

Outline of form and subject categories of the field of classification science and applied classification¹

0 Form divisions

- 01 Bibliographies
- 02 Literature reviews
- 02 Dictionaries, terminologies
- 04 Classification systems & thesauri
- 05 Periodicals and serials
- 06 Conference reports, proceedings
- 07 Text books (whole field)*
- 08 Other monographs (whole field)*
- 09 Standards, guidelines

1 Theoretical foundations

- 11 General theory of order
- 12 Conceptual basis of class.
- 13 Mathematics of classification
- 15 Psychol. & epistemol. of class.
- 16 Development of science and class.
- 17 Classification problems
- 18 Classification research
- 19 History of classification

2 Structure and construction of CS**

- 21 General questions of structure
- 22 Elements and special structures
- 23 Construction of CS
- 24 Relationships
- 25 Sequencing of concepts/classes
- 26 Notation, codes
- 27 Compilation, updating, storage & maintenance of CS
- 28 Compatibility and concordances of CS
- 29 Evaluation of CS

3 Classing and indexing (methodology)

- 31 Theory of classing & indexing
- 32 Subject analysis
- 33 Classing and indexing techniques
- 34 Automatic classing and indexing
- 35 Automatic ordering
- 36 Coding
- 37 Reclassification
- 38 Index generation programming
- 39 Evaluation of indexing

4 On universal systems

- 41 On universal systems in general
- 42 On the UDC
- 43 On the DDC
- 44 On the LCC
- 45 On the Bliss Classification, BC
- 46 On the Colon Classification, CC
- 47 On the Libr.-Bibliogr. Class., LBC (BBK)
- 48 On other universal CS (alph.)
- 49 On CS for special user groups

5 On special objects CS (taxonomies)

- 51 Numerical taxonomy***
- 52 On taxonomies and nomenclature for chem.
- 53 On taxonomies for minerals and materials
- 54 On taxonomies for plants and animals
- 55 On taxonomies in the human area
- 56 On taxonomies in the socio area
- 57 On commodity CS
- 58 On CS for kinds of documents
- 59 On CS for objects in humanities area

6 On special subjects CS

- 61 On CS for mathematics and area 1 fields
- 62 On CS for physics and chemistry, incl. el.
- 63 On CS for the astro- and geosciences
- 64 On CS in the bio-area
- 65 On CS in the human area
- 66 On CS in the socio-area
- 67 On CS in the economics and technol. area
- 68 On CS in the information area
- 69 On CS in the culture and humanities area

7 Classification and language

- 71 Gen. probl. of nat. languages, semiotics
- 72 Semantics
- 73 Automatic language processing
- 74 Grammar problems
- 76 Lexicon, dictionary problems
- 77 General problems of terminology
- 78 Special terminology problems
- 79 Problems of translation (incl. multiling. CS)

8 Applied classing and indexing

- 81 General problems of indexes and indexing rules
- 82 Data indexing
- 83 Indexing of and by titles, phrases
- 84 Indexing of texts
- 85 Book indexing
- 86 Indexing and indexes of CS
- 87 Indexing of secondary literature
- 88 Indexing of primary literature

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

- 91 General probl. of organisation of class.
- 92 Persons and institutions in class.
- 93 Org. of class. on the national level
- 94 Org. of class. on the intern. level
- 95 Education and training in class. & index.
- 97 Economic aspects
- 98 User studies
- 99 Standardization in classification

* Monographs on special topics at spec. subdivisions

** CS stands for Classification Systems including thesauri

*** Except for 51 outline follows under 5 and 6 the main divisions in scheme of subject fields as given in I.C.2 (1975) No. 1, p. 36

¹ Slightly differing version from the one published in Intern. Classificat. 1 (1974) No. 2, p. 109

01 Bibliographies

1127 **Accession list of the English Library Association library.** In: *Libr. & Inform. Bull.*, London (1974) No. 23, p. 46-49

List of some 54 titles pertaining to classification being held in the library of the Library Association.

1128 Laureilhe, M. T.: **Sixième complément à la bibliographie des thesauri et index par matières parus depuis 1960** (au 31 déc. 1974). In: *Bull. Bibl. France* 20 (1975) No. 3, p. 119-127

Lists 75 thesauri or the like of which 21 have been accessed in the Bibliothèque nationale. A further list of 30 thesaurus projects is added. (see also 036 and 524 in I. C. 74-1 and 74-2)

1129 Laureilhe, M. T.: **Bibliographie des Thesauri et Index par Matière parus depuis 1960.** Paris: Bibliothèque Nationale 1975. 22 p.

Result of the cumulation of the six bibliographies that have appeared annually in the *Bull. Bibl. France*.

Hidden bibliographies

1130 Vogel, F.: **Literature and bibliography.** In: Vogel, F.: *Problems and processes of numerical classification ...* (In German). Göttingen: Vandenhoeck & Ruprecht 1975. p. 357-405

Extensive bibliography, comprising 709 titles.

02 Literature Reviews

1131 Sparck Jones, K.: **Automatic indexing.** In: *J. Doc.* 30 (1974) No. 4, p. 393-432, 2 figs., 1 tab., 105 refs. State of the art review concentrating on the literature from 1968-1973.

03 Dictionaries, Terminologies

1132 Shupak, H.: **Classification: a definition.** In: *Drexel Libr. Quart.* 10 (1974) No. 4, p. 4-10
After extending on several aspects covered by the concept of classification the "unstartling" definition - "is the activity of storing documents for retrieval" is offered, however without real conviction.

1133 **The terminology of coordinate indexing.** In: *Aslib Inform.* 2 (1974) No. 6, p. 8
Reports on work of a Working Party from the Aslib Coordinate Indexing Group regarding the terms relating to the technique of coordinate indexing.

1134 Gekeler, O. (Comp.); AEG-Telefunken. Fachbereich Hochfrequenztechnik: **Multilingual glossary of important material codification terms.** Ulin: AEG Telefunken 1975. 31 p.

English definitions of 124 terms in the area of cataloguing and classification of supply articles and their translations in the following languages: French, German, Italian, Dutch, Norwegian, Portuguese and Spanish.

1135 Dahlberg, I.: **Some thoughts regarding the terminology of 'Fach', 'Sach-' und 'Wissensgebiete'.** (In German) In: *Muttersprache* 85 (1975) No. 2, p. 118-121, 5 refs.

04 Classification Systems and Thesauri

041 Universal Classification Systems

1136 Centre National de la Recherche Scientifique (CNRS): **PASCAL. Bulletin signalétique 1975. Plan de classement.** Paris: CNRS, Centre de Documentation 1975. 127 p.

Description of the activities of the documentation centre of CNRS and 1975 edition of the groupings of the Bulletin signalétique. (PASCAL stands for: Programme Appliqué à la Sélection et à la Compilation Automatique de la Littérature.)

1137 Lenocho, H.: **Classification system.** In: *Terminol. Bull., Luxemburg* (1975) No. 24, p. 43-133

List of the 45 main groups and their subgroups used for the order of the terms in the terminology bureau of the European Communities. Notation by capital letters, very often mnemotechnically composed, as e.g. under the group E one may find EC economy, ED education, EL electrical engineering and EN environmental research. Editions in different languages with the same notation.

1138 National Technical Information Service: **NTIS master frequency list of subject terms.** 4 vols. Springfield, Va.: U.S. Dept. of Commerce, NTIS 1974. \$ 125.- per volume.

Composite of the subject indexing vocabularies used to index research reports in the NTIS' Bibliographic Data File. Alphabetical list of subject index terms with frequency postings for the various index files as well as for the master file. To be supplemented annually.

1139 **The New York Times Thesaurus of Descriptors.** New York: The New York Times Co. 1971. 1129 p. (2 vols.)

Alphabetical arrangement only. Is subtitled as: "A guide for organizing, cataloguing, indexing and searching collections of information on current events."

1140 **Rubrikator osnovnykh informacionnykh izdanij SSSR.** (Classification for basic USSR-publications). (In Russian). Moskva: VINITI 1974. 478 p.

Subject-fields classification system with 67 main areas of science and technology subdivided in sections and subsections on 2-4 further levels. Index.

042 Universal Decimal Classification, UDC

1141 British Standards Institution: **Universal Decimal Classification.** Second English Full Edition. Auxiliary signs and subdivisions (except those of place). London: BSI 1974. 62 p. = BS 1000; = FID Publ. 483.

1142 **Clasificación Decimal Universal.** Edición abreviada española. 3rd rev. ed. Madrid: Instituto Nacional de Racionalización y Normalización 1975. 324 p. = FID Publ. 517.

1143 **Classificação Decimal Universal.** Edição desenvolvida em lingua portuguesa. 8 *Filologia e Literatura.* Rio de Janeiro, Brasil: Instituto Brasileiro de Bibliografia e Documentação. Lisboa, Portugal: Centro de Documentação Científica 1975. 56 p. = FID publ. 342. Portuguese translation of the full UDC edition for the main class 8; schedules and index.

043 Dewey Decimal Classification, DDC

1144 **Area table - 41: revised edition.** In: *Dewey Decimal Classification: Additions, Notes and Decisions* 3 (1974) No. 6, 23 p. (Supplement
Official revision of the administrative divisions of Scotland and Northern Ireland, effective April 1, 1974.

1145 Area table - 42: revised edition. In: Dewey Decimal Classification: Additions, Notes and Decisions 3 (1974) No. 4/5, 40 p. (Supplement)
Official revision of the administrative divisions of England and Wales, effective April 1, 1974.

1146 Trotter, R. R.: **Index to the area tables -41 and -42 - The British Isles - of the Dewey Decimal Classification**, following local government reorganisation of Great Britain and Northern Ireland 1974/75. London: The Libr. Assoc. 1975 24 p. (ISBN 0 85365 068 3)

044 Library of Congress Classification, LCC

1147 **Changes in chronological subdivisions under place names and topical subjects**. In: *Catalog. Serv. Bull., USA* (1974) No. 108, p. 5-25
List of the modified subdivisions in the Library of Congress Classification.

046 Colon Classification, CC

1148 Seetharama, S.: **Regional organs of human body: depth classification version of CC**. In: *Libr. Sci. Slant Doc.* 11 (1974) No. 1, p. 5-19, 8 refs.

04-01/09 Special Classification Systems - ●b-
jects

see also 1134

1149 Gekeler, O. (Ed.): **Multilingual Classification 1975**. (Title also in F, D, I, NI, No, Pt, Sp). Ulm: AEG Telefonen 1975. 184 p.
About 80 groups and their subgroups in 8 languages each for the "codification" of goods within the frame of the NATO classification of supply articles.

1150 Nakata, Y., Strange, M.: **Classification scheme for Illinois State publications**. As applied to the Documents Collection at the library, Univ. of Illinois at Chicago Circle, Ill. Champaign, Ill.: Graduate School of Library Science 1974. II, 39 p., \$ 1.- (Occ. Papers No. 116)

1151 **International Patentclassification**. (Internationale Patentklassifikation. 2. Ausg.) (In German). Köln etc.: C. Heymanns Verl. 1974. ca. 1000 p., in 9 vols., DM 550.-

1152 Lamy-Rousseau, F.: **Inventorier et classez facilement vos document audio-visuels**. Longueuil, Qué.: F. Lamy-Rousseau 1972. 207 p., 12 p. refs. (same document also in English)
Presentation of an alpha-numeric code for the classing of audio-visual documents.

04-1/9 Special Classification Systems - Sub-
jects (order follows the divisions as given in I. C. 75-1, p. 36)

1153 **Physics and Astronomy Classification Scheme**. PACS 1974. New York, N. Y.: Amer. Inst. Phys. 1974. 76 p. = AIP Publ. R-261

1154 **International Classification for Physics 1975**. Paris: Intern. Council of Scientific Unions. Abstracting Board 1975. 40 p., \$ 10.-
Comprises about 1200 classes and subclasses, arranged in four hierarchical levels.

1155 Zwirner, W. (Ed.) et al: **Physikalische Berichte. Klassifikationssystem 1975**. In: *Phys. Ber.* 54 (1975) No. 1, p. II-XXXII

This new outline for the German abstract journal in physics is based on the English version agreed upon in a Working Group of ICSU-AB and extended by some classes developed by the Editorial Board. Use was also made of the Physics and Astronomy Classification Scheme (PACS) of the Amer. Inst. of Physics. It contains in addition also a correlation of the UDC numbers as belonging into the 9 major groupings of this classification and its subdivisions (p. XXIX-XXXI).

1156 **INIS Thesaurus, Rev. 8**. Wien: International Atomic Energy Agency 1975. 632 p., DM 44.50 = IAEA-INIS 13

There are now 13675 descriptors and 3896 forbidden terms. Arrangement alphabetical; some new relationship indications such as UF+ (Used For plus), SF (Seen For), SEE OR (See... or...).

1157 **Dechema-Thesaurus for Chemical Technology**. Pt. 1: Systematical part, Pt. 2: General concepts. (In German). Frankfurt: Dechema-Informations- und Dokumentationsdienst 1974. ca 770 p. (2 vols.)
Contains around 30 000 descriptors alphabetically and systematically arranged in 40 subjects-fields.

1158 Deweze, A.: **THESEE. Thésaurus électricité électronique**. Grenoble: Merlin Gerin 1974. 703p.
This French thesaurus has also English and German equivalent terms.

1159 **Common Subject Order**. (Gemeinsame Fachordnung). (In German). Frankfurt: Zentralstelle Dokumentation Elektrotechnik (ZDE) 1975. 19 S.

This Common Subject Order used in the following three documentation centers (Dokumentation Maschinenbau, Dokumentationsring Fahrzeugwesen, Verband Deutscher Elektrotechniker) is meant for the channelling of literature, for pool-building and systematic planning of shared literature documentation. It is independent of any thesaurus, but may also be used in combination with one. It is valid since Jan. 1, 1975.

1160 **International glossary of hydrology**. Genf: World Meteorological Organisation 1974. 409 p.

The glossary contains 1588 terms from the fields of surface water, groundwater, hydrometeorology, soil moisture, river hydraulics, water resources management, also mathematical statistics and chemistry. To each entry equivalent terms in English, French, Russian and Spanish are given as well as their UDC numbers. Synonymous terms are included also as well as definitions in the four languages.

1161 **Microthesaurus of Soil Mechanics Terms**. Vicksburg, Mississippi: Army Engineer Waterways Experiment Station 1974. 356 p., \$ 10.-
In depth list of over 400 terms in the fields of soil mechanics, soil dynamics, rock mechanics, engineering geology and pavements.

1162 Rampon, A.: **Geotechnics**. (La géotechnique). (In French). In: *Banque des Mots, France* (1974) No. 8, p. 129-136, 4 refs.
Lexicon for geotechnics. Every term is provided with a definition and its English equivalent.

1163 Rousseau, L.-J.: **The English-French dictionary for the mining industry from the Office of the French language**. (In French). In: *Meta, Canada* 19 (1974) No. 4, p. 189-196
Description of the elaboration of the dictionary and actual presentation of its contents.

1164 **Thesaurus céramique**. 2nd ed. Sèvres: Institut de Céramique Française 1974. 162 p.
Alphabetically arranged thesaurus.

- 1165a **Rice Terminology**. Terminology du Riz. Terminologia del Arroz. Rome: Food and Agriculture Organization 1974. 82 p. = Terminology Bull. 26
Contains 657 terms related to rice breeding and production, with French and Spanish equivalents given to the English terms.
- 1165b Hammen, L. van der: **La terminologie acarologique**. (In French). In: Banque des Mots, France (1974) No. 8, p. 205–218
List of the terms concerning "acarologic" (knowledge about mites) with definitions and English and German equivalents.
- 1165c Henry, J. M., Ergo, A. B., Haes, W. de: **Thésaurus des symboles agrobioclimatiques, géographiques et techniques**. Fasc. 3–4: Le catalogue des expressions climatiques parissyllabiques. Centre d'informatique appliqué au Développement et à l'Agriculture Tropicale (CIDAT) 1973/74. 2 vols., 583 p., 26 figs., 130 refs.
- 1166 Kinkade, R. G. (Ed.): **Thesaurus of Psychological Index Terms**. Washington, D. C.: Amer. Psychological Assoc. 1974. 362 p.
Three sections: relationship section, alphabetical and hierarchical section.
- 1167 **Thesaurus of ERIC Descriptors**. 5th ed. New York: Macmillan Information 1974. 344 p.
- 1168 Foskett, D. J., Foskett, J.: **The London Education Classification**. A thesaurus/classification of British educational terms. 2nd ed. London: University of London. Institute of Education Library 1974. 165 p., £ 2.20 = Educ. Libr. Bull. Suppl. 6
Part 1 is a faceted classification with a pronounceable notation, Part 2 a thesaurus-like index to part 1 with the usual relationship indications (BT, USE, UF, NT, RT) and SN for a terse description of the sense of a term.
- 1169 Service d'information et de Documentation de l'Apprentissage et de la Formation Professionnelle (SIDA): **Thésaurus des enseignements technologiques et de la formation professionnelle continue**. In: Inform. SIDA, Lille 22 (1973) No. 233 (spec. issue), 121 p., 13 figs.
The thesaurus is in three parts: 1) the alphabetical list of 1149 terms of which 641 are descriptors with relationship indications, 2) the descriptors displayed in 13 arrow-diagrams and 3) the alphabetical list of these descriptors.
- 1170 **Instructional Materials Thesaurus for Special Education**. 2nd ed. Reston, Va.: CEC Inform. Center on Exceptional Children 1974. 34 p.
Contains alphabetical listing of terms, permuted index and groupings in 19 categories. The alphabetical listing provides definitions (and scope notes) for all terms.
- 1171 Amy, M.: **The vocabulary of the alpinist**. (In French). In: Banque des Mots, France (1974) No. 8, p. 165–176
75 terms are reviewed, defined and translated into English.
- 1172 Tscherne, F. (Comp.): **Skiterminologie. 1. Teil**. Wien: Internationaler Verband für das Skilehrwesen. Bundesanstalt für Leibeserziehung. Internationale Gesellschaft für Sportinformation 1975. ca 150 p.
Contains 52 terms of modern concepts in skiing sports. For each concept term, broader term, definition, synonymous (term(s) and remarks are given. The book is 5 parts, one for each of the languages: German, Czech, English, Spanish and Polish. In addition a thesaurus part is given (in German) for "Skilauf".
- 1173 Amiard, J.: **Le sport automobile**. (Motorcar sports). (In French). In: Banque des Mots, France (1974) No. 8, p. 155–164
70 terms in the field of motorcar sports are defined.
- 1174 **Terminology of electro-apparatusses for house-keeping**. (In French). Québec, Canada: Minist. Educ. 1974. 98 p., 5 p. refs.
English-French dictionary for terms concerned with cooking, washing, refrierating, dishwashing, drying, etc. English and French index.
- 1175 Viet, J.: **Thesaurus for information processing in/ pour le traitement de l'information en sociologie/sociologie**. Paris-The Hague: Mouton 1972. 335 p.
After an extensive introduction a systematic index to the main part is given (10 main groups). The descriptors of the main part are given a numeric notation. The index is in the form of a permuted list of descriptors. In each case the English and French terms are given.
- 1176 Dubuc, R.: **Long-term planning in the enterprise**. (In French). In: Meta, Canada 19 (1974) No. 4, p. 208–215, 3 refs.
Commented terminology on the planning in industrial enterprises with a dictionary F–E and E–F.
- 1177 **International welding thesaurus**. Abington, Cambridge. Welding Institut 1974. 112 p.
Thesaurus of about 1100 descriptors in alphabetical order. In an additional section 21 schemes are given for the presentation of the relationships between the descriptors. About 1300 terms are "lead-in" terms, referring to the descriptors.
- 1178 Monie, I. C.: **A textile thesaurfacet for shelf arrangement and information retrieval**. 2 vols. M. Sc. Department of Librarianship, Univ. of Strathclyde 1973. II, 561 p. Abstracted in: Libr. & Inform. Bull. London (1974) No. 24, p. 42.
- 1179 Couture, R.: **Vocabulary of the building industry**. (In French). In: Banque des Mots, France (1974) No. 8, p. 185–196, 8 refs.
The terms defined and with English translations are grouped in four sections. Differences in France and Canada are pointed out.
- 1180 Ruas Santos, F. (Comp.): **Pesquisa integrada na documentação do Ministério dos Transportes. Thesaurus**. Rio de Janeiro, Brasil: Ministério dos Transportes. CEDOP 1974. 166 p.
The systematically arranged main part contains 8 main groupings. Notation by letters and numbers. Alphabetical index referring to the notations.
- 1181 Daniel, R., Mills, J.: **A classification of Library and Information Science**. London: The Library Association 1975. 127 p. = Libr. Assoc. Res. Publ. 15 (ISBN 0 85365 118 3) £ 2.50
This faceted classification contains the following 6 groupings: Library and Information Science (LIS): general field, Subfields of LIS in general, Library users field, Library systems field, Library stock field (including indexing and indexes subfields), LIS-related fields (fringe). Notation only with capital letters. Compatible with the Bliss Revision of 1975. The index contains about 2600 terms.
- 1182 **Thesaurus for information science**. (Fachthesaurus Informatik. Systematischer und alphabetischer Teil.) (In German). Berlin (Ost): Zentralinstitut für Information und Dokumentation 1975. 177 p., M 120.—
Contains about 1600 descriptors in the main (systematically arranged) part and about 3370 entries in the alphabetical section.

1183 **Telephone vocabulary.** (In French). Québec, Canada: Minist. Educ. 1974. 43 p.
French-English dictionary of terms relating to the telephone.

1184 Trussler, S.: **A classification for the performing arts.** London: Commission for a British Theatre Institute 1974. 58 p. (ISBN 004512 002)

Contains 26 main classes for the major precoordinated subject areas of the performing arts subdivided using the principles of H. E. Bliss' System of Bibliographic Classification. The notation consists of 1-3 capital letters. No index.

1185 Panoff, M., Perrin, M.: **The vocabulary of ethnology.** (In French). In: *Banque des Mots*, France (1974) No. 8, p. 137-144

List of ethnological terms with their definitions.

05 Periodicals and Serials

1186 **Terminologie.** Terminology Bureau of the European Communities, Kirchberg, Luxembourg. Issue No. 23, 1974. 50 p. (irregular)

Brings usually a number of articles on different problems, e.g. translation in different domains, terminological questions. A bibliography of works published by the Bureau is given as well as a number of terminological cards for filing.

06 Conference Reports, Proceedings

1187 Krumholz, W. (Comp.); Intern. Org. f. Standardization (ISO/TC 46) and Unesco (UNISIST) (Eds.): **International Scientific Symposium on Multilingual Thesauri**, 8-10 Oct. 1973, Berlin (West). Proceedings. Berlin: Leitstelle Politische Dokumentation 1975. 179 p.

Contains the minutes of the Symposium, a list of the 75 participants and the texts of the 11 invited papers and the submitted papers. They are: 1188 Jansen, R.: *Terminologische Kontrolle und Begriffsrelationen bei der Erstellung mehrsprachiger Thesauri*. - 1189 Lloyd, J. J.: *Concept relations in a multilingual thesaurus*. - 1190 Jung, J.: *Contrôle terminologique d'un thesaurus plurilingue*. - 1191 Avramescu, A.: *Objective design of vocabularies and thesauri*. - 1192 Crofts, B.: *Methodology for updating multilingual thesauri*. - 1193 Colbach, R., Rolling, L.: *Computerized management of multilingual thesauri*. - 1194 Krumholz, W.: *Einige Vorschläge für die weitere Arbeit zur Aufstellung von Guidelines für multilinguale Thesauri*. - 1195 Belling, G., Schuck, H.-J., Wersig, G.: *Procedural guide for the translation of foreign-language thesauri into German*. - 1196 Wolff-Terroine, M.: *Quelques expériences françaises de thesaurus multilingues*. - 1197 *General scheme for testing the establishment of multilingual thesauri (prepared by Unesco)*. - 1198 Unesco: *Guidelines for Establishment and Development of Multilingual Scientific and Technical Thesauri for Information Retrieval*. - 1199 Avramescu, A.: *Some definitions on thesauri and vocabularies. Proposals to improve Unesco Guidelines*. - 1200 Avramescu, A.: *Modelling scientific information transfer*. - 1201 Bellert, I., Wojtasiewicz, O. A.: *On a definition of a thesaurus system and thesaurus structures*. - 1202 Neville, H. H.: *Aspects of indexing compatibility*. - 1203 Scibor, E.: *Plans concerning the establishing of Polish thesauri compatible with thesauri in other languages*. - 1204 Varga, D.: *Toward a new generation of thesauri building*. - 1205 INFCO/GTI: *Thesaurus ISO: problèmes rencontrés dans la recherche des équivalences linguistiques*. - 1206 Stephan, G. F.: *The thesaurus as a tool for information retrieval*.

1207 **Problemy sozdaniya i razvitiya Mežnarodnoy sistemy naučnoy i techničeskoj informacii.** Vyp. 1 Moskva: Meždunar. Cent. Naučn. i. Techn. Inform. 1974. 171 p. (In Russian)

Publication of the 23 papers presented at an international Symposium 11-13 Febr. 1974 in East-Berlin on thesaurus construction with special regard to problems of compatibility and multilingualism. - 1208 Arsenov, C. T. et al: *Language compatibility*

problems in the International Scientific and Technical Information System. - 1209 Dimitrov, V.: *Some problems in constructing a German-Bulgarian computer thesaurus*. - 1210 Pulev, V.: *Developing a compatible thesaurus system for machinebuilding technology as part of a national thesaurus for science and technology*. - 1211 Rosenbaum, H.-D.: *Methodological guidelines for compiling multilingual thesauri for CMEA countries*. - 1212 Bart, H.: *Compatible thesaurus development: experience and problems*. - 1213 Explanatory note to the "Science and Technology" thesaurus. - 1214 Winkler, H.: *A note on the problem of compatibility of multilingual thesauri*. - 1215 Herrmann, P., Löschner, G., Rudolf, D.: *Toward the problem of multilingual thesaurus construction*. - 1216 Kuklich, F.: *Building a thesaurus for the International Scientific and Technical Information System*. - 1217 Richter, G., Weber, H.: *The significance of the subject-independent basic structure of a multilingual thesaurus*. - 1218 Gerisch, G.: *Experience in developing an international bilingual (Russian-German) thesaurus for construction and first results of its testing as part of an international indexing experiment*. - 1219 Heinemann, E., Noack, H., Grunert, M.: *Practical experience in compiling a bilingual Russian-German (German-Russian) thesaurus for chemistry and chemical engineering*. - 1220 Mildner, G.: *On the concept of an international agricultural thesaurus*. - 1221 Piltz, J.: *Some problems and experience in the joint development of compatible thesauri for machine-tool and processing machine manufacture*. - 1222 Tomasič-Vek, I.: *Development of a general methodology for building national systems of compatible thesauri for the natural sciences and engineering and a methodology for their application to text indexing*. - 1223 *Creating a national polythematic thesaurus*. - 1224 Kazakov, E. N., Kopylov, V. A.: *Use of computer in developing a compatible thesaurus system for the natural sciences and engineering*. - 1225 Lachuti, D. G., Pevsner, B.: *On the use of a multilingual machine dictionary in a computer-based descriptor system for searching electrical engineering literature*. - 1226 Leonteva, T. M. et al: *Guidelines for construction and use of a bilingual chemistry thesaurus*. - 1227 Mechtiev, D. M.; Chrustaleva, R. A.: *The methodology of automating the compilation and editing of a four-language branch-oriented thesaurus for oil-production*. - 1228 Maitla, K.: *Building a Russian-Estonian thesaurus and term classification in the thesaurus*. - 1229 Šrejder, Ju. A.: *Information and meta-information in the thesaurus*. - 1230 Mojžišek, I.: *Thesaurus construction methods*.

1231 Lustig, G.: **Automatic indexing workshop.** In: *Nachr. Dok.* 25 (1974) No. 6, p. 269-270

Report on the Workshop of the British Library Research and Development Department on 29-30 April 1974 in London. Around 30 participants.

1232 Fleischer, D.: **AfB Colloquium "Uniform Classification" in Frankfurt, Oct. 3-4, 1974.** In: *Bibl. dienst*, Berlin-W (1974) No. 11, p. 544-548, 3 refs.

Report on the results of the meeting as well as text of the resolution adopted.

1233 FID/CR Secretariat: **Third International Study Conference on Classification Research.** In: *Intern. Classificat.* 2 (1975) No. 1, p. 37-41

A short report on the formal aspects of the Conference which took place in Bombay, Jan. 6-11, 1975 and the entire text of the Conclusions and Recommendations.

1234 Dahlberg, I.: **Some reflections on the Bombay CR-Conference.** (Jan. 6-11, 1975). In: *Intern. Classificat.* 2 (1975) No. 1, p. 41-45

Contains a complete listing of the 57 papers of the conference arranged according to their presentation with a topical index according to authors' emphases. Comparison with previous conferences in Dorking and Elsinore and appraisal of new "weights and awarenesses".

1235 Heinbuch, J. et al: **Infoterm-Symposium on international cooperation in terminology.** (In German). In: *Nachr. Dok.* 26 (1975) No. 3, p. 127-128

Report on the general aspects of the Symposium which took place in Vienna, April 9–11, 1975 as well as on the paper by A. Rohaert ("the most important one") and its special proposals regarding the work of Infoterm. The resolutions adopted envisage the establishment of an Infoterm-network for worldwide information on terminological activities.

1236 Deutsche Gesellschaft für Dokumentation. Ausschuss für Patentedokumentation: **Reports of the 17th Annual Conference of the Committee for Patent Documentation.** (In German). München: DGD-APD 1975. 251 p. = DGD-Schrift (APD-4) 1/75

Among the 18 papers presented at this year's conference of the Committee for Patent Documentation of the German Documentation Society (April 29–30, 1975) the following five are concerned with questions of classification: 1237 Weiß, W.: Stand der inhaltserschließenden Patentedokumentation im Deutschen Patentamt; Nutzung durch die Öffentlichkeit – 1238 Gehring, G.: Das deutsche Schlagwörterverzeichnis zur Internationalen Patentklassifikation. – 1239 Sölla, K.: Folgen aus dem Inkrafttreten des Straßburger Klassifikationsabkommens von 1971; Arbeiten zur 2. Revision der Internationalen Patentklassifikation. – 1240 Herbig, E.: Die Anwendung der Internationalen Patentklassifikation durch das Deutsche Patentamt. – 1241 Ullmer, K. H.: Die Anwendung der Internationalen Patentklassifikation durch ausländische Patentämter.

07 Textbooks (whole field)

1242 Foskett, D. J.: **Classification and indexing in the social sciences.** 2nd ed. London: Butterworth 1975. 202 p. £ 5.–

1243 Salton, G.: **Dynamic information and library processing.** Englewood Cliffs, N. J.: Prentice-Hall 1975. 523 p. (ISBN 0-13-221325-7)

10 Chapters: Introducing the new library. Mechanized house-keeping. Automatic indexing and abstracting. Storage and retrieval systems. Library systems analysis. Systems testing. Storage organization. Automatic document and query classification. Language processing. Dynamic information processing. Name index. Subject index. References with each chapter.

1244 Vickery, B. C.: **Classification and indexing in science.** 3rd ed. London: Butterworths 1975. £ 2.50
Need for classification. Classification of a subject field. Classification for arrangement. Notation for the classified catalogue. Classification and indexing. Classification in post-coordinate systems.

08 Other Monographs

1245 Painter, A. F. (Issue Ed.): **Classification: theory and practic.** In: Drexel Libr. Quart. 10 (1974) No. 4, 120 p.
This issue with 8 papers on 4 different aspects of classification does not try to be a state-of-the-art, nor a history, nor a how-to-do-it manual of classification and yet gives "the reader an opportunity to see where American classification stands". They are meant for the "general librarian, not the specialist, with the hope that they may stimulate interest and improve awareness of the heart of the retrieval problem-classification". (Quotations from Introduction). The contributions see nos.: 1132, 1256, 1263, 1264, 1265, 1321, 1355, 1359.

09 Standards, Guidelines

see also 1475

1246 DIN 2332. Vornorm. Juni 1975. **Internationale Angleichung von Fachbegriffen und ihren Benennungen.** (International unification of concepts and of their corresponding terms.). Berlin: Beuth-Verl. 1975. 7 p.

1247 ANSI Z 39.4, 1974. **Indexes, basic criteria for. Reaffirmation of ANSI Z 39.4–1968.** New York: American National Standards Institute 1974.

Guidelines and a uniform vocabulary for use in the preparation and evaluation of indexes.

1248 ANSI Z 39.19, 1974. **Guidelines for thesaurus structure, construction and use.** New York: American National Standards Institute 1974. 20 p., 11 refs.

1 Theoretical Foundations of Classification

12 Conceptual Basis of Classification

1249 Abraham, W. E.: **Predication.** In: *Studia leibnitiana* 7 (1975) No. 1, p. 1–20

"Attempt to clarify Leibniz's doctrine of predication as a relation of containment. . . between two concepts, to indicate how this idea is tested for different classes of propositions, and its adequacy for class inclusion, class membership, and attributive interpretations of the categorical proposition, and its demystification of the idea of an individual particular. It is evident that this doctrine of predication is that which will make feasible the idea of the complete concept. . ." (Author).

1250 Manzotti, E., Pusch L. F., Schwarze, Ch.: **Sorten von Prädikaten und Wohlgeformtheitsbedingungen für eine Semantiksprache.** (In German). In: *Z. german. Linguistik* 3 (1975) No. 1, p. 15–39, 17 refs.

"Semantic classification" of predicates. The following classes are distinguished: action-, process-, position-predicates, property-, genus- and location-predicates.

1251 Popper, K. R.: **Objective knowledge.** (Objektive Erkenntnis. Ein evolutionärer Entwurf.). (In German). Hamburg: Hoffmann u. Campe 1973/74. 417 p., DM 36.– (ISBN 3-455-09088-5)

German translation of "Objective knowledge. An evolutionary approach". Oxford: Clarendon Press 1972. 380 p., £ 1.75

1252 Skoda, V. V.: **On the information value of a concept.** (In Russian). In: *Vestn. Char'kov. Universiteta* (1974) No. 112, *Filosofija Vyp.* 9, p. 89–90.

The concept is defined as a message allowing to distinguish objects within a certain set. The content of a concept is identified by the information which it conveys.

13 Mathematics of Classification

see also 1325

1253 Šrejder, Ju. A.: **The algebra of classification.** (In Russian). In: *Naučn.-techn. Inform. Ser.* 2 (1974) No. 9, p. 3–6, 39, 4 refs.

Two alternative concepts of classification isomorphism are examined. The structure of a classification is characterized by a semigroup. The algebraic structure of these semigroups is characterized by the relation of order on the set of components. The case of "perfect order" on the components corresponds to hierarchical (tree) classifications. The case of "incomparability" of the components corresponds to faceted classifications. The rest of the cases are intermediates between these two classification types. (According to author).

16 Development of Science and Classification

see also 1297

1254 Griffith, B. C., Small, H. G.: **The structure of scientific literatures. II: Toward a macro- and micro-structure of science.** In: *Science Studies* 4 (1974) p. 339–365

Report on the outcome of an attempt to create 'maps' of the scientific literature. The scales of these maps have been systematically manipulated so that they present, not only an overview of all highly-cited papers in natural science, but also a detailed view of a single scientific specialty. At each level indications of the validity of the mapping operation were sought. "Certain important aspects of the specialty structure of science" were seen to be displayed by the maps. (pt. 1 see 885).

1255 Tomita, T., Hattori, K.: **Compilation of thesaurus and total index of "Nihon Kagaku-Gijutsu-Shi Taikai" and analysis of its documents.** In: Intern. Classificat. 2 (1975) No. 1, p. 11-21, 13 figs.

A thesaurus for the 25 volumes of the "Taikai" (History of Science and Technology in Japan from 1850-1960) was compiled comprising 4819 keywords. Analysis of 4627 documents with these keywords and identification of their distributions which explain the developments of science and engineering in Japan.

17 Classification Problems

1256 Abrera, J. B.: **Traditional classification: characteristics, uses and problems.** In: Drexel Libr. Quart. 10 (1974) No. 4, p. 21-36, 8 refs.

Short historical outline of the development of classification and discussion of the reasons for shortcomings of the present universal classification systems.

1257 Bazarnova, S. V., Miller, G. I.: **Present problems concerning information retrieval systems theory in the social sciences.** (In Russian). In: Naučn. i. techn. bibl. SSSR (1974) No. 10, p. 30-36, 5 refs.

Re-examination of some of the problems raised at a recent conference called "The subject catalogue and descriptor information retrieval systems in the social sciences". Consideration of the differences and similarities of the principles of the subject catalogue, the subject index and descriptor information retrieval systems. Topics surveyed include subject cataloguing in depth, facet analysis, automatic indexing, thesaurus construction and the future role and format of the subject catalogue.

1258 Beck, H.: **Classification and information retrieval.** Present problems from a librarianship point-of-view. Pt. 2 (In German). In: Zbl. f. Bibl. wesen, Leipzig 88 (1974) No. 5, p. 257-271, 47 refs.

Pt. 1 of this series of articles appeared in the same journal, vol. 87 (1973) No. 1, p. 2-25, 26 refs. It is concerned with specific aspects and characteristics of library classification and gives also definitions of the relevant concepts.

1259 Beling, G.: **Terminology, thesaurus, classification-relations and differences.** (In German). In: Kschenka, W. et al: *Information und Dokumentation im Aufbruch.* München: Verl. Dokumentation 1975. p. 192-206, 28 refs.

1260 Chandžjan, I. G., Teslenko, O. P., Fandičeva, E. N.: **Main directions in the development of information retrieval languages.** (In Russian). In: Sov. bibliotekovedenie (1974) No. 5, p. 67-81, 21 refs.

1261 Edwards, R. P. A.: **A surprisingly controversial subject.** In: Times Educational Suppl. (1974) No. 3102, p. 27-28 (Nov. 8, 1974)
Discussion of use, advantages and disadvantages of classification schemes, card indexes, edge punched and body punched cards for the indexing of non-book-materials in school resource centres.

1262 Rimbert, D.: **Langage documentaire et langage naturel: quelques voies de réflexion.** (In French). In: 1er Confr. natl. franç. inform. doc. commun. Paris 1974. CNRS 1974. p. 129-135

1263 Schneider, J. H.: **Modern classification: characteristics, uses and problems.** In: Drexel Libr. Quart. 10 (1974) No. 4, p. 37-55, 6 refs.

Presentation of some of the characteristics which are thought to apply to "modern classifications", which, however, are only referring to special classification systems.

1264 Stevenson, G.: **The historical context: traditional classification since 1950.** In: Drexel Libr. Quart. 10 (1974) No. 4, p. 11-20, 9 refs.

The situation in USA is characterized by the existence of the Dewey Decimal and the Library of Congress Classification and the fact that these "seem satisfactorily to serve the purpose of organizing materials on shelves". A better system might "not be taken seriously in the United States". Even by using computers DDC and LCC may be stabilized "for many generations to come".

18 Classification Research

see also 1233, 1234

1265 Richmond, Ph. A.: **The future of classification.** In: Drexel Libr. Quart. 10 (1974) No. 4, p. 105-117, 23 refs.

Summary of the trends and changes that have come up during the past years, the disappointment about the reliance on terminology alone and the new possibilities of computer-use for classification. Four major "unsolved problems" are stated and a list of 12 problems for future classification research is given.

1266 Rolland-Thomas, P.: **La recherche en matière de classification: état de la question.** (Progress in classification research) (In French). In: Documentation et Bibliothèques 20 (1974) No. 4, p. 202-204, 8 refs.

Short survey on developments in classification theory since 1930. Attention is paid to the work of the (British) Classification Research Group and the Canadian group, formed 1973.

1267 Suarez, R. J.: **Classification Research (Argentina).** Bangalore, India: Doc. Res. & Training Centre 1975. 52 p., \$ 3.- = FID/CR Report No. 16.

Reports on (1) investigation in the field of bibliographic classification based on work published in Argentina during 1964-1974 and (2) on the UDC in Argentina.

19 History of Classification

1268a Comaromi, J. Ph.: **A history of the Dewey Decimal Classification: editions one through fifteen. 1876-1951.** Ph.D., University of Michigan. VIII, 452 p.
Abstracted in: Libr. & Inform. Bull., London (1974) No. 24, p. 37-38

1268b Kendall, M.: **Some 19th century book indexes.** In: Indexer 9 (1974) No. 2, p. 66-68
Analysis of the indexes of four books published in 1841, 1866, 1890 and 1897 and discussion of the findings.

1269 Schulte-Albert, H. G.: **Cyprian Kinner and the idea of a faceted classification.** In: Libri 24 (1974) No. 4, p. 324-337, 43 refs.

Kinner was the originator of a rudimentary faceted scheme for botany. Every letter of syllable of its notation had a specific meaning. The work of Dalgarno and Wilkins in furthering Kinner's ideas is described. (17th century).

2 Structure & Construction of CS

21 General Questions of Structure

see also 1248

1270 Hutchins, W. J.: **Languages of indexing and classification.** A linguistic study of structures and functions. Stevenage, Herts. England: P. Peregrinus 1975. 148 p. Contents: The nature of documentary languages – Formal aspects – Semantic aspects I: the paradigmatic axis – Semantic aspects II: the syntagmatic axis – Pragmatic aspects – The indexing processes – The processes of searching – Language universals. 176 refs.

1271 Kulik, A. N.: **Thesaurus of scientific and technical terms. An outline.** Analysis of vocabulary distribution. (In Russian). In: *Naučn. techn. inform., Ser. 1* (1974) No. 9, p. 26–34, 20 refs.
The "semantic power" of a thesaurus may be determined by its capacity to render the purport of any message in a given subject field adequately and exhaustively. It can be evaluated by the levels of hierarchy included as well as by the width of the subject coverage. General characterization of the composition of the thesaurus with indication of its semantic power values. Statistical analysis of the classified index.

1272 Tarail, L. A.: **The typology of library and bibliographic classifications as a reflection of the concept dialectic.** (In Russian) In: *Probl. optimiz. tradicion. inform. poiskov. sistem v bibliotekach.* Leningrad 1974. p. 67–74

22 Elements and Special Structures of CS

1273 Bhattacharyya, G.: **Cutter's procedure for specific subject indexing.** In: *Libr. Sci. with a Slant to Doc.* 11 (1974) No. 2, p. 77–91, 3 refs.
Cutter's procedure of deriving subject headings for syndetic subject indexing in a dictionary catalog is a specific content of the logical form abstracted in the general theory of subject heading ... His policy for asyndetic subject indexing consists of associative grouping (classification) deeming each specific subject – individual or general, as the case may be – as a base. In the case of a compound subject, all other components, if any, are the complements ... (Author, abbr.)

1274 Campos, A.: **The theory of analytico-synthetic, or faceted classifications and its influence on the reform of the Universal Decimal Classification (UDC).** (In Portuguese). In: *Rev. Biblioteconomia de Brasilia* 3 (1975) No. 1, p. 23–36, 15 refs.

1275 Haendler, H.: **Selection-oriented indication of subject-fields and propositions.** (In German). In: *Intern. Classificat.* 2 (1975) No. 1, p. 25–31, 14 refs.
Referring to the creative aspect in the use of language (Humboldt, Chomsky) it is shown how a description based on the principles of concept-synthesis may be successfully applied for the representation of informemes (Diemer). An indication of subject-fields should follow the same principle of synthesis, since the steady change in the delimitation of scientific disciplines and the formation of new fields of research excludes an a-priori fixation of single codes for each fields.

1276 Lavrent'eva, G. A.: **On multiple meaning and homonymy in descriptor languages.** (In Russian). In: *Naučn. techn. Inform., Ser. 2* (1974) No. 9, p. 12–14, 23 refs.
Multiple meaning (polysemy) is looked at as an admissible property of the vocabularies of descriptor languages. A criterion for

the determination of the exact meaning of polysemous terms are the "characteristic words", regularly occurring in a text in the company of multiple-meaning terms. (Author, abbr.)

1277 Neelameghan, A.: **Systems thinking in the study of the attributes of the universe of subjects.** In: Debons, A. (Ed.): *Information Science: search for identity.* New York: Marcel Dekker, Inc. 1974. p. 139–170, 5 tabl., 28 refs.

Knowledge of the structure, modes of formation, and patterns of development of subjects is essential for the formulation of a theoretical foundation and guidelines for the design and development of efficient information-retrieval/document-finding systems. In studying the attributes of the universe of subjects, it is helpful to consider a subject as a system (Author, abbr.)

1278 Šelov, S. D.: **On the semantic description in information language development (with special reference to linguistics.)** (In Russian). In: *Naučn.-techn. Inform. Ser. 2* (1974) No. 6, p. 10–16, 47, 27 refs.

Sense conveying means of various types of information languages are compared. A tentative typology of semantic relations which are necessary for developing linguistics information languages is presented. (Author)

1279 Sidorčenko, V. D.: **Typological classification of the semantic structures of thesauri.** (In Russian). In: *Naučn. techn. Inform., Ser. 2* (1975) No. 4, p. 14–19, 23 refs.

The semantic structure of a thesaurus is characterized by the complex of the set of meaning-expressing elements, the conceptual system and the system of lexico-semantic relations. . .

1280 Salton, G. et al: **A vector space model for automatic indexing.** Ithaca, N. Y.: Department of Computer Science, Cornell Univ. 1974. 16 p. = EDRS: ED 096 986
The best "indexing (property) space" is one where each entity lies as far away from the others as possible; retrieval performance thus correlates inversely with space density. This result is used to choose an optimum indexing vocabulary for a collection of documents. (Author, abbr.)

1281 Salton, G. et al: **A theory of term importance in automatic text analysis.** Ithaca, N. Y.: Department of Computer Science, Cornell Univ. 1974. 18 p. = EDRS: ED 096 987

Terms exhibiting high occurrence frequencies in individual documents are often useful for high recall performance whereas terms with low frequency in the whole collection are useful for high precision. A new technique known as discrimination value analysis ranks the text words in accordance with how well they are able to discriminate the documents of a collection from each other (Author, abbr.)

23 Construction of CS

see also 1447, 1451

1282 Chiapetti, F. S., Pizzigallo, D.: **An experiment in information retrieval in the field of the psychology of human relationships.** (In Italian). In: *AlB Boll.* 14 (1974) No. 2–3, p. 117–127, 11 refs.

Description of the construction of a thesaurus on the psychology of small groups.

1283 Ciganik, M.: **Application of information theory for the formation of a retrieval language.** (In Czech). In: *Inform. Syst., ČSSR* 3 (1974) No. 4, p. 325–333

Study of the application of information theory in such cases where the documentary language is created in analogy with bidirectional communication.

1284 Nagao, M.: **Idea association and retrieval.** (In Japanese). In: *Suri kagaku, Math. Sci.* 12 (1974) No. 3, p. 77-80

Discussion of the semantic processing of natural language texts in order to construct a thesaurus. Description of the main direction of research into information retrieval systems at the Technical Sciences Department of the University of Kyoto, Japan.

1285 Yu, C. T.: **A methodology for the construction of term classes.** In: *Inform. Storage & Retrieval* 10 (1974) No. 7-8, p. 243-251

Heuristic methods are presented. Experimental results obtained demonstrate usefulness of the methods.

24 Relationships

see also 1447

1286 Chastinet, Y., Robredo, J.: **Study of the real associations between descriptors in order to improve indexing quality.** (In French). In: *Inform., Doc. (ANRT)*, France (1974) No. 4, p. 3-30

1287 Fugmann, R.: **The limitations of the thesaurus-method in the reproduction of concept-relationships.** (In German). In: *Nachr. Dok.* 26(1975)No. 1, p. 2-7, 13 refs.

In large documentation systems a thesaurus can only function adequately if it is combined with the principle of analytico-synthetic classification and if the relationships between concepts may be represented sufficiently exact. Report on experiences with new relationship indicators and with the graphical system TOSAR.

1288 Fugmann, R., Nickelsen, H., Nickelsen, I., Winter, J. H.: **TOSAR - a system for the structural formula-like representation of concept connections in chemical publications.** In: *J. Chem. Inform. & Computer Sciences* 15 (1975) No. 1, p. 52-55

1289 Janoš, J.: **Atypical means of expressing grammatical relations in retrieval languages.** (In Czech). In: *Českoslov. Informatika* 16 (1974) No. 12, p. 667-672

1290 Wüster, E.: **The inversion of a concept relation and its indication in dictionaries.** (In German). In: *Nachr. Dok.* 25 (1974) No. 6, p. 256-263, 3 tabl.

In any of the vertical relationships between concepts the two directions of the relationships may be distinguished implicitly, in most of the other cases the differing directions must be marked by symbols.

26 Notation, Codes

1291 Krishnamurthy, E. V., Sankar, P. V., Krishnan, S.: **ALWIN - Algorithmic Wiswesser Notation system for organic compounds.** In: *J. Chem. Doc.* 14 (1974) No. 3, p. 130-141, 19 figs., 8 refs.

Procedures and rules are given for constructing ALWIN for acyclic structures and cyclic structures. A new method called "tesellation" is introduced for the topological description of fused and spiro ring systems. New concepts are introduced for the description of bridged-ring and ring-of-rings systems.

1292 Sankar, P. V., Krishnamurthy, E. V., Krishnan, S.: **Representation of stereoisomers in ALWIN.** In: *J. Chem. Doc.* 14 (1974) No. 3, p. 141-146, 20 figs., 7 refs.

The Cahn-Ingold-Prelog method of specifying stereoisomers is introduced within the framework of ALWIN-Algorithm Wiswesser Notation. Given the structural diagram, the structural ALWIN is first formed; the specification symbols are then introduced at the appropriate places to describe the stereoisomers.

27 Compilation, Updating, Storage & Maintenance of CS

1293 Balogh, Z.: **Program system for thesaurus compilation written in PL/I programming language.** (In Hungarian). In: *Tudományos és Műszaki Tájékoztató* 21 (1974) No. 4-5, p. 271-286

28 Compatibility & Concordances of CS

see also 1207, 1494

1294 Agraev, V. A., Kobrin, R. Ju., Šul'ts, M. M.: **Information retrieval system compatibility.** (Transl. from Russian). In: *Autom. Doc. Math. Linguist.*, New York 8 (1974) No. 2, p. 29-37, 39 refs.

Discussion of the problem of designing an intermediate language for combined information retrieval systems including thesaurus compatibility and combination of grammars.

1295 Deweze, A.: **The realization of a thesaurus: compatibility with foreign systems in the frame of ELDOD.** In: *1er Congr. natl. franç. inform. doc. commun.* Paris 1974. Paris: CNRS 1974. p. 335-343, 2 refs.

Short reminder of the objectives and principles of the THESEE (Thésaurus Electricité Electronique), in particular the semantic constraints of a trilingual thesaurus and examination of its applications in national or multinational documentation systems.

1296 Horsnell, V.: **The Intermediate Lexicon: an aid to international cooperation.** In: *Aslib Proc.* 27 (1975) No. 2, p. 57-66, 4 refs.

Results of a feasibility study of an Intermediate Lexicon for Information Science showed that switching between different classification systems and thesauri via an Intermediate Lexicon is feasible.

1297 Smith, L. C.: **Systematic searching of abstracts and indexes in interdisciplinary areas.** In: *J. Amer. Soc. Inform. Sci.* 25 (1974) No. 6, p. 343-353, 4 tabl., 42 refs.

In order to permit systematic searching of multiple data bases to satisfy user requests in interdisciplinary areas, a mapping of a portion of Medical Subject Headings (MeSH) to three other controlled vocabularies has been constructed. The test showed that Index Medicus provides an average of 81% of the citations retrieved in searches using more than one source and that in some subject areas use of the mapping does allow an increase in the number of items retrieved with a loss in precision.

1298 Wdlisch, H.: **A concordance between the UDC and TEST.** (Thesaurus of Engineering and Scientific Terms). (In Serbo-Croate). In: *Informatika, Yugosl.* 8 (1974) No. 2, p. 37-51

The study proved that it is possible to find UDC-numbers for the majority of TEST-descriptors.

29 Evaluation of CS

see also 1297, 1304

1299 Bhattacharyya, K.: **How much "explicit relations" do retrieval systems use?** In: *J. Doc.* 30 (1974) No. 4, p. 391-392, 8 refs.

Discussion of the low retrieval performance of manually compiled thesauri, e.g. The Thesaurus of Engineering and Scientific Terms. The cost involved in construction and maintenance of a thesaurus remains to be investigated.

1300 Manecke, H. J.: **Statistical analysis of thesauri used in the GDR (German Democratic Republic).** (In German). In: *Wiss. Z. Techn. Hochsch. Ilmenau* 20 (1974) No. 4-5, p. 213-217, 3 refs.

Basic characteristics of 20 thesauri in different branches of science and technology in current use in the GDR are listed in a table. Presentation of analysis of results.

1301 Robertson, S. E., Teather, D.: **A statistical analysis of retrieval tests: a Bayesian approach.** In: *J. Doc.* 30 (1974) No. 3, p. 273–282, 10 refs.

It is assumed that, for a given system and a given question there are probabilities of retrieving relevant or non-relevant documents, but that these probabilities are not necessarily the same for different questions. A Bayesian method is outlined for estimating these probabilities, on the basis of a model relating them. The method is applied successfully to some Cranfield data. Potentialities of the method are discussed. (Author)

1302 Steinberg, F.: **Classified women.** In: *Librarians for Social Change* (1974) No. 5, p. 6–7, 3 refs.

Discusses the classification of women in the following 4 schemes: CC, DDC, LCC and Bliss. Concludes that Bliss has given most thought to the matter.

1303 Adrien, F.: **Sur l'indexation et sur la linguistique.** (In French). In: *1er Congr. natl. franç. inform. doc. commun.* Paris 1974. Paris: CNRS 1974. p. 153–158.

1304 Bird, P. R.: **The distribution of indexing depth in documentation systems.** In: *J. Doc.* 30 (1974) No. 4, p. 381–390, 4 tabl., 8 refs.

The results of an investigation into 5 documentation systems contradict previous reports that a lognormal distribution of indexing depth is to be expected.

3 Classing and Indexing (Methodology)

31 Theory of Classing and Indexing

1305 Salton, G.: **A theory of indexing.** Ithaca, N. Y.: Department of Computer Science, Cornell Univ. 1974. 102 p. = Techn. Report CU-CSD-74-203, NTIS: PB-231 539/8GA

Several automatic procedures have been examined for the assignment of significance values to the terms, or keywords, indentifying the documents of a collection. Good and bad index terms are characterized by objective measures, leading to the conclusion that the best index terms are those with medium document frequency and skewed frequency distributions. (Author, abbr.)

1306 Salton, G., Yang, C. S., Yu, C. T.: **Contribution to the theory of indexing.** In: *IFIP Congress 1974, Vol. 3.* Amsterdam: North Holland Publ. Co., New York: American Elsevier Publ. Co. 1974. p. 584–590

1307 Salton, G., Yang, C. S., Yu, C. T.: **A theory of term importance in automatic text analysis.** In: *J. Amer. Soc. Inform. Sci.* 26 (1975) No. 1, p. 33–44, 8 figs. 5 Tabl., 16 refs.

A new technique, known as discrimination value analysis, ranks the text words in accordance with how well they are able to discriminate the documents of a collection from each other . . . Experimental results are given showing the effectiveness of the technique. (Author)

1308 Sokolov, A. V., Kokorina, A. P.: **An algorithmic method for selective indexing of simple-structure documents.** (Transl. from Russian). In: *Autom. doc. math. linguist.*, New York 8 (1974) No. 2, p. 52–58, 4 figs., 1 tabl., 6 refs.

32 Subject Analysis

see also 1281

1309 Cigánik, M.: **Metainformational approach to the theory of integrated information retrieval systems.** In: *Inform. Proc. & Management* 11 (1975) No. 1/2, p. 1–10. 22 refs.

Primary documents contain the retrieval information in an implicit form. The metainformational approach discussed in this paper represents some attempts to transform this implicit information structure to an explicit one. A successful solution of the problem is based on a metasyntactic analysis of texts, a creation of the semantic language in an oriented graph metastructure, and a pragmatic interpretation of metastructures based on relational contextual indexes. The metasyntactic analysis with a small set of inclusion metarelators, faceted relators as governing words, self-acting delimiters, and some excluding modifying phrases. A transition from the metasyntactic analysis to additional common syntactic analysis is assumed. (Author)

1310 Gardin, J.-C.: **Documentary analysis in the inventory of products of art.** (In Italian). In: *Mus. Gallerie Ital.* 19 (1974) No. 53, p. 22–35

1311 Gardin, J.-C.: **Documentary analysis in archeology.** (In French). In: *Langages, France* 8 (1974) No. 35, p. 82–86, 4 refs.

Aims and methods in archeology demand a separation of the documentary analysis and the structural analysis.

1312 Schramm, R.: **Necessity of content analysis of patents.** (Notwendigkeit der Inhaltserschließung von Erfindungsbeschreibungen.) (In German). In: *Informatik, DDR* 21 (1974) No. 3, p. 23–25, 8 refs.

1313 Spencer, B. A., Davis, C. H.: **Efficient automatic analysis of one problem in twelve-tone music.** In: *J. Amer. Soc. Inform. Sci.* 25 (1974) No. 3, p. 202–293
Many information processing techniques developed primarily for scientific research also lend themselves to problem solving in other areas. Computer-based analysis of a complex musical practice provides an example in the fine arts.

1314 Tripodes, P. G., et al: **Automatic content coding of English text.** In: *Proc. ACM 1974 Ann. Conf.* New York: ACM 1974. p. 426–434

System developed under ARPA support is called a Programmed Experimental Theme Encoder (PETE). Meant to automate coding of political text for subsequent processing by the Stanford Inquirer Content Analysis Program.

33 Classing and Indexing Techniques

1315 Dave, R. K.: **Chain procedure.** In: *Herald Libr. Sci.* 13 (1974) No. 1, p. 58–60
Comments on M. M. Job's article on chain procedure (see *Ann. Libr. Sci. Doc.* 20 (1973) No. 1–4).

1316 Dusoulier, N.: **Indexing.** In: *ICSU. AB: Primary Publications and Secondary Services, Partners in Information Flow. Proc. Conf. Royal Soc. London July 4–5, 1973.* Paris: ICSU. AB 1974. p. 141–165
Description of the indexing operation and the possibility to arrive at a common indexing practice which would result in time saving and better quality.

1317 Rothman, J.: **Index, indexer, indexing.** In: *Encycl. libr. inform. sci.* vol. 11, 1974., p. 286–299
Function and history of index and indexing. Coordinate indexing, indexing principles and economic aspects of indexing are treated as well.

34 Automatic Classing and Indexing

see also 1131, 1231, 1243, 1280, 1477

1318 Adamson, G. W., Boreham, J.: **The use of an association measure based on character structure to**

identify semantically related pairs of words and document titles. In: *InformStorage & Retrieval* 10 (1974) No. 7-8, p. 253-260, 1 fig., 3 tab., 10 refs.

1319 Adamson, G. W., Bush, J. A.: **A comparison of the performance of some similarity and dissimilarity measures in the automatic classification of chemical structures.** In: *J. Chem. Inform. & Comput. Sci.* 15 (1975) No. 1, p. 55-58, 2 fig., 1 tabl.

1320 Kulkowski, J.: **Development trends and methods of automatic classification. Pt. II: Research development in Poland.** (In Polish). In: *Informatyka* 10 (1974) No. 5, p. 13-

1321 Moberg, Z.: **Automatic Classification: directions of recent research.** In: *Drexel Libr. Quart.* 10 (1974) No. 4, p. 90-104, 22 refs.
Treats keyword classifications as against "document classifications" by roughly summarizing the work of Salton and Lesk, Sparck Jones, Litofsky, Hoyle and Van Rijsbergen.

1322 Perschke, S., Vernimb, C.: **Feasibility study of automatic indexing of INIS abstracts.** In: *Information Systems, their interconnection and compatibility.* Vienna: Intern. Atomic Energy Agency 1975. 470 p. (here p. 409-416).
Description of experimental stage of automatic indexing of INIS abstracts with the INIS Thesaurus by the Information Science Research Unit of CETIS, Ispra and the Scientific and Technical Information Management of CEC in Luxemburg. After a source text analysis and a dictionary search is done, three cycles of indexing follow. The software consists of SMART and a preliminary version of the SLC IR package developed at CETIS.

1323 Uemura, S.: **Study on automatic indexing with the help of computers.** (In Japanese). In: *Res. electrotechn. lab., Japan* (1974) No. 743, 167 p., ext. bibliography, 11 p.
This volume is especially devoted to fundamental studies. Examples are given, particularly for the Japanese language.

1324 Watanabe, T.: **KWEST index system - a new attempt at automatic indexing.** (In Japanese). In: *Dokummentasyon Kenkyu* 24 (1974) No. 6, p. 195-200, 2 figs., 4 tabl., 10 refs.
KWEST stands for Keyword extracted as a string of terms. Index term units are an extracted term string placed between stop-words from the context. Examples from 310 Mathematical Reviews titles shows that the reduction of redundancy in comparison with a single word KWIC/KWOC system is 47.8%.

35 Automatic Ordering

see also 1243, 1321

1325 Coray, G.: **A logical framework for large file information handling.** In: *Inform. sciences, New York* 8 (1975) No. 1, p. 27-38, 2 figs.
Storage and retrieval algorithms for large files present special problems, especially regarding the classification of information into disjoint categories. An equivalence relation on the universal set of all items in the file has to be introduced which have to be defined in a manner that reflects something of the structure of the information. The classification procedure is conceived as a mathematical one on which various algorithms can be based. Description of this procedure. (Author)

1326 Crouch, D. B.: **A file organization and maintenance procedure for dynamic document collections.** In: *Inform. Proc. & Management* 11 (1975) No. 1/2, p. 11-21, 9 refs.

Several techniques have been proposed for clustering document collections. However, these algorithms ignore file maintenance problems which occur whenever the collection is dynamic. This paper describes a clustering algorithm designed for dynamic data bases and presents an update procedure which maintains an effective document classification without reclustering. The effectiveness of the algorithm is demonstrated for a subset of the Cranfield collection. (Author)

1327 Hlavac, T.: **The cluster theory as automation tool in bibliography.** (In Slovak). In: *Bibliogr. zb.* 1973. Martin 1974. p. 155-188, 26 refs.
Methods of cluster generation and the possibilities of using clusters in the automation of bibliography are discussed.

1328 Ivankin, V. I.: **Semantic distribution method of subject listing of keywords for document search patterns** (In Russian). In: *Naučn. techn. Inform. Ser. 2* (1974) No. 10, p. 27-31, 11 refs.

1329 Stonebreaker, M.: **The choice of partial inversions and combined indices.** In: *Intern. J. Comput. & Inform. Sci.* New York 3 (1974) No. 2, p. 167-188, 3 figs., 1 tabl., 9 refs.
For the selection of a limited number of indices (which best facilitate interaction with a file) a probabilistic model of interaction activity for queries and updates is presented and a parametric description of the storage medium is assumed. The best choice of indices were a) choice of domains to include in a partial inversion and b) choice of combined indices.

36 Coding

see also 1314

1330 Curras, E.: **Methods for entering chemical formulas into a computer.** (In Spanish). In: *Afinidad, Spain* 31 (1974) No. 319, p. 635-642, 38 refs.
Principles for the writing of formulas and examples.

1331 Gilligan, M. J.: **Information system data coding guidelines.** In: McEwen, H. E. (Ed.): *Management of data elements in information processing. Proc. Symposium National Bureau of Standards, Gaithersburg, Md., 24-25 Jan. 1974.* p. 103-182

1332 Govaerts, S., Denooz, J.: **Codification of a Latin text on IBM punched cards with 80 columns.** (In French). In: *Org. intern. Et. Langues anc. Ordinat. Rev., Belg.* (1974) No. 3, p. 1-32, 6 refs.

1333 Jakušev, V. M., Zonov, L. D., Morozova, L. A.: **A Russian alphabet-based grouping code.** (In Russian). In: *Naučn. techn. Inform. Ser. 2* (1974) No. 9, p. 7-9, 39, 3 refs.
A method for coding names of mineral deposits, or exposure sites and anomalies is proposed, based on a grouping code to implement a computer retrieval system. . . . Examples illustrating the coding procedure are given for names consisting of one, two or three words. The code can be used likewise for encoding place names, personal names, etc. (Author; abr.)

1334 Osinga, M., Verrijn Stuart, A. A.: **Documentation of chemical reactions. II. Analysis of the Wiswesser Line Notation.** In: *J. Chem. Doc.* 14 (1974) No. 4, p. 194-198, 2 figs. 3 tabs., 17 refs.
Description of the first step toward automatic encoding of chemical reactions, a conversion from a WLN to a kind of connection table. This table is organized in pairs of atoms, as connected by a bond. Instead of the usual element symbols, numbers are given which represent the bond environment of the atom. Some further applications. (Author)

1335 Subramanian, K., Krishnan, S., Krishnamurthy, E. V.: Huffman binary coding of WLN symbols for file-compression. In: *J. Chem. Doc.* 14 (1974) No. 3, p. 146–149, 2 tab., 4 refs.

37 Reclassification

1336 Goodram, R., Howard, M., Eaves, D.: The University of Tasmania's reclassification programme: the first year. In: *Aust. Acad. Res. Libr.* 5 (1974) No. 3, p. 101–112, 1 fig., 2 tabl.
Tasmania University Library began to reclassify from Bliss to LC in 1973. Description of the implications and the procedure.

38 Index Generation Programming

1337 "Context" a key to accessing entries in textual data bases. In: *Computerworld* 8 (1974) No. 29, p. 13
The system written in Cobol creates an index that contains every significant word and symbol used in the text as it is being entered.

1338 Hammerling, F. D.: ADKWIC: a PL/1 program to produce KWIC or KWOC indexes from ADSEP data bases. Oak Ridge, Tenn.: Oak Ridge Natl. Lab. 1974. 21 p. = NTIS:ORNL-4946

39 Evaluation of Indexing

see also 1307

1339 Adamson, G. W., Bush, J. A.: A comparison of the performance of some similarity and dissimilarity measures in the automatic classification of chemical structures. In: *J. Chem. Inform. & Computer Sciences* 15 (1975) No. 1, p. 55–

1340 Bhattacharyya, K.: The effectiveness of natural language in science indexing and retrieval. In: *J. Doc.* 30 (1974) No. 3, p. 235–254, 42 refs.

The terminological structures of chemistry, botany, zoology, geology and physics were examined regarding the formulation of criteria and measure of the terminological consistency of a subject. The investigation showed how and why an artificially created scientific language cannot keep pace with current developments.

1341 Bichteler, J., Parsons, R. R.: Document retrieval by means of automatic classification algorithm for citations. In: *Inform. Storage & Retrieval* 10 (1974) No. 7–8, p. 267–278, 10 refs.

1342 Burkett, S. G.: Strings or chains? In: *Aust. Acad. Res. Libr.* 5 (1974) No. 4, p. 195–200, 5 tabs., 9 refs.
Description and evaluation of chain indexing and PRECIS. Advantages and disadvantages of both methods are pointed out.

1343 Serebryanyj, A. I.: Dependence of the sizes of formal and semantic based retrieval outputs on the request length and theoretical estimation of losses and noise in a descriptor IRS. (In Russian). In: *Naučn.-techn. Inform. Ser. 2* (1974) No. 1, p. 27–35, 3 figs., 9 tabs., 3 refs.

4 On Universal Systems

41 On Universal CS in General

1344 Barry, S. G.: Letter to the editor. In: *J. Amer. Soc. Inform. Sci.* 25 (1974) No. 4 p. 275

Description of a research grant given to the author by the UK Government Office for Scientific and Technical Information with the assignment to set up an "index of expertise", i.e., an index to persons having special knowledge or skills.

1345 Campbell, A.: Classification schemes in school libraries. In: *School Librarian* 22 (1974) No. 4, p. 310–315, 6 refs.

Discussion of available schemes in 5 main sections: Dewey or abridgements, Bliss or abridgement, Cheltenham Scheme, others. Their varying qualities cancel each other out. The abridged Bliss is recommended for any secondary, middle or primary school.

1346 Ključarev, G. V.: Mnemonic information language for data banks of automatic documentation systems. (In Russian) In: *Naučn. techn. Inform. Ser. 2* (1974) No. 7, p. 13–20, 14 refs.

1347 Plante, S., Grandjouan, J.-M.: Un macrothesaurus des sciences et techniques. (In French). In: *1er Congr. natl. franç. inform. doc. commun. Paris 1974. Paris: CNRS 1974. p. 157–168.*

A general thesaurus of about 5000 terms is being worked out presently for broad indexing and compatibility of different special thesauri.

42 On the Universal Decimal Classification, UDC

see also 1298, 1384

1348 Arntz, H.: Basic Medium Edition of the UDC (BME). (In German). In: *DK-Mitt.*, Berlin-W. 18 (1974) No. 2, p. 7–10

The BME has been planned as a new medium edition to the full edition of the UDC. Unlike the DK-Handausgabe this edition will be based on the English language and should appear in 1976. Article clarifies some misunderstandings.

1349 Carosella, M. P.: Towards classification language unity: the UDC. (In Italian). In: *Conv. organ. circ. inf. centri verso azienda e interno di questa; Taranto 1974. p. 1–19, 12 refs. CNR.*

General information on the UDC as well as on the Italian full and middle edition. Short list of applications in Italy.

1350 Furio, J.: Introduction to the UDC. (In Spanish). In: *CIC Bol. Inform.* (1974) No. 4, p. 36–38
Arguments in favor of the UDC.

1351 Grabilin, Ju. N., Degtjarev, E. C.: Updating specialised UDC tables. (In Russian). In: *Naučn. tr. CNII ekon. i naučn.-techn. inform. ugol'n. prom-sti* (1974) No. 23, p. 15–21

Composition and structure of the tables for UDC622 Mining and related fields are presented.

1352 Miroszewska, K.: Universal Decimal Classification. An essay on its history, structure and developmental trends. (In Polish). Krakow: Biblioteka główna AGH 1974. 44 p.

1353 Round table discussion: problems of the UDC. (In Japanese). In: *Dokumentesyon kenkyu* 24 (1974) No. 8, p. 305–315

Discussion of the advantages and the weaknesses of the UDC. More than 200 Japanese periodicals make use of the UDC. The UDC is being taught in short-term courses on documentation in Japan.

1354 Saedeleer, G. de: **The automatisisation of UDC in the Quetelet List.** (In Dutch). In: *Open* 7 (1975) No. 1, p. 3–11, 3 tables., 9 refs.

Some data on computer programs to process the UDC in such a way as to make automatic classified cataloguing and on-line retrieval possible. (Author)

1355 Wellisch, H.: **UDC: present and potential.** In: *Drexel Libr. Quart.* 10 (1974) No. 4, p. 75–89, 27 refs.

Present applications – Reform or revolution? – English Basic Medium Edition – Index in thesaurus form – Subject-field Reference Code – UDC as a Universal Faceted Classification – NUDC – Conclusions.

43 On the Dewey Decimal Classification, DDC

see also 1264, 1268a, 1302

1356 Gangadhara Rao, P.: **Classification of bibliography by Dewey Decimal Classification: an evaluation.** In: *Libr. Sci. Slant Doc.* 11 (1974) No. 2, p. 73–77

Points out difficulties in teaching of library classification by DDC. A variety of alternative and sometimes contradictory prescriptions leads to confusion in classing. This is illustrated by the rules and notes made in DDC schedules. A unified theory of classification should be adopted for classing by DDC. (Author, abr.)

1357 Requião Piedade, M. A.: **Classificação Decimal de Dewey.** Introdução Programmada as 17. a e 18. e Edições. Sao Paulo, Brasil: Ed. McGraw-Hill do Brasil 1975. 226 p. Cr\$ 30.–

1358 Stevenson, G.: **Centered headings in the Dewey Decimal Classification.** In: *Libr. Resources & Techn. Services* 18 (1974) No. 4, p. 378–386, 1 fig., 7 refs.

The centered heading is a typographical device used in the Dewey Decimal Classification (DDC) schedules to signal a breakdown in the relationship between the system's inner structure and its notation. It usually identifies a class for which no single class number is provided in the schedules. It cannot be justified on any theoretical grounds, but has served the practical functions of 1) shortening class numbers and 2) permitting the system to expand internally with a minimum of major notational changes. With the present of research in the use of DDC, the criteria needed to evaluate the practical consequences of the device are lacking. (Author)

1359 Tauber, M. F., Feinberg, H.: **The Dewey Decimal and Library of Congress Classifications; an overview.** In: *Drexel Libr. Quart.* 10 (1974) No. 4, p. 56–74, ca 40 refs.

Presentation of current problems, criticism and description of use made of these systems in the USA.

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

see also 1264, 1302, 1336, 1359

1360 Bernier, R. B.: **La classification Library of Congress: Cours et exercices.** 2nd ed. La Pocatière, Canada: Soc. du Stage en Bibliothéconomie de la Pocatière 1973. 347 p., \$ 7.50

1361 McKinlay, J.: **Subject headings for Australia.** In: *Aust. Acad. Res. Libr.* 5 (1974) No. 3, p. 131–136, 4 refs.

A preliminary edition of a list of subject headings to be perhaps accepted in Australia and in the Library of Congress concerning anything on Australia is to be produced within two years.

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

1362 Baskina, I. A., Murav'eva, N. V.: **The structure and content of class E3 Virology.** (In Russian). In: *Sov. bibliografija* (1974) No. 5, p. 39–49.

The detailed divisions of the class E3 Virology, now in biological sciences have been published as extensions and corrections to the 6th edition of the LBC. Subclass E34 Virus genetics is also in the press, conforming to Class E04 General genetics.

1363 Belen'kaja, M. B.: **Unifying methods for identifying problem subject headings.** (In Russian). In: *Sov. bibliografija* (1974) No. 5, p. 26–38

In the different sections of Class E Biological Sciences more thorough-going unification of problem-related subject headings should be envisaged. A revision of Subclass E05 General cytology is being planned.

1364 Büttner, H.: **Classed catalogues in libraries of the German Democratic Republic and problems of the Soviet Library-Bibliographical Classification.** (In Russian).

In: *Bibliotekoved. i bibliogr. za rubezom* (1974) No. 51, p. 36–43, 33 refs.

Analysis of a questionnaire sent to 100 research libraries in the GDR indicated that the LBC is adopted by those libraries where new classed catalogues supersede older ones and also by those just starting a catalogue. In general the research libraries use abridged LBC tables.

48 On Other Universal CS (alph.)

1365 **Broad System of Ordering – Progress Report.** In: *UNISIST Newsletter* 3 (1975) No. 2, p. 5–6

State of affairs described as of April 1975. Further actions in 1975 include: circulation for comment to ICSU-affiliated unions and other international bodies, field trials (tests), establishment of revised scheme in the light of these two operations and provision of an appropriate notation.

1366 **Outline of main subject-fields for the BSO.** In:

FID/CR Newsletter 3 (1975) No. 2, p. 12–14
Report on the state-of-affairs as of June 1975.

5 On Special Objects CS (Taxonomies)

51 Numerical Taxonomy

see also 1130

1367 Dalton, C. C.: **Notes for the improvement of the spatial and spectral data classification method.** Huntsville, Ala.: NASA Marshall Space Flight Center 1974. 33 p. = NTIS: N74–15058/2GA

Examination of the spatial and spectral clustering technique for unsupervised automatic classification and mapping of earth resources satellite data. Theoretical analysis of the decision rules and tests.

1368 Egorova, N. A.: **A functional predicate language for factographic data.** (In Russian). In: *Naučn. techn. Inform.*, Ser. 2 (1975) No. 2, p. 18–20, 7 refs.

A formal language for factographic data notation is suggested. The formalization is based on representing the information items as predicates to which a numeric function of variable objects is assigned. The uses of the formal language are exemplified as applied to minimize the natural language redundancy, eliminate the multiple meaning and write down computation procedures.

(Author)

1369 Kochan, A., Örsi, F.: **Beitrag zur Weiterentwicklung der Punktbewertungsmethode zur sensorischen Analyse von Lebensmitteln.** (In German). In: *Lebensmittel-Industrie* 22 (1975) No. 4, p. 156–158

The paper intends to show ways to control an optimal quality of foods by application of mathematical methods. Due to the importance of the sensorically analysable quality of goods within the total quality of foods the authors concentrate on the properties which can be analysed by the sense organs. They prove by the example of the cooked sausage "Parizsi" that it is possible by the correlation and discriminatory analysis to decide which properties are essential for the quality of the product, to weight these selected properties and to classify the products into quality ranks by the calculated separation function. (Authors)

1370 Kullback, S.: **The information in contingency tables.** Final technical report. Washington, D. C.: G. Washington Univ. 1974. 385 p. = Report K-1-74 AROD-12226.2-M. = NTIS:AD-785 599

Usually observations can be expressed only in qualitative or categorical terms. If observations are taken over a sample of many individuals, the result will be a multidimensional contingency table with as many dimensions as there are classifications. Contingency tables are cross-classifications of vectors of discrete random variables showing the number of subjects belonging to distinct categories of each of several qualitative or categorical classifications. (Author, abr.)

1371 Mežiborski, M. A.: **On the quality of classifiers.** (In Russian). In: *Naučn. techn. inform.*, Ser. 2 (1975) No. 3, p. 17–21

The paper presents absolute and relative criteria for assessing the quality of classifiers. It is possible with these criteria to compare alternative versions of the same classifier as well as different classifiers, whatever the dimensionalities and sets of objects may be. (Author)

1372 Sodeur, W.: **Empirical processes for classification.** (Empirische Verfahren zur Klassifikation). (In German). Stuttgart: Teubner 1974. 183 p., 35 figs., 9 tabl. s., 143 refs. = *Studienskripten zur Soziologie* 42. DM 9.80 Treats the presuppositions for "numerical taxonomy": characteristics and their typologies, presentation of characteristics in their special spaces, similarities between elements on account of their characteristics, search for typologies and kinds of classifications.

1373 Vogel, F.: **Problems and processes of numerical classification.** (In German: Probleme und Verfahren der numerischen Klassifikation unter besonderer Berücksichtigung von Alternativmerkmalen). Göttingen: Vandenhoeck & Ruprecht 1975. 410 p. Review see *Intern. Classificat.* 2 (1975) No. 2

52 On Taxonomies & Nomenclatures for Chemicals

see also 1460, 1466

1374 Bedford, C. T.: **Von Baeyer/IUPAC names and abbreviated chemical names of metabolites and artifacts of aldrin (HHDN), hehdin (HEOD) and endrin.** In: *Pestic. Sci.*, Great Britain 5 (1974) No. 4, p. 473–489 14 refs.

1375 **Chemical name and WLN indexes to 6 000 substructures.** In: *CWIK List News* (1974) No. 3

The Institute for Scientific Information is providing its subscribers of chemical information services with copies of a chemical substructure dictionary (CSD) containing approximately 6000 prefix, suffix and parent names matched to WLN (Wiswesser Line Notation) descriptions.

1376 Subakov, W. D.: **Classification of the hygienic properties of plastic products for the food industry.** (In German). In: *Lebensmittel-Industrie* 22 (1975) No. 4, p. 153–155.

The application of polymeric materials in the food industry is aggravated by the long run of the necessary tests. For that reason some parts of the hygienic assessment were systematized and a hierarchic system of plastic good provided for the contact with foods was worked out. (Author)

1377 Young, J. A.: **Revised nomenclature for highly fluorinated organic compounds.** In: *J. Chem. Doc.* 14 (1974) No. 2, p. 98–100, 1 ref.

55 On Taxonomies for Area 5

1378 Findlay, G. H.: **The taxonomy of disease.** In: *S. Afr. J. Sci.*, S. Afr. 70 (1974) No. 3, p. 69–70

56 On Taxonomies for Area 6

1379 Schroeder, E. H. W.: **A revised method of classifying fraudulent checks in a document examination laboratory.** In: *J. Forens. Sci.*, USA 19 (1974) No. 3, p. 618–635

57 On Commodity CS

1380 Gekeler, O.: **Product description and ordering of product characteristics.** (In German). In: *Intern. Classificat.* 2 (1975) No. 1, p. 2–10, 9 refs.

Comments on an ordering system for the characteristics of products as designed by W. M. Paass, comprising about 170 groups of characteristics.

1381 **How universal is the UPC?** In: *Infosystems, USA* 21 (1974) No. 7, p. 22–23

The Universal Product Code (UPC) meant for the food industry is presented and its principles are outlined. Problems of use, especially regarding optical character recognition are mentioned.

58 On CS for Kinds of Documents

see also 1236, 1384

1382 Chaumier, J.: **Documentary languages and graphic documentation.** (In French). In: *1er Congr. natl. franc. inform. doc. commun.* Paris 1974. Paris: 1974. p. 169–176, 11 refs.

Assessment of existing classification schemes for cartographic documentation and outline of its variables regarding symbolisation and document analysis for information retrieval.

6 On Special Subject CS

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

see also 1295, 1469

1383 Laureille, M.-Th.: **Book review of "The international Nuclear Information System Thesaurus: French version."** (In French). In: *Bull. Bibl. France* 19 (1974) No. 7, p. 528–529

Review of the third edition of the INIS Thesaurus, French version (Gif-sur-Yvette, CEA-CEN-Saclay 1973. 745 p.).

1384 Schreiber, H., Bauer, C., Lange, B.: **Descriptor list with UDC- and IPC-notations added.** (In German). In: *Informatik, Berlin (Ost)* 22 (1975) No. 1, p. 24–26, 3 refs.

For a special information profile within chemistry and chemical technology UDC-numbers and notations from the International Patent Classification were added to the descriptors. The concordance resulting was investigated.

63 On CS for the Astro- and Geosciences

1385 Harnisch, M., Strange, A.: **Working thesaurus "Higher geodesy"**, an aid for information retrieval. (In German). In: *Vermessungstechn.*, DDR 22 (1974) No. 9, p. 342-345, 6 refs.

Description of the structure of this thesaurus comprising some 1800 terms of which 700 serve as descriptors. The indexing methods are explained as well.

1386 Auger, P.: **The synonymy in the language of mining.** (In French). In: *Banque des mots*, France (1974) No. 8, p. 177-184

1387 Meynen, E. (Comp.): **Bibliography of mono- and multilingual dictionaries and glossaries of technical terms used in geography as well as in related natural and social sciences.** (Title also in French). Wiesbaden: F. Steiner Verl. 1974. 220 p., DM 42.-

This bibliography was sponsored by the Commission on International Geographical Terminology of the International Geographical Union. The arrangement is by geographical branches and by auxiliary subjects, the table of contents is arranged by UDC.

64 On CS in the Bio-Area

see also 1376

1388 Le Sage, D. E.: **Bees in Indo-European languages.** In: *Bee World*, Great Britain 55 (1974) No. 2, p. 46-52
Etymological study of some terms from the field of apiculture.

1389 **Dictionaries and Vocabularies 1966-1973.** 4th ed. Rome: Food and Agriculture Organization 1974. 130 p.
List of 813 works held by the Terminology Reference Library of FAO. Part 1 arranged by subject (alphabetical according to subject headings), part 2 are language dictionaries.

1390 Laureilhe, M.-T.: **Book review of "Thesaurus of agrobioclimatic, geographical and technical symbols, Vols. 3-4."** (In French). In: *Bull. Bibl. France* 19 (1974) no. 7, p. 525-526.

The thesaurus reviewed was developed by the Centre d'informa-tique appliquée au développement et à l'agriculture tropical, Ter-uren, Belgium 1973-74. 1202 p.

1400 **Dictionaries and vocabularies in the field of forestry, 1945-1972.** (Title also in French). Roma: Food and Agriculture Organization of the United Nations (FAO) 1972. 38 p.

The bibliography lists 189 titles. The arrangement follows the ten groups of the Oxford Decimal Classification for Forestry Sciences.

65 On CS in the Human Area (5)

1401 Coyle, K.: **A faceted classification for occupational safety and health.** In: *Spec. Libr.* 66 (1975) No. 5/6, p. 256-259, 3 refs.

Discussion of the faceted classification theory of B. C. Vickery and description of the CIS classification of occupational safety and health materials of the International Labor Organization.

1402 Blanken, R. R., Stern, B. T.: **Excerpta Medica's system for the automated storage and retrieval of biomedical information.** In: *Federation Proc. (Federation of Amer. Soc. f. Experimental Biology)* 33 (1974) No. 6, p. 1718-1721, 9 refs.

Description of the abstracting, indexing, publishing and information processing activities of Excerpta Medica including its 3-level classification system (subject index, EMCLASS classification system and item index), based on the thesaurus of primary index terms MALIMET).

1403 Neil, A. G.: **The new London Education Classification and Thesaurus: a critique.** In: *Educ. Libr. Bull.* 17 (1974) No. 3, p. 11-20, 4 refs.

Discussion and favorable appraisal of the new edition of LEC.

1404 Sharp, P., Songolo, G.: **Curriculum laboratory classification and organization.** In: *Libr. Resources & Techn. Services* 18 (1974) No. 4, p. 372-377, 2 refs.

Description of the classification for curricula materials developed by and used at the University of Iowa Curriculum Laboratory.

1405 Mšvelidze, A. I.: **Concerning the study of information workers' professions and specialties.** (In Russian).

In: *Naučn.-techn. Inform. Ser. 1* (1974) No. 9, p. 7-9, 39
Discussion of the problems involved in the classification of professions and specialties of scientific and technical information workers. The solution of the task should be based on information worker professionograms. (Author, abr.)

66 On CS in the Socio-Area

see also 1242, 1470

1406 Schumacher, N.: **Onomasiological study of a political vocabulary: the European vocabulary.** (In French). In: *Meta*, Canada 19 (1974) No. 4, p. 197-202

1407 Wall, E.: **Symbiotic development of thesauri and information systems: a case history.** In: *J. Amer. Soc. Inform. Sci.* 26 (1975) No. 2, p. 71-79, 7 refs.

Description of the "Disclosure" data base publication system and thesaurus. (Th. for terms in the field of finances). Gives data also on the cost of thesaurus construction.

1408 Šurucht, L. M.: **Input language of an automatic information retrieval system.** (In Russian). In: *Naučn.-techn. Inform. Ser. 2* (1974) No. 6, p. 17-23, 8 refs.

Description of the thesaurus and its linguistic aids for housing and lodging.

67 In CS in the Economics and Technology Area

1409 Sakata, S.: **Toward a more demand-oriented classification scheme for economic information.** (In Japanese). In: *Dokumentesyon Kenkyu* 24 (1974) No. 5, p. 171-178

1410 Sonoda, K.: **Compilation of the thesaurus on pile foundation.** (In Japanese). In: *Zyoho kanri, Inform. & Doc.* 17 (1974) No. 5, p. 349-358.

In constructing the thesaurus the following thesauri in allied fields have been used: Geodex Thes., TEST, Intern. Road Research Doc. Thesaurus. It is arranged in 6 large sections. Experimental indexing has been carried out.

1411 Thielen, K.: **A macrothesaurus for transportation.** (*Der Dachthesaurus Verkehr*). (In German). In: *DFW - Dok., Inform.* 23 (1975) No. 3, p. 77-79

Description of the macro- or roof-thesaurus for traffic and transportation which only contains the broader terms of special thesauri and concept-relationships. (see also 603 in I. C. 74-2).

1412 Turcat, A.: **Aviation: concordance of languages.** (In French). In: *Banque des Mots*, France (1974) No. 8, p. 145-154

Examination of two problems of technical communication: the

translation of English technical terms and the difficulty of deciphering the symbols and abbreviations. List of terms in modern aviation with definitions and English equivalents.

68 On CS in the Science and Information Area

1413 Filippov, V. A., Bojčenko, V. S.: A classification of research trends being developed at the USSR Academy of Sciences. (In Russian). In: *Perspektiv. planir. nauč. issled. i razrabotok*. Moskva: Nauka 1974. p. 22–27
Enumeration of requirements for a classification of research trends. It is intended for practical use in planning and management of research and development.

1414 Yoshimura, T., Igarashi, H., Okinaga, T.: On the retrieval system for general information on scientific and technological research (REGISTER) and the classification of science and technology (CST). (In Japanese). In: *Dokumentesyon Kenkyu* 24 (1974) No. 12, p. 493–504, 12 refs.
Report on the current situation of REGISTER and CST. The former was started as a retrieval service in 1972 by the Japan Science Foundation. There have been 12 771 research projects listed in 1973 and about 20 900 in 1974. CST is a poly aspect and postcoordinate decimal classification scheme with four digits, covering all fields of science, technology and related fields. The main table comprises 2 242 entries with about 8500 terms, synonyms, etc.

1415 Buchalkin, Ju. M., Timofeeva, N. M.: Classification of inventions with a view to identifying a prototype. (In Russian). In: *Vopr. izobretatel'stva* (1974) No. 12, p. 22–27, 12 refs.
Definition of three basic systems for the classification of inventions.

1416 Mojžišek, J.: The VINITI thesaurus for the ordering and searching of informatics information (In Czech). In: *Čs. inform.* 18 (1974) No. 6, p. 356–372
Description of the preparation, layout, presentation and use of the VINITI Thesaurus on Informatics.

1417 Hlavac, T.: Some aspects of the terminology of information problems. (In Slovak). In: *Inform. Syst., ČSSR* 3 (1974) No. 2, p. 161–170, 2 refs.
Studies on the Slovak terminology of information science.

1418 Thésaurus Bureau Marcel Van Dijk. (In French). Paris: Bureau Marcel Van Dijk 1974. 60 p.
This thesaurus is concerned with organisation, information systems and documentation and educational programs in enterprises. It consists of three sections: a descriptor list with equivalent terms, arrow-graph schemes and lists of "free descriptors".

1419 Laureille, M.-T.: Book review on "Data processing thesaurus". (In French). In: *Bull. Bibl. France* 19 (1974) No. 7, p. 526–528
The "Thésaurus informatique", developed by the CNRS jointly with the Institut de recherche informatique et d'automatique, contains about 1000 terms, 800 of which are descriptors. It is arranged in 8 categories (working operations, equipment, general terms, materials, phenomena, processes, properties, areas of science and technology).

1420 Schöppler, A.: Industrial documentation system for photographic chemistry, technology, processes and materials. (In German). In: *Nachr. Dok.* 25 (1974) No. 5, p. 192–196, 10 figs.
The documentation system for patent literature on photography is based on the use of a thesaurus containing well-defined concepts and on a topological coding system (MCC-TSS) for the storage of chemical compounds. The thesaurus (in English language) is partly structured hierarchically and contains also synonyms and related terms indications.

69 On CS in the Culture Area

1421 Šelov, S. D.: Semantic description for the creation of a documentary language (in the field of linguistics.) (In Russian). In: *Naučn.-techn. Inform. Ser.* 2 (1974) No. 6, p. 10–16, 30 refs.

1422 Cipolla, W. R.: Music subject headings: a comparison. In: *Libr. Resources & Techn. Services* 18 (1974) No. 4, p. 387–397
The subject headings for the field of music in the New York Public Library and the Library of Congress are compared. The differences are documented.

1423 Classification. In: *Catalogg. Serv. Bull., USA* (1974) No. 110, p. 5–6
Problems concerning the classification of ethnological materials of special places or particular groups.

1424 Chouraqui, E.: The system for the automatic exploitation of the general inventory of monuments and artistic riches of France. Formalisation of the analysis language. (In French). In: *Banques données archéol. Colloq. natl. CNRS; Marseille 1972*. Paris: CNRS 1974. p. 147–159, 9 refs.

1425 Christophe, J., Guimier-Sorbets, A. M.: Preparatory work for the establishment of a databank on Greek and Roman mosaics. I. Research on databank languages as against a databank language for Greek and Roman mosaics. (In French). In: *Banques données archéol. Colloq. natl. CNRS; Marseille 1972*. Paris: CNRS 1974. 11 p.

1426 Guimier-Sorbets, A. M.: Preparatory work for the establishment of a databank on Greek and Roman mosaics. II. Research on the terms of a descriptive language and establishment of their semantic and syntactic relationships. (In French). In: *Banques données archéol. Colloq. natl. CNRS; Marseille 1972*. Paris: CNRS 1974. p. 237–244

7 Classification and Language

71 General Problems of Natural Languages, Metalanguages, Semiotics

1427 Weinrich, H.: The truth of dictionaries. (Die Wahrheit der Wörterbücher. Plädoyer für ein großes interdisziplinäres Kommunikationslexikon). (In German). In: *Die Zeit* (1975) No. 27, p. 33 (June 27, 1975)
In order to collect together all the common words of ordinary language with the special terms of all the special languages existing in one natural language an interdisciplinary dictionary will become necessary which may also show, how terms of ordinary language are used together with the terms of special languages in differing ways. It seems timely today to work towards the creation of such a tool.

1428 Cejtin, G. S.: Features of natural languages in the programming languages. (In Russian). In: *Maš. per. i prikl. lingvistika, Vyp.* 17. Moskva 1974, p. 134–143

1429 Marčuk, Ju. N.: Some tendencies in the development of information languages. (In Russian). In: *Maš. per. i prikl. lingvistika, Vyp.* 17. Moskva 1974. p. 144–158

1430 Bul'skis, A. K.: A cybernetic symbolism. (In Russian). In: *Tech. estetika* (1974) No. 9, p. 8–10

A conception for the construction of an artificial symbolic language is proposed. With a comparatively small set of geometrical elements vast information files could be encoded.

1431 Šeralieva, R.: **Sign: an information medium.** (In Russian). In: *Znaki obščeniye*. Frunze: Ilim 1974. p. 78–84, 5 refs.

72 Semantics

1432 Kempson, R. M.: **Presupposition and the delimitation of semantics.** Cambridge University Press 1975. £ 5.50, Ppb. £ 1.95. (SBN 521 09938 2)

1433 Mel'čuk, I. A.: **On a model of natural language text comprehension (the semantic theory of R. Schank).** (In Russian). In: *Nauč.-techn. Inform. Ser. 2* (1974) No. 8, p. 33–44, 25 refs.

1434 Pricker, A. I.: **An attempt at a distributional and statistical description of semantics.** In: *Maš. per. i prikl. lingvistika. Vyp. 17.* Moskva 1974. p. 159–173, 20 refs.

1435 Studnicki, F.: **The semantic problems of automatic search in legal texts.** (In German). In: *Datenverarb. im Recht*, Berlin-W 3 (1974) No. 3/4, p. 252–266

1436 Ty Pak: **Semantics and grammar: a review of recent theories. I.** In: *Semiotica*, Netherlands 12 (1974) No. 4, p. 315–359

1437 Ubin, I. I.: **Syntagmatics of semantic elements and the lexical function Magn in Russian and English.** (In Russian). In: *Maš. per. i. priklad. lingvistika. Vyp. 17.* Moskva 1974. p. 117–133, 8 refs.

1438 Wilks, Y.: **An intelligent analyzer and understander of English.** In: *Comm. ACM* 18 (1975) No. 5, p. 264–274, 17 refs.

73 Automatic Language Processing

see also 1434, 1435, 1438, 1447

1439 Borkowski, C., Martin, J. S.: **Structure, effectiveness, and benefits of LEXtractor, an operational computer program for automatic extraction of case summaries and dispositions from court decisions.** In: *J. Amer. Soc. Inform. Sci.* 26 (1975) No. 2, p. 94–102, 12 refs., App.: LEXtractor Algorithm.
"In a recent run, LEXtractor scanned the full texts of 249 reported cases (some 650 000 words of text) and extracted correctly 92% of case summaries and 93% of case dispositions." Paper outlines the structure of LEXtractor, describes and analyzes its cost and performance and discusses some relevant issues in text editing.
(Author)

1440 Causse, B., Le Penven, G.: **Initiation into the automatic treatment of languages. II.** Informatics. (In French). Toulouse: Univ. Toulouse, Le Mirail 1974. 46 p., 1 ref.

1441 Halbauer, S.: **Programs for language statistics. I.** Wordstems in Russian scientific and technical languages. (In German). In: *Angew. Informat.* 16 (1974) No. 11, p. 469–470, 3 refs.

1442 Hoffmann, H.: **Programs for language statistics. II.** Search for wordstems in Russian texts. (In German). In: *Angew. Informat.* 16 (1974) No. 11, p. 470–473

1443 Henzler, R.: **Quantitative relations between length of text and vocabulary.** (In German). Berlin-W.: Beuth 1974. 60 p., 3 figs., 11 tabs., 8 refs., DM 10.– = ZMD-A-28

1444 Klingbiel, P. H.: **Multimillion word data bases: a preliminary report.** Vols. 1 and 2. Alexandria, Va.: Defense Documentation Center 1974. 481+569 p. = NTIS: AD-777 200/7GA and AD-777 210/6GA.

Statistics are provided on word distribution and word type for a three million word data base. Consonant clusters, word length and letter frequencies are given for the traditional natural language portion of the vocabulary.

1445 Michlin, G. Z., Piotrovskij, R. G., Frumkin, V. A.: **Compression of word codes in automatic text processing.** (In Russian). In: *Nauč.-techn. Inform. Ser. 2* (1974) No. 9, p. 28–30, 6 refs.

1446 Ševenko, S. M.: **Structural-linguistic approach to the hieroglyphs' recognition problem.** (In Russian). In: *Nauč.-techn. Inform. Ser. 2* (1974) No. 3, p. 27–33, 11 refs.

Description of structural types of hieroglyphs. Classification of descriptive elements. Formal description of the laws for structural organization of hieroglyphs.

74 Grammar Problems

see also 1289, 1436

1447 Hirschman, L., Grishman, R., Sager, N.: **Grammatically-based automatic word class formation.** In: *Inform. Proc. & Management* 11 (1975) No. 1/2, p. 39–57, 12 refs., 2 app.

Most previous attempts at producing word classes (thesauri) by statistical analysis have used very limited distributional information such as word cooccurrence in a document or a sentence. This paper describes an automatic procedure which uses the syntactic relations as the basis for grouping words into classes. It forms classes by grouping together nouns that occur as subject (or object) of the same verbs, and similarly by grouping together verbs occurring with the same subject or object. The program was applied to a small corpus of sentences in a subfield of pharmacology. This procedure yielded the word classes for the subfield, in good agreement with the word classes recognized by pharmacologists. The word classes can be used to describe the informational patterns that occur in texts of the subfield, to disambiguate parses of a sentence and perhaps to improve the performance of current information retrieval systems. (Authors)

1448 Lesskis, G. A.: **The syntagmatics in an automatic syntactical analysis system.** (In Russian). In: *Nauč.-techn. Inform. Ser. 2* (1974) No. 8, p. 15–21, 4 refs.

1449 Sager, N.: **Sublanguage grammars in science information processing.** In: *J. Amer. Soc. Inform. Sci.* 26 (1975) No. 1, p. 10–16, 6 refs.

Positive test of the hypothesis that the literature of a science subfield has characteristic restrictions on language usage which can be used to develop information forms for text sentences in the subfield, (here: pharmacology).

1450 Waite, J. H., Boehm, R., Risher, J. G., Epstein, S. D., Stewart, D. J.: **Phrase dictionary distribution analysis and growth prediction report.** (Final report). Cherry Hill, N. J.: Cryptanalytic Computer Sciences 1974. 56 p. = NTIS:AD-780 957/7GA

Describes a study of the DDC phrase glossary. Includes a computer program to tabulate word frequencies for blocks of phrases of optimal sizes. Based upon the available distributions, a two-word phrase glossary size of 320 000 two-word phrases was determined. (Author, abr.)

76 Lexicon/Dictionary Problems

see also 1427, 1450

1451 Bako, M.: **Semantic devices in automated IR systems.** (In Slovak). In: Bibliogr. zb. 1973. Martin 1974. p. 113–154, 13 refs.

Basic principles for the construction, updating and use of dictionaries and thesauri are discussed. Automatic procedures for dictionary and thesaurus construction are dealt with.

1452 Ginzburg, E. L., Probst, M. A.: **Linguistic substitutions and their structure.** (In Russian). In: Naučn. techn. inform., Ser. 2 (1975) No. 4, p. 25–32

Investigation of the transformations connected with the replacements of a word by other words. Formulation of a number of dictionary characteristics of words (relationships, combinabilities, valences) as a basis for the study of the transformations carried out on the dictionary (replacements, substitutions, substitution classes). Proposal to examine the transformations of sentences with the aid of the transformations carried out on the dictionary.

1453 Maruyama, S.: **Kanji thesaurus: toward its flexible structure and conversational mode.** (In Japanese). In: Kokuritsu kokkai toshokan geppo. Nat. Diet Libr. Mon. Bull. (1974) No. 158, p. 16–21

The Japanese language disjoins words into unit concepts, recorded by hieroglyphs, which makes it possible to develop a thesaurus-type machine dictionary in an updatable form. A technique for ordering this kind of dictionary is proposed.

1454 Šaljapina, Z. A.: **Anglo-Russian multi-aspect automatic dictionary (ARMAS).** (In Russian). In: Maš. per. i prikl. lingvistika. Vyp. 17. Moskva 1974, p. 7–67

The treatment of natural language texts with this dictionary involves three levels of representation of text structure: morphological, syntactic and semantic. The ARMAS dictionary entry consists of 32 sections grouped into 5 large zones. Numerous examples are given. (Author, abr.)

1455 Zgusta, L.: **Syntagms, transformations, and lexicography.** In: Semiotica 12 (1974) No. 4, p. 307–314, 7 refs.

Analysis of the work of the lexicographer Gerhard Wahrig, in particular his way of transformation of syntagms.

77 General Problems of Terminology

see also 1186, 1235, 1246, 1464

1456 Drozd, L.: **On the object and the method of terminology.** (In German: Zum Gegenstand und zur Methode der Terminologielehre.) In: Muttersprache 85 (1975) No. 2, p. 109–117

1457 McNamee, P. A.: **Enforcing naming standards through use of a data dictionary.** In: Mc Ewen, H. E. (Ed.): Management of Data Elements in Information Processing. Proc. Symp. National Bureau of Standards, Gaithersburg, Md., 24–25 Jan. 1974. p. 263–270

1458 Perebijnyis, V. S.: **On some regularities in the development of terminological vocabularies.** (In Ukrainian). In: Movoznavstvo, SSSR (1974) No. 4, p. 3–12, 27 refs. Study was done in the field of cybernetics.

1459 Stoberski, Z.: **Scientific and technological terminology.** (In Russian). In: Isv. AN SSSR. Ser. Lit. i Jas. 33 (1974) No. 5, p. 448–543

Description of the present Unesco/ISO activities toward guidelines for the adoption of new scientific and technological terms, and of the activities of INFOTERM, especially regarding a new section with the name "New Terminology".

78 Special Terminology Problems

1460 **Are long chemical names necessary for entomologists?** In: CWIK List News (1974) No. 1

1461 Dahlberg, I.: **The terminology of subject-fields.** In: Intern. Classificat. 2 (1975) No. 1, p. 31–37, 14 refs. In the FRG and R&D project was started in 1972 with the collection of names of subject-fields; it is intended to assemble their definitions in a dictionary and to build a general concept-system by computer-comparison of their characteristics as provided by their definitions. The nature of subject-fields is explained, details on the German collection are given as well as some results from a formal analysis of their concepts.

1462 Dresco, P.: **Automatic treatment of neologisms.** (In French). In: Langages, France 8 (1974) No. 36, p. 119–123

A pilot-project was undertaken to evaluate the possibilities of automatic handling of new terms.

1463 Dubuc, R.: **Translated texts and their use in terminology.** (In French). In: Meta, Canada 10 (1974) No. 4, p. 205–208, 6 refs.

Analysis of three experiences (in banking, radiocommunication and statistics) consisting in the elaboration of the terminology on the basis of translated texts. It is concluded that this process is dangerous. Its only advantage may be the low costs of this method.

1464 Molde, B.: **Language Planning in Sweden.** In: Language Planning Newsletter 1 (1975) No. 3, p. 1,3,4
The Swedish Academy. Language Planning Agencies in Scandinavia. Swedish Center of Technical Terminology. Private Language Associations. The Swedish Language Committee. Nordic Language Committees.

1465 Thiess, H. E.: **A syntax for naming data entities.** In: McEwen, H. E. (Ed.): Management of Data Elements in Information Processing. Proc. of a Symposium, National Bureau of Standards, Gaithersburg, Md., 24–25 Jan. 1974. p. 309–317, 7 refs.

The syntax described provides rules for unambiguous naming of data entities in normal English.

1466 Wipke, W. T., Dyott, T. M.: **Stereochemically unique naming algorithm.** In: J. Amer. Chem. Soc. 96 (1974) No. 15, p. 4834–4842, 10 refs.

Description of an algorithm generating a unique linear name for each chemical structure, including the stereoisomers.

79 Problems of Translation (incl. Multilingual CS)

see also 1187, 1207

1467 Lemesle, M.-L.: **Establishment of a trilingual thesaurus and its practical application.** (In French). In: 1er Congr. natl. franç. inform. doc. commun., Paris 1974. Paris: CNRS 1974. p. 275–288

Description of the experiences gained with the thesaurus for road research and technology.

1468 Moureau, M., Brace, G. W.: **Linguistic problems in the multilingual systems.** (In French). In: 1er Congr. natl. franç. inform. doc. commun. Paris 1974. Paris: CNRS 1974. p. 257–265, 5 refs.

1469 Semenov, V. F. et al: **Problems concerning the construction of a bilingual thesaurus for the indexing of documents and questions in nuclear science and technology.** (In Russian). In: Colloq. intern. syst. doc. connexion compatibilité; Varna, Bulg. 1974. Wien: I.A.E.A. 1974. 42, 1–13, 6 refs.

1470 Viet, J.: **Problems posed by the elaboration of multilingual documentation languages in the social sciences and humanities.** (In French). In: 1er Congr. natl. franç. inform. doc. commun. Paris 1974. Paris: CNRS 1974. p. 289–297, 8 refs.

1471 Zentralinstitut für Information und Dokumentation (ZIID) der DDR: **A rational method for the maintenance of multilingual thesauri.** (In German). In: ZIID-Mitt. (1974) No. 12, p. 15–16

8 Applied Classing and Indexing

81 General Problems and Indexing Rules

see also 1247, 1273

1472 Levine, E. H.: **Effect of instantaneous retrieval on indexing criteria.** In: J. Amer. Soc. Inform. Sci. 25 (1974) No. 3, p. 199–200
Proposes to develop new indexing philosophies in order to optimize the total document retrieval system.

1473 **Specifications for printed indexes.** In: The Indexer 9 (1975) No. 3, p. 121

1474 U. S. Atomic Energy Commission: **Guide to abstracting and indexing at the Technical Information Center.** Oak Ridge, Tenn.: U.S. Atomic Energy Commission. Techn. Inform. Center 1974. 66 p. = NTIS:TID-4583

1475 Zentralstelle Dokumentation Elektrotechnik (ZDE): **ZDE-Indexing rules.** (In German). Frankfurt: Verband Deutscher Elektrotechniker u. ZDE 1975. 11 p.

84 Indexing of Texts

1476 Breton, J. M.: **Lexicological and syntactical approach for computer documentation of texts.** (In French). In: Documentaliste (1974) p. 12–14, 18 refs.

1477 Koymen, K.: **TOS: A text organizing system.** In: Inform. Proc. & Management II (1975) No. 1/2, p. 23–38, 7 refs.
Report on research undertaken to conceptualize, design and implement a system for automatic indexing, classification and repositing of text items, which may be any aggregate of information in English language on a computer-readable media, in a standard format. (Author)

1478 Ryan, V. J., Dearing, V. A.: **Computerized text editing and processing with built-in indexing.** In: Inform. Storage & Retrieval 10 (1974) No. 5–6, p. 211–228, 2 p. refs.

85 Book Indexing

see also 1268b

1479 **Symposium on selective indexing.** In: Indexer 9 (1974) No. 2, p. 59–65
Discussion of various approaches to selective indexing (for the sake of minimizing the possible number of index entries in books) and of arranging index entries based on this principle.

86 Indexing and Indexes of CS

1480 Immroth, J. P.: **Indexes to classification schemes.** In: Encycl. libr. inform. sci. vol. II, 1974. p. 305–311, 17 refs.

87 Indexing of Secondary Literature

1481 Boodson, K.: **Indexing a bibliographical guide.** In: Indexer 9 (1975) No. 3, p. 93–100, 3 tabl., 4 refs.

1482 Hino, S.: **Preparation of a subject index using INIS descriptors in place of subject headings.** (In Japanese). In: Dokumentasyon kenkyu 24 (1974) No. 10, p. 419–423, 6 refs.

1483 **Indexes to API abstracts of refining literature and to API abstracts of refining patents.** Indexer's manual. New York: Amer. Petroleum Institute 1974? 13 p.

88 Indexing of Primary Literature and Documents

1484 Kneitel, A. M.: **Microfiche indexing revisited.** In: J. of Micrographics 8 (1974) No. 2, p. 73–77, 1 ref.

1485 Miles, R.: **The cataloging and classification of music on phonorecords – some considerations.** In: Libr. Resources & Techn. Services 18 (1974) No. 3, p. 213–219

1486 Sasaki, H.: **Annual cumulation and frequency of appearances of keywords.** (In Japanese). In: Dokumentasyon Kenkyu 24 (1974) No. 8, p. 293–298, 1 ref.
Calculation of the annual accumulation of keywords used in the keyword system of the clipping file of a newspaper. The total number of keywords accumulated annually may be calculated by an equation as given.

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

93 Organisation of Class. on the National Level

1487 Bielicka, L.: **The problem of choice of a descriptor language for use in a system of scientific, technical and economic information.** (In Polish). In: Aktual probl. inform. i dok. 19 (1974) No. 5, p. 8–14, 21 refs.

1488 Davis, P. J.: **Rationalized cataloguing and the new authorities.** In: Libr. Assoc. Record 77 (1975) No. 2, p. 29, 1 ref.
The new public library authorities will have been considering the elimination of cataloguing from the work of their own staff through reliance on centralised services. It is argued that classification and subject indexing problems set limits to the extent to which this can be achieved, if reference and enquiry services are to be efficiently maintained. (Author)

95 Education and Training in Classification and Indexing

see also 1356

1489 Kashyap, M. M.: **Concept comprehension building in students and the teaching of the theory of library classification.** In: Intern. Classificat. 2 (1975) No. 1, p. 22–25, 10 refs.

The teaching process has to take into account the mastery of pre-requisite concepts and the analytical presentation of concepts for the students' resynthesis. The components of the concept "Classification" are used as an example for these procedures.

1490 Sokolov, A. V., Firsov, G. G.: **Library catalogues and information retrieval systems: problems in teaching.** (In Russian). In: *Naučn. i techn. bibl. SSSR* (1974) No. 8, p. 24–28, 4 refs.

Two of the five sections of the new course taught at the Leningrad State Institute of Culture N. K. Krupskaya are devoted to 1) classification and the classified catalogue and 2) subject cataloguing and indexing, subject headings.

98 User Studies

see also 1364

1491 Hall, A. M.: **Methodology and results of some user studies on secondary information services.** In: *EURIM: A European Conf. on Res. into Management of Inform. Services and Libr.* 20–22 Nov. 73, Paris. London: Aslib 1974, p. 31–37, 11 tabl., 2 refs.

Reports on user studies carried out at INSPEC, referring mostly to the use made of indexes.

1492 Richardson, A. D.: **Survey of cataloguing and classification in New Zealand.** In: *N. Z. Libr.* 37 (1974) No. 3, p. 112–122, 13 refs.

Replies from a questionnaire sent out show that the Dewey Decimal Classification is the most widely used one in New Zealand and that the 18th ed. is already proving very popular.

99 Standardization in Classification

see also 1232, 1471

1493 Dahlberg, I.: **The "double notated uniform classification": the solution?** (In German). In: *Nachr. Dok.* 26 (1975) No. 3, p. 105–112, 21 refs.

For the elaboration of a uniform classification system for all German libraries a group of influential German librarians supported the idea of using the analytico-synthetic classification system of the State Library of Bavaria as background system. New classes corresponding to the analytico-synthetic ones composed on existing literature in this library will have to be fixed. This method has been called „Doppelt-notierte Einheitsklassifikation“. Its fallacies are discussed and demonstrated. Some other approaches for the solution of this problem are offered. (Author)

1494 Jankowski, J.: **The need for unification and standardisation of terminology and symbols in various classification systems.** (In Polish). In: *Normalizacja* 42 (1974) No. 7, p. 12–16, 5 refs.

1495 Leski, K.: **Standards in thesauri development.** (In Polish). In: *Aktual. probl. inform. i dok.* 19 (1974) No. 5, p. 3–8, 11 refs.

Communication of Scientific Information

Ed. by Stacey B. Day

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Terminologie der Information und Dokumentation

Ed. by Komitee Terminologie und Sprachfragen (KTS) der Deutschen Gesellschaft für Dokumentation (DGD)

Prepared by Ulrich Neveling and Gernot Wersig = DGD-Schriftenreihe, Vol. 4

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