be applied in building a new information retrieval system (an index of citations) and further document retrieval in it. (Author)

4594 Razmyslov, Ju. P.: The DSL- α language in Codd's relational model. (In Russian). In: *Algoritmy i org. rešenija ekon. zadač.* (1978) No. 11, p. 20-35, 8 refs.

Presents the main concepts and operators, syntax and semantics of the DLS- α language. (Author)

26 Notation, Codes

4595 Notaton. In: Foskett, A. C.: Subject aproach to information. 3rd. ed. London: Bingley 1977, p. 164-188, refs.

4596 Tiwari, P. C.: Book number in theory and practice. In: *Herald Libr. Sci.* 16 (1977) No. 1, p. 49-51

27 Compilation, Updating, Storage & Maintenance of CS

See also 4589, 4741

4597 Lebelt, W.: Ein Programmsystem zur rechnerunterstützten Thesauruspflege. (A program system for computer supported thesaurus maintenance.) (In German) In: Rechentechn. Datenverarb. 15 (1978) No. 6, p. 21-24, 5 refs.

Presentation of a method for the rationalization of a steady maintenance of thesauri.

28 Compatibility & Concordances of CS

4598 Antopol'skij, A. V., Salij, A. D., Fedosimov, V. I.: A study of automatic methods for identification of lexical overlaps among information retrieval thesauri. (In Russian). In: Naučno-techn. inform. Ser. 2 (1979) No. 2, p. 14-17, 7 refs.

Examines the concept of lexical overlap among information retrieval thesauri (IRT) and looks at overlap types. Investigates the following techniques of overlap identification: a search leading to word-form matches in IRT lexical units, a search leading to stem matches in automatically derived morphemes, as well as statistical surrogates of varying length. Presents algorithms for morphemic and statistical analysis of lexical units. Discusses the specific concept of relevance and, consequently, of recall and precision in searching for lexical overlaps. Discusses the overlap multiplicity in different IRTs: it has been experimentally demonstrated that the pattern of the overlap multiplicity distribution curve does not depend on the power of the overlap identification techniques. Cites recall and precision ratios for the various search modes. (Authors)

29 Evaluation of CS

4599 Ryzkov, G. S., Sejful'-Mulyukov, R. B.: An experimental comparison of the effectiveness of computer-based IR systems using different descriptor indexing schemes. (In Russian). In: Naučno-techn. inform. Ser. 2 (1979) No. 1, p. 29-36, 10 refs.

A performance evaluation was made of two automated retrieval systems, one using a descriptor list to formulate the search queries alone and the other using the conventional technique of indexing the search queries as well as the documents, taking special care to ensure comparable operating conditions. The relative significance of the various search query components under the two indexing schemes, and the causes of non-retrievals and noise have been evaluated. The first system is shown to perform better than the second one, primarily with respect to recall, under certain conditions. Viewed in the context of the linguistic compatibility requirements for the IR systems which form part of the State Automated STI System, the study results indicate that indexing schemes that use a word list for query processing alone show great promise indeed. (Authors)

3 Classing and Indexing (Methodology)

31 Theory of Classing and Indexing

See also 4388, 4528, 4532, 4552

4600 Bono, E. de: Lateral thinking and indexing. In: Indexer 11 (1978) No. 2, p. 61-63

One needs to use a different type of thinking than usual when organizing one's thoughts for the purpose of indexing.

4601 Ghose, A.; Dhawle, A. S.: Between traditional classification and coordinate indexing. In: Inf. Proc. & Manag. 15 (1979) No. 1, p. 27-31, 3 figs., 12 refs.

The system MANIS described here maintains the traditional classification and yet allows the user to combine terms of his choice, where the choice is restricted to the terms belonging to the system of traditional classification. (Authors, abbr.)

4602 Wilson, P.: Utility-theoretic indexing. In: J. Amer. Soc. Inform. Sci. 30 (1979) No. 3, p. 169-170, 5 refs.

Arguments against W. S. Cooper's proposals in his article "Indexing Documents by Gedanken Experimentation" (JASIS 29 (1978) No. 3, p. 107-119). "If Cooper's rule is practically superior to others, this cannot be known without appeal to experience". (Cooper's answer to this see next entry.)

4603 Cooper, W. S.: Utility-theoretic indexing: a note on Wilson's note. In: J. Amer. Soc. Inform. Sci. 30 (1979) No. 3, p. 170-172, 2 refs.

Concludes his answer by the statement: "utility/decision theory is capable of analyzing an indexer's decision problem into such component tasks as estimating odds and payoffs. Because there is no way of determining ahead of time how skillfully the decision maker will exploit this greater analytic depth, there is no absolute guarantee of an improvement in the end result. . ."

4604 Zajdberg, Ch. M.: A contribution to the indexing problem: indexation formulae. (In Russian). In: Naučno-techn. inform. Ser. 2 (1978) No. 12, p. 21-26

The paper sets out the principles of the thus far little elaborated theory of indexation formulae for a classification or subject-type information language. A uniform basic indexation formula is suggested, which admits of a great number of modifications according to the specifics of the sciences, categories, and subjects. The structure of the formulae, their application conditions, and the corresponding indexing procedures are considered. The formulae have been devised with a view to automated indexing. (Author)

32 Subject Analysis

See also 4538, 4539

4605 Brachmann, B.: Zur Widerspiegelung des Informationsgehaltes archivalischer Quellen in den Recherchehilfsmitteln. (On the mirroring of the information contents of archival sources in retrieval aids) (In German) In: Archiv.-Mitt. 28 (1978) No. 1, p. 10-15, 48 refs.

Description of the possibilities of using thesauri for the subject analysis of archive materials.

4606 Hartmann, J.: Gedanken zur weiteren Verbesserung der Erschließung von Archivgut. (Second thoughts on an improvement of subject access to archive materials.) (In German). In: Archiv.-Mitt. 28 (1978) No. 2, p. 47-50, 27 refs.

Treats the possibility to index more precisely archival materials depending on its differing value and is concerned with the reproduction of archival information in retrieval tools.

4607 Holländer, R., Pieper, G.: Erfahrungen mit der elektronischen Datenverarbeitung bei der Aufbereitung des Inhalts hochmolekularer chemischer Patente. (Experiences in content analysis of patents in the fields of plastics by electronic data processing.) (In German). In: Nachr. Dok. 30 (1979) No. 2, p. 75-80, 4 tabs., 5 refs.

The AMD-Code (AMD = Arbeitsgemeinschaft für makromolekulare Dokumentation) is used by Bayer for computer-aided documentation of plastic patents. It gives adequate results if 1) exactly one plastic is mentioned in the document coded and 2) no alternative terms are cited. Both sources of error in the output can be removed by addition of indices to the 3-digit-code. These indices cancel the compatibility of terms mentioned for two or more different plastics in a patent and of alternative terms. Terms cited additionally and referring to the same plastic remain compatible. Allowed questions consist of additive terms and are directed to one plastic. When questioned, the program identifies, regarding to the indices, compatible terms in the stored document. Optionally the procedure is transferable to similarly conceived documentation systems. (Orig. Abstr.)

4608 Irie, T.: Relation between the facet analysis and classification in science and technology. (In Japanese). In: Dokument. Kenkyu 28 (1978) No. 8, p. 305-313, 16 refs.

4609 Lynch, M. F., Willett, P.: The production of machine-readable descriptions of chemical reactions

using Wiswesser Line Notations. In: J. Chem. Inf. Comput. Sci. 18 (1978) No. 3, p.149-

A method has been developed for the automatic analysis of chemical reactions by a consideration of the changes in the Wiswesser Line Notations of the reacting molecules. The notations are broken down by a multilevel fragmentation process which yields descriptions for all parts of the molecules. The two fragment lists are compared, duplicates eliminated, and the remaining fragments recombined to produce a reaction site. The output from the program consists of these reaction sites and a set of fragment descriptors derived from them. The method has been tested on a file of 9197 one-reactant, one-product reactions and analyses were produced for 7415 of them (80.6%); the success rate could be increased to ~ 90%. (Authors)

4610 Salton, G.: Automatic text analysis. In: J. Am. Soc. Inf. Sci. 30 (1979) No. 2, p. 116, 2 refs.

In this letter to the Editor concerning M. L. Pao's article on "Automatic text analysis based on transition phenomena of word occurrences" (JASIS 1978-3, p. 121-125) G. Salton gives three reasons why Pao's threshold computation cannot lead to a viable automatic indexing policy, the third of which is quoted here: "A reasonable automatic indexing policy must be based on two thresholds distinguishing respectively high-, medium-, and low-frequency terms: (i) medium-frequency terms are used directly for content identification; (ii) high-frequency terms which are too broad (and hence cause a loss in precision) are rendered narrower by being assembled into *phrases*; (iii) low-frequency terms which are too narrow (and hence cause a loss in recall) are rendered broader by being collected into *thesaurus classes*".

4611 Udovyčko, A. D.: A method for analytical description of information system data structures. (In Russian). In: Vopr. sozdaniya ASPR (1977) No. 12, p. 128-134

4612 Zdenkovič, M.: Entropy of topographic maps. (In Croatian). In: Informatol. jugosl. 9 (1977) No. 1-4, p. 19-38, 9 refs. Analysis of the information content of maps with a formula based on information theory.

34 Automatic Clasing and Indexing

See also 4388, 4545, 4610

4613 Alliger, W., Richter, W.: Ein Verfahren zur automatischen Indexierung deutschsprachiger Texte im Rahmen des internationalen Zweiginformationssystems Elektrotechnik. (A procedure for the automatic indexing of German language texts in the international branch information system for electrical engineering.) (In German). In: Informatik 25 (1978) No. 4, p. 10-15, 6 refs. The procedure used is able to handle isolated words as well as composite words and numerical data. The essential part is based on a German-Russian dictionary.

4614 Araki, K., Itayama, K.: On automatic keyword extraction from titles and abstracts and TOSAR-like representation of subjects. (In Japanese). In: Daij 14 kaj zyoheo gakagu gizyutsu kenkyu syukaj happyo rombun-syu (1977) p. 213-225

Reports on the first phase of an automatic keyword extraction project based on the JICST Scientific and Technological Literature Retrieval File, in which a stoplist and a keyword extraction algorithm were developed. (Authors)

4615 Arzikulov, Ch. A., Piotrovskij, R. G., Popesku, A. N., Chazinskaja, M. S.: An automatic system for the-saurus-aided annotating of scientific and technical documents. (In Russian). In: Naučno-techn. inform. Ser. 2 (1978) No. 12, p. 12-20

An automatic dictionary and a thesaurus-based semantic net were constructed and entered into a computer. They furnish the base for developing an algorithmic user-computer dialogue which results in the computer generating a Russian annotation of a French scientific or technical document. (Orig. abstr., mod.)

4616 Bell, C.; Jones, K. P.: Computerized indexing need not be impossible. In: Indexer 11 (1979) No. 3, p. 132-135. 12 refs.

Lists some of the problems which have still to be resolved in order to accomplish computerized indexing eventually.

4617 Buchaleva, E. I., Zajceva, G. N., Rebrova, M. P.: Automatic methods of document classification for building a model of an object. (In Russian). In: Naučno-techn. inform. Ser. 2 (1978) No. 12, p. 4-8, 9 refs.

Algorithms are considered for formal analysis of the theme. It is proposed to consider the relation of semantic proximity between texts to be quasitolerant and to identify the text theme through comparison with the theme of the given taxon. The search pattern of a document can contain as many themes as the number of taxons including it. An experimental comparison is presented of two different classification methods for search patterns of documents; one of the methods strictly rejects the symmetry. The results have shown that while analysing the structural theme both methods complement each other. (Orig. abstr.)

4618 Hatcher, W. E.: Automated classification of MMPI profiles into psychotic, neurotic or personality disorder types. In: Computer Programs in Biomedicine 8 (1978) No. 1, p. 77-80

35 Automatic Ordering

See also 4427

4619 Carpenter, M. P.: Similarity of Pratt's measure of class concentration to the Gini Index. In: J. Amer. Soc. Inform. Sci. 30 (1979) No. 2, p. 108-110, 4 figs., 2 refs. Pratt's measure of concentration is shown to be nearly identical to an already established measure of concentration, the Gini index. Pratt's measure is shown to be an improvement over the Gini index. (Author)

4620 Fu, K.-S.; Rosenfeld, A.: Pattern recognition and image processing. In: Minicomputer software, J. R. Bell and C. G. Bell (Eds.). 1976. p. 358-368. New York, N. Y.: Elsevier/North-Holland. 1976.

Extensive research and development has taken place over the last 20 years in the areas of pattern recognition and image processing. Areas to which these disciplines have been applied include business (e.g., character recognition), medicine (diagnosis, abnormality detection), automation (robot vision), military intelligence, communications (data compression, speech recognition), and many others. This paper presents a very brief survey of recent developments in basic pattern recognition and image processing techniques. (Author)

4621 Gonzalez, R. C., Thomason, M. G.: Syntactic pattern recognition: an introduction. Reading, Mass.: Addison-Wesley Publ. Co. 1978. 283 p. ISBN 0-201-02920-8

4622 Nevalainen, O.; Jakobsson, M.; Berg, R.: Compression of clustered inverted files. In: Mathematical Foundations of Computer Science 1978. (Proc. 7th. Symp., Zakopane, Poland, 1978). J. Winkowski (Ed.). New York, N. Y.: Springer Verl. 1978. p. 393-402.

One way to save memory space in inverted file organizations is to map each address list to a bit-vector and compress it by a suitable compression technique. Eight such techniques are discussed for nonuniformly distributed bit-vectors in this study. Occurrences of clusters with high 1-bit densities are simulated using a *n*-state bit-vector generating process. Experiments with a real life file are also reported. (Author)

4623 Salton, G.; Bergmark, D.: Clustered file generation and its application to computer science taxonomies. In: Information Processing 77. (Proc. IFIP Congress 77, Toronto, Aug. 8-12, 1977). Bruce Gilchrist (Ed.). New York, N. Y.: Elsevier/North-Holland Publ. Co. 1977. p. 441-445.

A clustered file organization is one where related, or similar records are grouped into classes, or clusters of items in such a

way that all items within a cluster are jointly retrievable. Such a file organization is advantageous for interactive searching where tentative query formulations may be used and the records may be specified incompletely or approximately. An inexpensive file clustering method applicable to large files is given together with an appropriate file search method. The method is used to cluster a file of research articles in computer science based on citation similarities between the papers; this leads to the identification of groups of active computer science research topics and of productive computer scientists. (Author)

4624 Salton, G., Wong, A.: Generation and search of clustered files. In: ACM Trans. Database Syst. 3 (1978) No. 4, p. 321-346

4625 Schüler, W., Kunzelmann, F., Kretzschmar, U.: Über den Entwurf von Ordnungsmitteln für die Dokumentation radiologischer Befunde mit SOPS AIDOS. (On the design of ordering aids for the documentation of radiological diagnoses with SOPS AIDOS.) (In German). In: Informatik 25(1978) No. 4, p. 39-42, 12 refs. The classification method used is based on the mathematical classification theory and on decision theory permitting an automatic treatment.

4626 Slagle, J.: Experiments with some algorithms that find central solutions for pattern classification. In: Comm. ACM 22(1979) No. 3, p. 178-183, 9 figs., 2 tabs., 8 refs.

In two-class pattern recognition, it is a standard technique to have an algorithm finding hyperplanes which separates the two classes in a linearly separable training set. The traditional methods find a hyperplane which separates all points in one class from all points in the other, but such a hyperplane is not necessarily centered in the empty space between the two classes. Since a central hyperplane does not favor one class or the other, it should have a lower error rate in classifying new points and is therefore better than a noncentral hyperplane. Six algorithms for finding central hyperplanes are tested on three data sets. Although frequently used in practice, the modified relaxation algorithm is very poor. Three algorithms which are defined in the paper are found to be quite good. (Author)

36 Coding

4627 Codes of the names of languages. (In Polish) In: Aktual. Probl. Inform. Dok. 23 (1978) No. 3, p. 40

Presents the standards for the codes of the names of 183 languages.

4628 Haase, J., Klar, R., Pietrzyk, P.: Ein Programm zur Diagnosenverschlüsselung im Dialogverkehr. (A program for the coding of diagnoses in dialogmode.) (In German). In: Math. Inform. Med. 17 (1978) No. 3, p. 145-150, 25 refs.

4 On Universal Systems

42 On the Universal Decimal Classification, UDC

See also 4543

4629 Robinson, G.: UDC. A brief introduction. The Hague: International Federation for Documentation (IFID) 1979. 8 p., free of charge

A very short text covering purpose, scope, structure, notation and arrangement, tables, mechanization, synopsis, main table, auxiliary tables, management and maintenance, growth of and publications about the UDC.

4630 Schiopu, I.: The visual method in the UDC. (In

Roumanian). In: Prob. Inform. Document. 12 (1978) No. 2, p. 84-86

The UDC is used in all the libraries of Roumania. It is proposed to use colors in the UDC files.

4631 Terzič, D.: Comparative efficiency of the Universal Decimal Classification and descriptor languages in information searching. (In Serbo-Croatian) In: Nauč.-tehn. pregl. VTI 27 (1977) No. 10, p. 59-67, 7 refs.

A defense of the values of the UDC especially regarding its internationalism, its suitability for general collections and its effectiveness for general and retrospective searches.

4632 Universal Decimal Classification. In: Foskett, A. C.: Subject approach to information. 3rd ed. London: Bingley 1977. p. 306-326

43 On the Dewey Decimal Classification, DDC

4633 Dewey Decimal Classification. In: Foskett, A. C.: Subject approach to information. 3rd ed. London: Bingley 1977. p. 277-305

4634 Dhyani, P.: Dewey Decimal Classification in Hindi. In: Herald Libr. Sci. 17 (1978) No. 1, p. 58-61

Adaption of 18th Edition DDC - Doubtful utility of translations - To whom it is useful - Utility of translations - Omission of classes - Replaced numbers - No provision after 1972 - Use of wrong Hindi terms.

4635 Gupta, S. S.: Expansion of 355.48 in Dewey Decimal Classification. In: Herald Libr. Sci. 17 (1978) No. 4, p. 308-311

Contains discussion of the difficulties met with the Class mentioned dealing with Tactical Analysis of Military Events and gives suggestions for expansions.

4636 Raju, A. A. N.: A study of auxiliary schedules in the Dewey Decimal Classification. In: Herald Libr. Sci. 17 (1978) No. 1, p. 3-12, 37 refs.

Traces the genesis and growth of the concept of auxiliary schedules from Edn. 2. onwards. Discusses the concepts of Common Isolates and Mnemonics as enunciated by S. R. Ranganathan and compares them with those in the C. Discusses in detail the growth and development of 7 auxiliary tables appended to Edn 18. Concludes that the 7 auxiliary tables achieve: 1 Economy of entries in the main schedules; 2 Greater consistency and viability; and 3 Faceted feature and mnemonic quality. (Author, abbr.)

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

4638 Library of Congress Classification. In: Foskett, A. C.: Subject approach to information. 3rd ed. London: Bingley 1977. p. 359-367

4639 Subject headings used in the dictionary catalogs of the Library of Congress. In: Foskett, A. C.: Subject approach to information. 3rd ed. London: Bingley 1977. p. 368-375

45 On the Bliss Classification, BC

4640 Bibliographic Classification. In: Foskett, A. C.: Subject approach to information. 3rd ed. London: Bingley 1977. p. 327-339

46 On the Colon Classification, CC

4641 Colon Classification. In: Foskett, A. C.: Subject approach to information. 3rd ed. London: Bingley 1977. p. 340-358

4642 Sharma, P. S. K.: Treatment of Indian philosophy and Indian religions in Colon Classification. In: Intern. Library Review 10 (1978) No. 3, p. 283-300, refs.

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

See also 4592

4643 Dorofeeva, N., Šerebryannikova, V.: *The LBC in the practice of the libraries.* (In Russian). In: *Bibliotekar* (1978) No. 9, p. 48–53

Presentation of the advantages of using the LBC (BBK) in the libraries.

4644 Panov, A. A. (Ed.): *Optimisation of the Library-Bibliographical Classification and the conception of its 2nd edition: collected papers.* (In Russian). Leningrad: BAN 1977. 170 p.

The papers deal with main principles of the 2nd edition of the LBC and with LBC improvement problems. 4645 Ter-Avanesjan, D. V., Panov, A. A., Bannov, Ju. N.: The development and evolution of the Soviet Library-Bibliographical Classification. 4646 Žuržalina, N. P. et al.: The conception of the 2nd edition of the Library-Bibliographical Classification. 4647 Suchmaneva, E. G.: The structure and notation of the 2nd edition of the LBC. 4648 Mišin, V. A.: The requirements to be met by a classification and the outlook for LBC optimisation. 4649 Kušul', A. Ja.: Problems in managing the improvement efforts of international general library classifications and the LBC. 4650 Sukiasjan, E. R.: The publication system for LBC schedules and its improvement prospects. 4651 Čurina, T. D.: Apropos the representation of methodological matters in the LBC schedules for the humanities. 4652 Komarov, V. P.: Reconciling LBC schedules for the humanities. 4653 Kolojarcev, M. V., Nekrasov, B. V.: The wider use of alternatives as an underlying principle of the LBC Ed. 2, with special reference to volume VI "E Biological Sciences". 4654 Kolojarcev, M. V., Lasurkina, V. B. et al.: On the use of the taxonomic classification characteristic in the main version of the LBC schedules for the biological sciences. 4655 Suchmaneva, E. G., Lazurkina, V. B.: Results of partial faceting of the LBC class "E Biological Sciences". 4656 Naumenko, G. F.: Main directions of optimisation efforts in the LBC schedules for the technical sciences.

4657 *The Soviet Library-Bibliographical Classification.* (In Russian). Leningrad: Sb. trudov GPB 1977. 159 p. Discussion of the classification problems relating to the classes of the LBC on Historical Materialism, Scientific Communism and Sociology, Automation and Telemechanics, Medicine (parts), Folklore, Art and Urbanization.

48 On Other Universal CS (alph.)

See also 4543, 4699

4658 Friis Hansen, J. B.: *Companion to DK5.* (In Danish). Copenhagen: Danmarks Biblioteksskole 1978. 253 p.

Notes and reports written down during many years of instruction at the Royal School of Librarianship, Copenhagen in the Danish Decimal Classification System DK5. The contents: General theory of classification, principles for the use of DK5, comments on the structure and use of the various classes of the system. The main classes are analyzed by means of dichotomic organograms. The book is meant as a teaching aid.

(Author, mod.)

4659 Schierlich, W.: *Einige praktische und theoretische Fragen der Klassifikation für Staatliche Allgemeinbibliotheken und Gewerkschaftsbibliotheken.* (Some practical and theoretical problems of the classification system for Public General libraries and Union Libraries.) (In German). In: *Bibliothekar* 32 (1978) No. 2, p. 102–108, 2 refs.

4660 Sterninson, D. L.: *The Roof Information Language (RIL) and data bank flow diagrams.* (In Russian). In: *Nauč. tr. NII planir. i. normativov* (1977) No. 2, p. 7–26, 8 refs.

4661 Unger, I.: *Zur Einführung der „Klassifikation für Tonträger/Musik“.* (On the introduction of the classification system for music carriers). (In German). In: *Bibliothekar* 32 (1978) No. 2, p. 112–116; 7 refs.

The principles and criteria for the classification of records and music cassettes are presented. The classification system serves for the catalogues as well as for the shelves.

49 On CS for Special User Groups

4662 Dressler, I.: *Zur neu erarbeiteten Klassifikation für die Kinderliteratur.* (Study on the newly elaborated classification system for children's literature.) (In German). In: *Bibliothekar* 32 (1978) No. 2, p. 109–112, 7 refs.

5 On Special Objects CS (Taxonomies)

51 Numerical Taxonomy

See also 4478–4522

4663 Bryant, P.: *Asymptotic behaviour of classification maximum likelihood estimates.* In: *Biometrika* 65 (1978) No. 2, p. 273–281

4664 McCullagh, P.: *A class of parametric models for the analysis of square contingency tables with ordered categories.* In: *Biometrika* 65 (1978) No. 2, p. 413–418

4665 Merriam, D. F. (Ed.): *Recent advances in geomathematics: an international symposium.* Oxford: Pergamon Press 1978. 233 p., US \$ 30.—

A review of these proceedings of a meeting of the International Association for Mathematical Geology, Australia, 1976 contained in *Classific. Soc. Bull.* 4 (1978) No. 2, p. 60 points out that a number of the papers are of interest to those working in classification. It mentioned two papers on topics using cluster analysis, others using multivariate analyses of various geological studies. One paper (Dienes) was on formalized definitions using set-theory notation, of stratigraphic units.

4666 Opitz, O. (Ed.): *Numerische Taxonomie in der Marktforschung.* (Numerical taxonomy in market research). (In German). München: Vahlen 1978. 136 p., DM 58,—

58 On CS for Kinds of Documents

4667 Knipfer, G. B.: *Produkt-Information PI – ein neues Warenbeschreibungssystem für den Verbraucher.* (Product information PI – a new commodity description system for the consumer). (In German). In: *DIN-Mitt.* 58 (1979) No. 5, p. 290–293

Presentation of this new cataloguing system meant for the end-consumer with regard to its foundations, its way of application, its differences in comparison with existing systems as well as its relations to standardization, liberal trade policy and safety of products.

4668 Alferov, A. V.: *Problems in research programme classification.* (In Russian). In: *IV Vses. simpoz. po probl. planir. i upr. issled. i razrabotkami, Sekc. I. Moskva* 1977. p. 11–12

A series of classifying criteria are given, permitting to identify 81 types of programmes distinct in their objectives, level and time required.

4669 Berezkin, G. P.: *On classifying research institutions (RI).* (In Russian). In: *IV Vses. simpoz. po probl. planir. i upr. nauč. issled. i razrabotkami. Sekc. 2, Moskva* 1977. p. 134–137

4670 Sorin, V. G.: Use of a classification for working out norms and an R&D planning system. (In Russian) In: IV Vses. simpoz. po probl. planir. i upr. nauč. issled. i razrabotkami. Sekc. 2. Moskva 1977. p. 105-107.

4671 Eisenschitz, T. S., Oppenheim, Ch.: Reasons for inconsistencies in the use of the International Patent Classification. Studies on Patent Classification Systems. III. In: Intern. Classificat. 6 (1979) No. 1, p. 26-28, 2 tabl., 7 refs.

A study was carried out on the consistency of International Patent Classification indexing on 150 families of patents in the field of laser technology. Patents emanating from eight countries (Belgium, Switzerland, East Germany, West Germany, France, UK, Netherlands and USA) were studied. Mean consistency ranged from 0.45 to 0.76 and it was found that countries for whom the IPC is a secondary classification are not significantly less consistent in their IPC assignments than those countries for whom IPC is the national patent classification. IPC consistency was only 0.77 between 15 West German early published applications and the equivalent final granted patents. Reasons for IPC inconsistencies are suggested; the reason seems to be that patents are being over-classified. (Authors)

4672 Kabancev, G. G., Kuznecov, G. I.: The use of a subject thesaurus for the patent papers analysis and synthesis. (In Russian). In: Naučno-techn. inform. Ser. 2 (1978) No. 12, p. 9-11

In order to raise the informativity of the invention formulae (included in patent papers and in their requests) a qualitative-quantitative method of text analysis and synthesis in applying a subject thesaurus is suggested. An initial text of the invention formula on a technique for the mining industry is analyzed. The final invention formula (more informative than the initial one) is synthesized. The application of such editing method to the patent papers texts and to the requests (before input into automatic IR systems) raises the efficiency of the latter.

(Orig. abstr., mod.)

4673 Rumjanceva, N. L.: Patent classification as an index language. (In Russian). In: Naučno-techn. inform. Ser. 2 (1979) No. 3, p. 26-29, 3 refs.

The alphabet, vocabulary, grammar and paradigmatics of a patent classification are explored with special reference to the International Patent Classification. The interplay of the functional and the subject principles in classification development is looked at. IPC classification rules are derived from the patent classification structure determined by the classification paradigmatics, with due regard to the classification priority rules. (Orig. abstr.)

59 On CS for Objects in Area 9

4674 Ihm, P.: Statistik in der Archäologie. Probleme der Anwendung, allgemeine Methoden, Seriation und Klassifikation. (Statistics in archeology. Problems of application, general methods, seriation and classification.) (In German) (P. Ihm unter Mitwirkung von J. Lüning u. A. Zimmermann) Köln: Rheinland Verlag 1978. 619 S. = Archeo-Physika Band 9.

Contains 20 chapters, one of which is devoted to classification (numerical taxonomy) and one to seriation. The bibliography contains 170 references. A subject- and author-index is given as well as references to computer programs and explanations concerning the tables.

6 On Special Subject CS

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

4675 Weiske, C.: Das Klassifikationssystem des Chemischen Informationsdienstes. (The Classification system of the chemical information service.) (In German). In:

DK-Mitt. 21 (1977) No. 5-6, p. 11-15 (Ersch. April 1979)

Describes the rough classification used for the announcement of abstracts in ChemInform, a weekly journal with 20 000 abstracts annually. It was built on the foundation of the system used in the Chemische Zentralblatt.

4676 Wagner, J., Bolick, E., Liebscher, W.: Der Spezialthesaurus „Tenside“. In: Informatik 25 (1978) No. 6, p. 22-24, 1 ref.

Description of the structure of this special thesaurus for chemistry which contains some 2000 terms of which 1500 are determined to be descriptors.

64 On CS in the Bio-Area

4677 Kraft, H.: Anwendungsmöglichkeiten und Brauchbarkeit der „Standardnomenclature of Veterinary Diseases and Operations (SNVDO)“. (Possibilities for application and usefulness of SNVDO.) (In German). In: Prakt. Tierarzt 59 (1978) Spec. printing from 'Collegium veterinarium', within p. 63-66 and 128-.

4678 Blanco, J. M.: Construction experience with an agricultural thesaurus in the Republic of Cuba. (In Russian). In: Bjul. nauč.-techn. inform. MS AGROINFORM 4 (1977) No. 4, p. 136-139, 5 refs.

Description of the methods used in a thesaurus construction for computer handling comprising some 4338 terms.

65 On CS in the Human Area (5)

4679 Barron, B. A.: Classification in clinical medicine. In: Classif. Soc. Bull. 4 (1978) No. 2, p. 11-23
Paper delivered at the Meeting of the Classification Society, held at Dartmouth College, Hannover, N. H., June 77.

4680 Leonhard, K.: The classification of endogenous psychoses. (Ed. by E. Robins). Baffins Lane, Chichester, England: J. Wiley 1979. approx 480 p., approx \$ 29.70

4681 Bachrach, C. A., Charen, T.: Selection of MEDLINE contents the development of its thesaurus, and the indexing process. In: Medical Informatics 3 (1978) No. 3, p. 237-254

4682 Job classification and effective staff utilization. In: Tex. Library Journal 54 (1978) p. 46

67 On CS in the Economics and Technology Area

See also 4660

4683 Tunickij, E. M.: Developing a thesaurus for a computer-based data bank. (In Russian). In: Standarty i kacestvo (1978) No. 4, p. 64-67

The language chosen for description of the economic indicators is a descriptor-facet language featuring some hierarchical classification traits based on elements of the statistical indicator information language. The design methodology, content and structure of the thesaurus meant for national economic planning at a state planning level are described.

4684 Bakewell, K. G. B.: The London Classification of Business Studies. In: Intern. Classificat. 6 (1979) No. 1, p. 29-35

The origins, scope and principles of The London Classification of Business Studies, compiled by K. D. C. Vernon and Valerie Lang, are described. The classification has now been revised, and the article outlines the reasons for the revision, the revision policy and the revision process, which involved soliciting the views of users of the classification. The major differences between the first and second editions are explained, with illustrative examples. The classification has established an international reputation for the organisation and retrieval of information on business studies, and it is hoped that the second edition will be a worthy successor to the first. (Author)

4685 Ruban, V. Ja., Medvedev, A. A.: Use of an information language to improve the efficiency of MIS design. (In Russian). In: Naučno-techn. inform. Ser. 2 (1977) No. 11-12, p. 43-48, 11 refs.

An information language is presented whose application ensures unambiguous names for tasks and indices which figure as source and target variables. Manipulations with task descriptions leading to more efficient complex systems are presented. (Orig. abstr.)

69 On CS in the Cultura Area

4686 Sudarikova, E. P.: The classification of the entries in the current bibliographical bulletin "New Soviet Literature in the Social Sciences: Series 'Philosophical Sciences'". (In Russian). In: Tr./Leningr. Inst. Kul'tury 34 (1977) p. 151-170, 31 refs.

The structure of the INION bulletin mentioned matches in principle the composition and hierarchy of the fields in philosophy. - The logical principles followed are enumerated.

4687 Kersten, D. B.: Classifying church or synagoge library materials. Bryn Mawr, Pa.: Church & Synagogue Libr. Association 1977. 10 p., refs.

7 Classification and Language

71 General Problems of Natural Languages, Metalanguages, Semiotics

See also 4427, 4428, 4591

4688 Bauer, C.: A reflection on universal grammars. In: Synthese 37 (1978) No. 2, p. 239-251

4689 Giljarevskij, R. S., Šrejder, Ju. A.: The semiotics of scientific-information processes. (In Russian). In: Naučno-techn. inform. Ser. 2 (1979) No. 1, p. 1-7, 15 refs.

Information presentation is shown to play a major role in scientific-information processes. The levels and main traits of these processes are discussed and problems associated with their semiotic description are formulated. Some of the VINITI-based research in this field is presented. (Authors)

4690 Pelc, J.: Some semiotic considerations concerning intensional expressions and intentional objects. In: *Logique et Analyse* 20 (1976) No. 79, p. 244-267

4691 Peri, S.: The problem of universals and its perceptual correlates. In: *Synthese* 35 (1977) No. 4, p. 447-456

4692 Rohrer, C. (Ed.): *Papers on tense, aspect and verb classification*. Tübingen: G. Narr Verlag 1979. 165 p., DM 24.80 ISBN 3-87808-110-3

4693 Seiler, H. (Ed.): *Language Universals*. Tübingen: G. Narr Verlag 1979. 328 p., DM 68,- ISBN 3-87808-111-1

Contains 19 contributions around the problem of the universals introduced by one from H. Seiler himself on: The Cologne project on language universals: questions, objectives and prospects.

4694 Vetrov, A. A.: Semiotics as a deductive system. (In Russian). In: *Sistem. analiz. i nauč. znanie*. Moskva 1978. p. 202-228, 11 refs.

In a sign system, four components have been identified: referring object, referred object, organised system referring to some object and significance enabling a reference act. It is shown that syntactical systems are not sign systems.

72 Semantics

See also 4440, 4458

4695 Gavrilova, V. I.: A note on the semantics of a variety of conversive constructions. (In Russian) In: Naučno-techn. inform. Ser. 2 (1979) No. 3, p. 30-37, 11 refs.

The paper considers conversive constructions using pair reflexive verbs for predicates which coincide with two-member passive constructions in structural formula but differ in semantic and syntactic peculiarities. This conversive construction is called quasi-passive. A rationale is given for regarding quasi-passive constructions as an independent type contrasted with active and passive type constructions. The proposed interpretation of quasi-passive constructions can furnish the basis for simpler representation of reflexive verb meanings in dictionaries. (Author)

73 Automatic Language Processing

See also 4452, 4458

4696 Bundy, A. (Ed.); Burstall, R. M., Weir, S., Young, R. M.: *Artificial intelligence. An introductory course*. Edinburgh: University Press 1978. 261 p., ISBN 0-85224-340-5

4697 Kobzareva, T. Ju., Leskis, G. A.: A morphological segmentation system. (In Russian). In: Naučno-techn. inform. Ser. 2 (1979) No. 2, p. 23-27, 2 refs.

Text words are grouped into four types depending on whether or not every word part is used in making up the word's grammatical characteristic at the output, and whether the information is stored in dictionaries or tables.

Rules of analysis have been laid down for each word type. The system's output takes the form of a string of grammatical characteristics, to be handled by parsing algorithms. Both algorithms are a part of an automatic grammatical analysis system designed for use in computer-based IR systems with grammar in the electrical engineering field. (Authors)

4698 Lynch, M. F.: The statistical microstructure of textual data-bases. In: *Classif. Soc. Bull.* 4 (1978) No. 2, p. 2-10, 17 refs.

Paper presented at the European Branch Meeting of the Classification Society, Sept. 29, 1977.

4699 Nakai, H., Okano, H., Osada, T.: The word base segmentation system and its application to JICST thesaurus keywords. (In Japanese). In: *Daj 14 kaj zyohto kagaku gizyutsu kenkyu syukaj happyo rombunshyu* (1977) p. 169-179

In the Japanese language long complex nouns are composable by combining unit-words (word-bases) whose number amounts to several hundred thousands. In order to examine the feasibility of controlling Japanese nouns using fewer word-bases, a machine-aided system for word-base segmentation was developed. The fundamental concepts of the segmentation algorithm, an outline of the system and the results of its application to JICST Thesaurus keywords are described. From 34,000 keywords 15,100 word-bases were obtained, and a KBIC (Key Base In Context) index was compiled. It contains about 73,000 entries, each noun consisting of 2.15 based on the average. Problems in the use of word-bases in indexing, retrieval and thesaurus construction are discussed. (Author, mod.)

74 Grammar Problems

4700 Janoš, J.: Theory of functional sentence perspective and its application for the purposes of automatic extracting. In: *Inf. Proc. & Manag.* 15 (1979) No. 1, p. 19-25, 12 refs.

When preparing the more sophisticated methods of text analysis for information systems, an important role may belong to the applications of modified results gained on the basis of the theory of so called "functional sentence perspective", working with the concepts of the "theme" of a sentence (that which is spoken about in the sentence) and of the "rheme" (that which is said about the theme in the sentence). From the standpoint of the need to establish the "informational content" of the text an analysis of his kind undoubtedly is more important than a traditional

examination of a subject-predicate relations etc. Along with a brief characterization of the results of this theory, the article analyzes the possibilities for the implementation of this theory in the theory of information systems, particularly with respect to the study of so called thematic progressions in the text and general structural formula of the text. Besides, particular attention is paid to the utilization of this theory in the domain of automatic extracting. (Author)

75 Question-answering Systems

4701 Guenoche, A.; Virbel, J.: *L'interrogation des banques de données en langage naturel dans une démarche cognitive complexe.* (In French) In: *Inf. Proc. & Manag.* 15 (1979) No. 1, p. 33-46. 1 scheme, 14 refs.

This paper deals with linguistic and mathematical problems which arise in natural language processing of data bases of informations, liable to have a cognitive function. Within the framework of the project AVEROES, questions are asked to a data base providing a description of morphological aspects of roman amphora, in order to analyse and to verify traditional typologies in this archaeological field. (Author, abbr.)

76 Lexicon/Dictionary Problems

See also 4477, 4523, 4524, 4598

4702 Arapov, M. V., Ter-Gasparjan, L. I., Cherts, M. M.: *Comparison of frequency dictionaries.* (In Russian). In: *Naučno-techn. inform. Ser. 2* (1978) No. 4, p. 20-29, 8 refs.

A mathematical theory is proposed which describes a way how dictionaries of one language could be built up consistently.

4703 Martem'janov, Ju. S., Moskovoj, V. A.: *On a calculus of dictionary entries (based on German material).* (In Russian). In: *Prikladnaja lingvistika* (1976) No. 18, p. 3-47, 18 refs.

An attempt is made at using a calculus to describe words from the point of view of both the meaning they convey and their syntactic and sentential structure. . . In view of the fact that the presence of the semantic relations of the relational language in the words of a natural language is implicit and manifests itself only through vacant valencies, the need arises for constructing a new grammar to describe valence relations, i.e. a valence grammar, and for setting forth the rules of translating ("transducing") into the valence language the relational significata derived earlier. (Orig. abstr., abbr.)

4704 Mel'čuk, I. A.: *A new kind of dictionary and its role as a core component of automatic text processing systems.* In: *T. A. Inform.* 12 (1978) No. 2, p. 3-8, 9 refs.

Description of a dictionary type called explicative and combinatorial dictionary. Every entry exists out of three kinds of information: semantic, syntactic and morphological one. The first two kinds are explained here.

77 General Problems of Terminology

See also 4429, 4430, 4529

4705 Bungarten, T.: *Wissenschaftssprache. Beiträge zur Methodologie, theoretischen Fundierung und Deskription.* (The language of science. Papers on methodology, theoretical basis and description). (In German). München: W. Fink Verlag 1978.

4706 Hoffmann, L.: *Sprache in Wissenschaft und Technik.* (Language in science and technology). (In German). Leipzig: VEB Verlag Enzyklopädie 1978. 244 p.

4707 Joly, H.: *A note on the terminological work of the International French Language Council CILF.* (In French). In: *Bull. Terminol.* (1976) No. 27, p. 69, 71-75

Summary on the tasks of CILF, founded in 1967 and serving the linguistic and terminological needs of 231 million people using

French as native, official or working idiom. It publishes "Banque des Mots" since 1971 and "La Clé des Mots". It also works out unified terminological standards for France, Belgium, Canada and Senegal.

4708 Mignemi, G.: *Linguistic and terminological normalisation in EEC countries and ISO Technical Committee 37.* (In Italian). In: *Bull. Terminol.* (1976) No. 27, p. 109, 111-113

Reports on the activities of the Italian National Unification Board (UNI) concerning terminological work and standards.

4709 *Standardization of terminology in USSR and international organizations.* (In Russian). - Moskva: Gosudarstvennyj Komitet Standartov Sovety Ministrov SSSR. 1978. 48 p.

4710 Sundström, E.: *The Termdok Bulletin, No. 44, 45, 46.* In: *Intern. Classificat.* 6 (1979) No. 1, p. 43-44

The issue 44 and 45 are devoted to the prospect of public availability of a term bank, making use of the multiple-access system, realized on an experimental scale. No. 46 tells of the search speed-up and the integration effects of the various information handling activities associated with terminological work.

78 Special Terminology Problems

See also 4457

4711 Achmanova, O.: *Linguistic terminology.* Moskva: University Press 1977. 188 p.

4712 Arrignon, J.: *La terminologie de la pêche fluviale.* (The terminology of river fishing). (In French). In: *Banques des Mots* (1978) No. 15, p. 61-68

Some hundred terms are defined and in some cases English and German equivalencies are added.

4713 Bablon, G.: *Noyau d'un vocabulaire phares et balises.* (Kernel of a vocabulary on beacons and buoys.) (In French). In: *Banque des Mots* (1978) No. 15, p. 53-60

Definition of the terms with English equivalents.

4714 Delamare, G.: *Le vocabulaire des réseaux.* (The vocabulary of nets). (In French) In: *Information et Question, France* (1978) No. 96, p. 41-43

4715 Murcia, C.: *La terminologie de l'enseignement du français langue étrangère.* (The terminologie of the teaching of French as a foreign language). (In French) In: *Banque des Mots* (1978) No. 15, p. 19-28, 3 refs.

4716 *Terms in ISO international standards and recommendations.* Vol. 1 (In Russian). Moskva 1977. 295 p.

The collection has been compiled for unifying and classifying terms defined by various ISO standards and recommendations. Terms have been classified according to the USSR State Standards Classification, and within separate section terms have been listed alphabetically. The work appears in three volumes, in the third volume, alphabetic lists of terms in English and French are given, corresponding to the Russian term number.

(Accord. to orig. abstr.)

79 Problems of Translation (incl. Multilingual CS)

See also 4634

4717 Harris, B.: *On the translation of classification instruments.* In: *T. A. Inform.* 19 (1978) No. 2, p. 57-67, 1 p. refs.

Treats mainly problems of translation between different editions of universal classification systems.

4718 Pigur, V. A.: *Multilingual information retrieval systems: integration levels and linguistic support.* (In Russian). In: *Naučno-techn. inform. Ser. 2* (1979) No. 1, p. 22-28, 15 refs.

Operational international IR systems of several levels were analysed. Major prerequisites for these systems viability are described as follows: an internationally accepted language, a language maintenance methodology, and indexing rules. The systems are classified according to integration level, degree of neutralisation of linguistic differences, and hardware and communications compatibility. (Orig. abstr.)

8 Applied Classing and Indexing

81 General Problems and Indexing Rules

See also 4468, 4528

4719 Clark, J.: *The programme index and script library of the BBC*. In: *Indexer 11* (1979) No. 3, p. 149–151
Description of the indexing practices at the British Broadcasting Corporation, where television yields 17000 indexable items per year and radio 47000.

4720 Dykstra, M.: *The lion that squeaked*. In: *Library Journal* 103 (1978) No. 15, p. 1570–1572
Pleads for the adoption of the PRECIS indexing system in the Library of Congress.

4721 Edmunds, A.: *For the professional indexer a book needs that listing in the back*. In: *Indexer 11* (1979) No. 3, p. 160–161.
Reprinted text from the Aug. 14, 1978 issue of *Publishers Weekly* (R. R. Bowker Co.). Presents the aims of the American Society of Indexers.

4722 Hewitt, A. R.; Banwell, C. C.: *A practical guide to law indexing*. London, England: The Society of Indexers 1977. 31 p.
Contains some 76 advices and references to further reading. The little book is concluded by an excellent little index.

82 Data Indexing

See also 4609

4723 Evans, L. A., Lynch, M. F., Willett, P.: *Structural search codes for on-line compound registration*. In *J. Chem. Inform. Comput. Sic.* 19 (1978) No. 3, p. 146–
A topological index has been developed which can discriminate between isomers in a molecular formula group. This index could be used, in combination with the molecular formula, to provide rapid access to those few compounds in a large chemical structure file which must be compared with a query structure at registration.

83 Indexing of and by Titles, Phrases

See also 4387, 4726

4724 *Commentaires au sujet de l'application du système PRECIS à la langue française*. (Notes about adapting the PRECIS system to the French language). (In French). In: *Canadian J. of Inform. Sci.* 3 (1978) p. 181–189
The paper written by Madeleine Laliberté in the same journal 2 (1977) No. 1, p. 79–92, generated considerable interest among those involved in the development and use of the PRECIS system. Two important comments on this paper are presented here, one from the PRECIS/Translingual Project group of the British Library, and a second from the author of the original paper. (Orig. abstr.)

84 Indexing of Texts

4725 Janisch, A.: *Towards a subject index for legislation in Canada*. In: *Canadian J. of Inform. Sci.* 3 (1978). p. 44–56, 12 refs.

The need for subject indexes to legislation is outlined as well as the methodology adopted and some of the problems associated with the production of this pioneering index.

85 Book Indexing

See also 4551

4726 Bett, C. E.: *The Subject Access Project: A comparison with PRECIS*. In: *Indexer 11* (1979) No. 3, p. 145–148. 14 refs.

Following a summary of the aims and recommendations of Atherton's SAP Report is a critique of her discussion on PRECIS, interwoven with corrective explanations of how PRECIS works. In the SAP Report PRECIS is confused with a bibliographic file, with document analysis, with indexing policy and with the British MARC Verbal Feature Heading. PRECIS is none of the above, but rather an indexing method based on a system of grammar, with computer codes used to create a printed index. As well as clearing up errors in relation to PRECIS, the display value of PRECIS and machine applications to PRECIS are noted in response to Atherton's desiderata for a new indexing system. (Author)

4727 Coyne, A. V.: *Ideas for indexing: Encyclopaedia Britannica and Great Books of the Western World*. In: *Indexer 11* (1979) No. 3, p. 136–140.

Gives an introduction into the indexing and systematization of the 15th edition of the *Encyclopaedia Britannica* and the indexing in the 2-volumes *Syntopicon* which indexes by 102 topics the 443 works of 74 authors of *Great Books*.

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

91 General Problems of Organisation of Classification

4729 Galloway, S.: *A publisher uses freelance indexers*. In: *Indexer 11* (1979) No. 3, p. 154–155.
Report on experiences made by the Copy Chief of *Time-Life Books* with the organization of the indexes and the freelance indexers they employ.

4730 Urdang, L.: *The human use of human indexers*. In: *Indexer 11* (1979) No. 3, p. 125–131. 3 figs.
Demonstrates that a great amount of the drudgery of indexers can be assumed by the computer, namely the extraction, limited editing, alphabetization and a few other routine processes. Only those functions that the computer is incapable to perform should be left to the indexer.

92 Persons and Institutions in Classification

4731 Greig, P. E. et al: *Gilfred Norman Knight*. 12 Sept. 1891–17 Aug. 1978. In: *Indexer 11* (1979) No. 3, p. 164–168
Obituary by P. E. Greig of the founder of the Society of Indexers as well as 11 personal notes by close colleagues and friends.

4732 Jones, K. P.: *Leo Jolley: a short appreciation*. In: *Aslib Proc.* 30 (1978) No. 6, p. 192–196, 10 refs.
Paper represented at the *Leo Jolley Memorial Seminar*, 20th June 1977. It forms the entry article of an entire issue on *Leo Jolley* and his contributions to the field of information science by his colleagues and friends.

4733 Kaula, P. N.: *The work and greatness of Ranganathan*. In: *Herald Libr. Sci.* 17 (1978) No. 2–3, p. 200–204

After a biographical introduction into Ranganathan's life follow two book-reviews of recent studies of Ranganathan's contributions, namely one of A. P. Srivastava: *Ranganathan, a pattern maker*; and M. P. Satija: *Ranganathan, method and style*.