

Classification Literature 19(1992)No.4 (4-001 - 4-456)

0 FORM DIVISIONS

01	Bibliographies	232
02	Literature Reviews	232
03	Dictionaries, Terminologies	232
04	Classif. Systems & Thesauri*	232
05	Periodicals and Serials	233
06	Conference Reports, Proceedings	233
07	Text Books**	-
08	Other Monographs**	235
09	Standards, Guidelines	235

1 THEORETICAL FOUNDATIONS

11	Order and Classification	235
12	Conceptology In Classification	236
13	Mathematics In Classification	236
14	Systems Theory In Classification	236
15	Psychology and Classification	236
16	Development of Science and Classif.	236
17	Problems In Classification	237
18	Classification Research	-
19	History of Classification	237

2 STRUCTURE & CONSTRUCTION OF CS & T***

21	General Questions of CS & T	237
22	Elements of CS & T	237
23	Construction of CS & T	237
24	Relationships	238
25	Numerical Taxonomy	238
26	Notation, Codes	238
27	Revision, Updating of CS & T	238
28	Compatibility & Concordance	238
29	Evaluation of CS & T	-

3 CLASSING AND INDEXING

31	Theory of Classing and Indexing	236
32	Subject Analysis	239
33	Classing and Indexing Techniques	239
34	Automatic Classing and Indexing	239
35	Manual & Automatic Ordering Techn.	240
36	Coding	241
37	Reclassification	241
38	Index Generation and Programmes	241
39	Evaluation of Classing & Indexing	241

4 ON UNIVERSAL SYSTEMS

41	On Universal Systems In General	242
42	On the Universal Decimal Classif.	242
43	On the Dewey Decimal Classif.	242
44	On the Libr. of Congress Classif.	242
45	On the Bliss Bibliogr. Classif.	242
46	On the Colon Classification	242
47	On the Libr. Bibliogr. Classif.	-
48	On Other Universal Systems	242
49	Free	-

5 ON SPECIAL OBJECTS CS (TAXONOMIES)*

51	On Taxonomies In the Form & Struct. Area 1	243
52	On Taxonomies In the Energy & Matter Area 2	243
53	On Taxonomies In Cosmos & Earth Area 3	-
54	On Taxonomies In the Bio Area 4	-
55	On Taxonomies In the Human Area 5	-
56	On Taxonomies In the Socla Area 6	-
57	On Taxonomies In the Prod. Area 7	-
58	On Taxonomies In the Sci. & Info Area 8	-
59	On Taxonomies In the Culture Area 9	-

6 ON SPECIAL SUBJECTS CS & T*

61	On CS & T In the Form & Struct. Area 1	243
62	On CS & T In the Energy & Matter Area 2	-
63	On CS & T In the Cosmos & Earth Area 3	-
64	On CS & T In the Bio Area 4	243
65	On CS & T In the Human Area 5	243
66	On CS & T In the Socio Area 6	-
67	On CS & T In the Production Area 7	243
68	On CS & T In the Sci & Info Area 8	243
69	On CS & T In the Humanities Area 9	243

7 CLASSIFICATION AND LANGUAGE

71	General Problems of Natural Language	243
72	Semantics	244
73	Automatic Language Processing	244
74	Grammar Problems	244
75	Online Problems and Technologies	244
76	Lexicon/Diclionary Problems	245
77	General Problems of Terminology	245
78	Subject-Oriented Terminology Work*	245
79	Problems of Multilingual Systems	246

8 APPLIED CLASSING AND INDEXING (C&I)***

81	General Problems of Applied C&I	246
82	Data Classing and Indexing*	246
83	Title Classing and Indexing	-
84	C&I of Primary Literature	246
85	(Back of the) Book Indexing	-
86	Indexing of Secondary Literature	246
87	C&I of Non-Book Materials	246
88	C&I In Subject Fields*	247
89	Free	-

9 CLASSIFICATION ENVIRONMENT

91	Organization Problems In General	-
92	Persons and Institutions	-
93	Organiz. of C&I on a Natl. & Int. Level	247
94	Free	247
95	Education and Training In C&I	-
96	Legal Aspects of C&I	248
97	Economic Aspects of C&I	-
98	User Studies	248
99	Standardization In C&I	248

Personal Author Index

248

* Divisions of 04, 5, 6, 78, 82 and 88 according to the Information Coding Classification (ICC) described and displayed in Int. Classif. 9(1982) No. 2, p. 87-93 and in the International Classification and Indexing Bibliography, Vol. 1. (1982).

A further division of the above scheme (by one and sometimes two levels) was published in Int. Classif. 12(1985) No. 3, p. 147-151.

From this more detailed scheme it will be visible that subject fields may also occur in many cases on the third and also fourth level of division, indicated by the number 8.

** Monographs on special topics at special subdivisions.

*** CS & T stands for Classification Systems and Thesauri
C & I stands for Classing and Indexing

We offer to send copies of the abstracts of the references cited to anybody interested.

Language abbreviations:

bg	Bulgarian	fi	Finnish	pl	Polish
cs	Czech	fr	French	pt	Portuguese
da	Danish	hu	Hungarian	ro	Romanian
de	German	it	Italian	ru	Russian
ee	Estonian	ja	Japanese	sh	Serbo-Croatian
en	English	li	Lithuanian	sk	Slovakian
es	Spanish	nl	Dutch	uk	Ukrainian

0 FORM DIVISIONS

01 Bibliographies

4-001 016,038-91
Les dictionnaires de terminologie linguistique: bibliographie systématique. (Dictionaries of linguistic terminology: Systematic bibliography) Orig.fr. Meta Vol 36, No 4, 1991. p.647-653, refs.(4p.)

4-002 016.3
Prossopritti, M.: Bibliografia sull'indicizzazione 1988-1989. (Bibliography on indexing) Orig.it. Boll.Inform.Assoc.Ital. Bibl. Vol 31, No 1, 1991. p.39-57
The bibliography is based on scanning-the British National Bibliography (until April 1990) and LISA (until Sept.1990). It is in alphabetical order according to authors and has a subject index.

4-003 016.32
Ruda, S.: Abstracting - Eine Auswahlbibliographie. (Abstracting - a selective bibliography) Orig.de. Nachr.Dok. Vol 43, No.5, 1992. p.283-292, 217 refs.
The selective bibliography is arranged according to nine subject fields, among which historical development of abstracting, guidelines, methods of text condensation, text structures, abstract writing, automatic and machine-supported abstracting, bibliographies.

02 Literature Reviews

4-004 025
Taylor, A.G.: Enhancing subject access in online systems: The year's work in subject analysis, 1991. Orig.en. Libr.Resources & Techn.Serv. Vol 36, No 3, 1992. p.316-332, 5 refs.
Arrangement according to (1) users and subject searching, (2) subject access in online catalogs, (3) subject cataloging and indexing, (4) information retrieval, (5) thesaurus and indexing approaches, (6) classification, (7) specialized subjects and materials. Subject access in online systems has been found the focus of most research. Improvements in online systems are more promising than the perfection of subject analysis.

03 Dictionaries, Terminologies

4-005 032
Soper, M.E.; Osborne, L.N.; Zweizig, D.L.: The Librarian's Thesaurus. Chicago and London: Amer.Lib. Assoc., Eurospan 1990. XVI, 164 p.
This is no thesaurus at all but a systematically arranged kind of encyclopedia of some 370 concepts in modern library science including also technology (office, communications, security, mechanical data storage and retrieval, computers, transportation, patron-use equipment, miscellaneous). Elaborate entries with "encyclopedic" descriptions, sometimes longer than one page. Elaborate index (p.157-164).

4-006 036.387
Hesse, W.; Luft, A.L.; Keutgen, H.; Romach, H.D.: Ein Begriffssystem für die Softwaretechnik. Vorschlag zur Terminologie. (A concept system for software technology, A terminological proposal) Orig.de. Informatik-Spektrum Vol 7, 1984. p.200-213, 39 refs.
This concept system has only now been brought to our attention. 143 concepts are defined by the Working Group on Concept Determinations of the Subject Group "Software Engineering", (German Society for Computer Science, GI).

04 Classification Systems & Thesauri

041 General Library Classification Systems

4-007 041-de-71/2
Universitätsbibliothek Regensburg: Aufstellungssystematik, 15. Wirtschaftswissenschaften (Q). 4.Aufl., Stand: April 1992. (Shelving system for economics (Q). 4th ed.) Orig.de. Regensburg, DE: Universitätsbibliothek 1992. 175p.

4-008 041-de-12
Universitätsbibliothek Regensburg: Aufstellungssystematik, 17.1 Mathematik (SA-SP). - 6.Aufl., Stand: Mai 1992. (Shelving system for mathematics, (SA-SP), 6th ed., of May 1992. (Orig. de) Regensburg, DE: Universitätsbibliothek 1992. 53 p.

4-009 041-de-73
Universitätsbibliothek Regensburg: Aufstellungssystematik, 24.2 Technik (ZG-ZS). 3.Aufl., Stand: Mai 1991. Orig.de. Regensburg, DE: Universitätsbibliothek 1991. 164p.

4-010 041-de-962
Universitätsbibliothek Regensburg: Aufstellungssystematik, 11.1 Ethnologie (LA-LC). 4.Aufl., Stand: Nov. 1991. (Shelving System for Ethnology (LA-LC). 4th ed.) Orig.de. Regensburg, DE: Universitätsbibliothek 1991. 19p.

4-011 041-de-92
Lehman, K.(Ed.): Klassifikation für Allgemeinbibliotheken, Teil Wissenschaftliche und Fachliteratur, Belletristik (KAB/E). Veränderte Hauptgruppen A-F und Veränderungen in weiteren Sachgruppen. (Classification System for General Libraries) Orig.de. Berlin, DE, Zentralinstitut für Bibliothekswesen, Deutsches Bibliotheksinstitut. 77p.
Revised version, finished Dec.1991, having been requested by the users of the KAB.

4-012 041.8-de-92
Lehmann, K., Pohlenz, K. (Eds.); Bertz, U., Weigert, K. (Conps.): Klassifikation für Allgemeinbibliotheken, Veränderte Hauptgruppen A-F, Register. (Classification System for General Libraries. Index to the changed main groupings) Orig.de. Berlin, DE: Zentralinstitut für Bibliothekswesen; Dt.Bibliotheksinstitut 1991/92. 30p.

4-013 041.8-de-92
Lehmann, K.; Pohlenz, K. (Eds.): Klassifikation für Allgemeinbibliotheken - Teil Wissenschaftliche und Fachliteratur, Belletristik (KAB/E). Alphabetisches Schlagwortregister, Nachtrag 2. (Classification System for General Libraries, Belles Lettres. Alphabetical subject index. Supplement 2) Orig.de. Berlin, DE: Deutsches Bibliotheksinstitut 1992. 65p.
The first supplement had been added 1991 and is included in this second supplement which contains about 1900 concepts and references. In most cases these are new subject headings resulting from subject analysis work in libraries and the BKZ (book purchasing center). This supplement may help in introducing into and use of the changed subject groups.

4-014 041.8
Ergänzungen zum alphabetischen Schlagwortregister der KAB/E. (Supplements to the alphabetical subject index of the Classification System for General Libraries (KAB)) Orig.de. Bibliotheksinfo Vol 1, No 3, 4, 1991. p.174-178; p.251-254
This is the reference to the first supplement, mentioned above (in 4-013).

045 Bliss Bibliographic Classification

4-015 045.1-en-11; 97
Bell, K.; Mills, J. (Eds.): Bliss Bibliographic Classification, Class A/AL: Philosophy and Logic. 2nd ed. Orig.en. London, etc.: Bowker-Saur 1991. XLVIII, 56p.
The second edition was accomplished with the assistance of C. Neilson.

048.1 Other General Classification Systems

4-016 048.1
Union of International Associations: Yearbook of International Organizations, Vol.3: Classified Subject Volume, Global Action Networks, Classified Directory by Subject and Region. 10th ed. Orig.en, ca 1,700p. München, DE: K.G.Saur Verl. 1992
ISBN 3-598-22215-7
The new edition lists entries in (1) a single alphabetical sequence according to subject headings, (2) according to geographical entities (countries) where each sequence has been subdivided into fields of interest and in main subject fields, and (3) according to form of organizations. There is a main index to the entire Yearbook. The classification scheme used facilitates understanding of the relationships between the parts of the different organizations. In order to show the connection between international organizations and "World Problems" (which is a separate work of the UAI), the subject heading lists are supplemented with references to parallel problems.

048- Special Classification Systems and Thesauri

4-017 048-284
International Atomic Energy Agency: INIS Thesaurus. Orig.en. Vienna, AT: Int.Atomic Energy Agency 1992. XI, 880p.+34p., IAEA-INIS-13(Rev.31)

4-018 048-387
Kibus, R. (Comp.); Deutsches Kunststoffinstitut: Thesaurus "Kunststoffe, Kautschuk, Fasern". (Thesaurus for Plastics, Rubber and Fibers) Orig.de, en. Darmstadt, DE: Deutsches Kunststoff-Institut 1992. 170p., DM 350.-
Updated and enlarged edition, now comprising some 2500 concepts. Contains a great number of synonyms and the English translations of descriptors. The main arrangement is in alphabetical order. In addition, an English version of this thesaurus has been published, see the next entry.

4-019 048-387
Kibus, R. (Comp.); Deutsches Kunststoff-Institut: Thesaurus
Plastics, Rubber, and Fibers. Orig.en. Darmstadt, DE: Deutsches
Kunststoff-Institut 1992. 122p.
(See entry under 4-018)

4-020 048-47
Schenker, R. (Comp.); IUFRO-Project Group: Forest Decimal Clas-
sification - Forstliche Dezimalklassifikation - Classification
Décimale Forestière: trilingual short version. Orig.en,de,fr.
Vienna, AT: IUFRO 1990. 147p., 4 app., IUFRO World Series, 2

4-021 048-51/4
Fornes Garcia, A.: Erfahrungen mit dem Rubrikator Medizin und
Gesundheitswesen sowie Vorschläge zu dessen Spezifizierung und
Erweiterung in einer gerichtsmedizinischen Fachbibliothek. (Ex-
periences with the Rubricator System for Medicine and Health
Sciences as well as proposals for its specialization and en-
largement in a special library for forensic medicine) Orig.de.
Leipzig, DE: College for Library Science. Thesis 1991. 36p.
Elaboration of a descriptor list for the subfield of "non-nat-
ural death by outward influences" pertaining to forensic me-
dicine.

4-022 048-56
Genf Bureau Internationale d'Education, UNESCO: Thésaurus de
l'éducation UNESCO: BIE, 5. éd., révisée et augm. (Education
Thesaurus of UNESCO, 5th ed.) Orig.fr, en, es. Paris, FR: UNESCO
1990. XII, 137p.

4-023 048-6
Broxus, P.F. et al (Ed.): ASSIA thesaurus 1991. Orig.en.
London, GB: Bowker-Saur 1991. ISBN 1-85739-086-6
Thesaurus for the Applied Social Sciences Index and Abstracts.
It is meant for use with the printed, online or CD-ROM ver-
sions.

4-024 048-62
Stahnke, K.-H.; Bürgerschaft der Freien und Hansestadt Hamburg:
Anwenderthesaurus der Parlamentskundlichen Fachbibliothek.
Teil 1: Alphabetisches Sachregister. (Thesaurus for Applica-
tion in the Library of Parliamentary Affairs. Pt.1: Alphabeti-
cal Subject Index) Orig.de. Hamburg, DE: Bürgerschaft der
Freien und Hansestadt Hamburg 1991. 103p.

4-025 048-62
Bibliothèque de la Commission des Communautés Européennes:
Thésaurus ECLAS. Parties 1, 2 and 3: Présentation alphabétique,
permutée, thématique. Orig.fr. Luxembourg: Comm.des Communau-
tés Européennes 1991. 280+544+302p.

4-026 048-652
Ajchison, J. (Comp.); International Thesaurus for Refugee Ter-
minology. Orig.en. The Hague, NL: Martinus Nijhoff 1989. ISBN
0-7923-0504-3
Contains a systematic, and an alphabetical display, a KWOC in-
dex, a French/English/Spanish index and a Spanish/English/
French index. The thesaurus is available in English, French
and Spanish. Has been published under the auspices of the In-
ternational Refugee Documentation Network.

4-027 048-71/72
International Committee for Social Science Information and Do-
cumentation: Thematic list of descriptors in economics - liste
thématique des descripteurs science économique. Orig. en, fr.
London-New York: Routledge 1989. 495p.

4-028 048-82
Associação Portuguesa para o Desenvolvimento de Informação
Científica e Técnica: Thésaurus d'informatique, 2 parties
Pt.1. (Thesaurus computer science). Orig.pt. Lisboa, PT: INCIIE
(Apartado 2410, 1111 Lisboa Codex) 1992.
The thesaurus contains also a dictionary English-Portuguese.
It covers the objects, the communication of data, and the or-
ganization and handling of data. This is part 1. Pt. two is to
appear at the end of 1992.

4-029 048-93
Friedrich, R. (Comp.); Deutsches BibliotheksInstitut: Systemati-
ken für Öffentliche Musikbibliotheken 3. vollst. überarb. Aufl.
(Classification system for public music libraries, 3rd rev.ed)
Orig.de. Berlin, DE: Deutsches Bibliotheksinstitut 1991. 251p.
Contains a classification system for literature on music and
musical documents: (SMM-1991).

05 Periodicals and Serials

4-030 056.715
Yazdani, M. (Ed.): Artificial Intelligence Review.
An International Survey and Tutorial Journal. Orig. en.
Vol 6, No 1. Dordrecht, NL: Kluwer Academic Publ. 1992. 123p.
This issue is devoted to Case-Based Reasoning. J.L.Kolodner
gives an introduction into this subject-field. Further artic-
les are by and on: B. Chaib-Draa, B. Moulin, R. Mandlau, P.

Millot: Trends in distributed artificial intelligence. - Zla-
tereva, N.P.: Truth maintenance systems and their application
for verifying expert system knowledge bases. The issue con-
tains also 7 book reviews, viz. on Deville, Y.: Logic program-
ming - systematic program development (by Tony Dodd). - Ro-
bertson, D. et al: Eco Logic (by T.Dodd). - Banerji, R.B. (Ed.)
Formal techniques in artificial intelligence (by L.Bolc). -
Neapolitan, R.E.: Probabilistic reasoning in expert systems:
Theory and algorithms (by D.Saunders). - Hickman, F.R. et al:
Analysis for knowledge-based systems: A practical guide to the
KAOS methodology (by D.Saunders). - Mirzai, A.R. (Ed.): Arti-
ficial Intelligence: Concepts and applications (by D.Partridge).
Boden, M.A.: The creative mind, myths, and mechanisms (by B.
Wilby).

4-031 056.72
Heim, I.; Kratzer, A. (Eds.): Natural Language Semantics. An
International Journal of Semantics and its Interfaces in
Grammar. Orig.en. Vol 1, No 1. Dordrecht, NL: Kluwer Academic
Publishers 1992. 121p.
The publication programme foresees 3 issues per year. Micro-
film and microfiche editions of this journal are available
from University Microfilm International, 300 North Zeeb Road,
Ann Arbor, MI, 48106, USA. The first issue contains the fol-
lowing articles: F.Landman: The progressive (p.1-32); M.C.Ba-
ker: Unmatched chains and the representation of plural pro-
nouns (p.33-74); M.Rooth: A theory of focus interpretation
(p.75-116).

4-032 056.93/4
Journal of Information Networking. Orig.en.
Vol 1, No 1. London, GB: Taylor Graham 1992; 3/ann.
The journal was announced to be concerned with developments in
the following subjects: Information infrastructure; Teaching;
Research; Communication and publishing; Applications architec-
ture; Network infrastructure: policy and practice; Funding,
costing and charging; Organizational change, user support,
training; and Toward Cyberspace.

06 Conference Reports, Proceedings

See also 4-298

4-033 06.90-03-14; 272
Wessel, H.-P.: LB Trier - Kolloquium "Kooperative Pflege der
Schlagwortnormdatei" am 14. März 1990 in Trier. (Colloquy on
Cooperative Maintenance of the Standard Subject Heading File
on March 14, 1990, Trier, University Library) Orig.de. Ticker,
No 1, 1990. p.18-20
Gives short summaries of the 4 papers (by Keim, Schubert,
Stumpf/Geisselmann, and Stephan). The significance of the
quality factor was emphasized in the discussion repeatedly.

4-034 06.90-03-25/27
Lancaster, F.W.; Smith, L.C.: Artificial Intelligence and Expert
Systems. Will they Change the Library? Papers presented at the
1990 Clinic on Library Applications of Data Processing, March
25-27, 1990. Orig.en. Urbana, IL: Illinois Univ. at Urbana-
Champaign, Graduate School of Library and Information Science
1992. 291p.
The 27th Annual Clinic was designed to correct some of the
misconceptions of AI and ES by presenting a balanced picture
of present and potential capabilities of AI and ES. The papers
presented deal with these capabilities as they relate to a
wide range of library applications: descriptive cataloguing,
technical services, collection development, subject indexing,
reference services, database searching, and document delivery.
Other papers deal with the underlying design issues of knowl-
edge representation and natural language processing. (Author)

4-035 06.90-10-2/4
Gupta, S.R.: Book review of Czap, H., Nedobity, W. (Eds.):
TKE'90: Terminology and Knowledge Engineering. Frankfurt:
INDEXS Verlag 1990. 682p. Orig.en. Int. Inform., Communic.&
Educ. (INICAE) Vol 11, No 1, 1992. p.134-135

4-036 06.91-02-18; 31
Weinberg, B.H. (Ed.): Cataloging Heresy: Challenging the Stand-
ard Bibliographic Product. Proceedings of the Congress for Lib-
rarians, Feb. 18, 1991. St. John's University, Jamaica, NY with
additional contributed papers. Orig.en. Medford, NJ: Learned
Inform., Inc. 1992. XII, 217p., ISBN 0-938734-60-1
After an introduction of the Congress Chair, Emmet Corry and
one by B.H.Weinberg on the Congress Theme, the papers are
listed in two parts: Pt.1 invited papers (4-037-046) with con-
cluding remarks by B.H.Weinberg; Pt.2: Contributed Papers,
both parts accompanied with an Editor's Note. The index has
been prepared by Edward Swanson.

4-037 Weinberg, B.H.: A theory of relativity for catalogers.
4-038 Anderson, N.: The non-neutrality of descriptive catalog-
ing. - 4-039 Benman, S.: Cataloging tools and "copy": The myth
of acceptability - A public librarian's viewpoint. - 4-040
Sinn, S.: The development of classification and subject head-
ing systems for medicine. - 4-041 Whitehead, C.: The Art &
Architecture Thesaurus as an alternative to LCSH. - 4-042

Parr, M.: Standard cataloging data and the academic library: The technical services manager's point of view. 4-043 Bishoff, L.; Patton, G.: Master bibliographic record vs. Local bibliographic record - who needs what?: An OCLC perspective. - 4-044 Glazier, E.: The display and indexing of customized catalog records in RLIN. - 4-045 Byrum, J.: Standard cataloging data: The view from the Library of Congress. - 4-046 Intner, Sh.: Rejecting standard cataloging copy: Implications for the education of catalogers. - 4-047 Elliott, P.; Bakke, C.: Special collections and cataloging standards: Issues and compromises at the Steinbeck Research Center and the Center for Beethoven Studies. - 4-048 Whitlow, Ch.: Musical sound recordings: Subject retrieval, analysis and access in Online Public Access Catalogs. - 4-049 Olson, H.: Subject access to women's studies materials. - 4-050 Kim, Sook-Hyun: Volume/date designation and serials holdings. - 4-051 Armintor, B.: "Marrying" college catalog data with the library's online catalog: Enhancing access to nonprint materials at Pikes Peak Community College. - 4-052 Lai, PohChin; Wong, Ming-Kan: Problems in the cataloging of digital cartographic databases. - 4-053 Thomas, A.R.: Options in the arrangement of library materials and the new edition of the Bliss Bibliographic Classification. -

4-054 06.91-03-12/13; 42.82
Büch, G.: Tagung zur DK-Anwendung in Bibliotheken und Dokumentationsstellen (Meeting on UDC-Application in Libraries and Documentation Centers). Orig.de. Mitt. Univ.-Bibl. Jena Vol.1, No.3, 1991. p.8-9
Report on a meeting on 12-13 March 1991 at the University Library of Chemnitz with discussions on the possible further use of the UDC after the German Institute for Standardization had given up its services in this regard (publication and committee work).

4-055 06.91-06-24/28
Williamson, N.J.; Hudson, M. (Eds.): Classification Research for Knowledge Representation and Organization. Proceedings 5th International Study Conference on Classification Research, Toronto, Canada, June 24-28, 1991. Orig.en. Amsterdam, etc.: Elsevier 1992. XII, 427p., FID 698

Arrangement of the 40 papers in alphabetical sequence of the authors in two parts: Plenary Sessions, Contributed Papers. The volume ends with a conference summary and conclusions, a list of participants and a short subject index.

4-056 Svenonius, E.: Classification: Prospects, Problems, and Possibilities. - 4-057 Beall, J.: Editing the Dewey Decimal Classification Online: The evolution of the DDC Database. 4-058 Beghtol, C.: Toward a theory of fiction analysis for information storage and retrieval. - 4-059 Craven, T.C.: Concept relation structures and their graphic display. - 4-060 Fugmann, R.: Illusory goals in information science research. - 4-061 Gilchrist, A.: UDC: The 1990's and beyond. - 4-062 Green, R.: The expression of syntagmatic relationships in indexing: Are frame-based index languages the answer? - 4-063 Humphrey, S.M.: Use and management of classification systems for knowledge-based indexing. - 4-064 Miksa, F.L.: The concept of the universe of knowledge and the purpose of LIS classification. - 4-065 Scott, M.; Fonseca, A.F.: Methodology for functional appraisal of records and creation of a functional thesaurus. 4-066 Albrechtsen, H.: PRESS: A thesaurus-based information system for software reuse. - 4-067 Ameshi, B.: A preliminary AAT compatible African Art Thesaurus. - 4-068 Chatterjee, A.: Structures of Indian classification systems of the pre-Ranganathan era and their impact on the Colon Classification. - 4-069 Cochran, P.A.: Indexing and searching thesauri, the Janus or Proteus of information retrieval. - 4-070 Craven, T.C.: A general versus a special algorithm in the graphic display of thesauri. - 4-071 Dahlberg, I.: The basis of a new universal classification system seen from a philosophy of science point of view. - 4-072 Drabenstott, K.M.; Riester, L.C.; Dede, B.A.: Shelflisting using expert systems. - 4-073 Fidel, R.: Thesaurus requirements for an intermediary expert system. - 4-074 Green, R.: Insights into classification from the cognitive sciences: Ramifications for index languages. - 4-075 Crolrier, E.de: Towards a syndetic information retrieval system. - 4-076 Guenther, R.: The USMARC Format for classification data: Development and implementation. - 4-077 Howarth, L.C.: Factors influencing policies for the adoption and integration of revisions to classification schedules. - 4-078 Hudson, M.: Term definitions in subject thesauri: the Canadian literacy thesaurus experience. - 4-079 Husain, Sh.: Notational techniques for the accommodation of subjects in Colon Classification 7th edition: Theoretical possibility vis-à-vis practical need. - 4-080 Kvasnik, B.H.; Jorgensen, C.: The exploration by means of repository grids of semantic differences among names of official documents. - 4-081 Micco, M.: Suggestions for automating the Library of Congress Classification schedules. - 4-082 Perreault, J.M.: An essay on the prehistory of general categories (I): G.W.Leibniz, Conrad Gesner. - 4-083 Rees-Potter, L.K.: How well do thesauri serve the social sciences? - 4-084 Revie, C.W.; Smart, G.: The construction and use of faceted classification schema in technical domains. - 4-085 Rockmore, M.: Structuring a flexible faceted thesaurus record for corporate information retrieval. - 4-086 Roulin, C.: Sub-thesauri as part of a metathesaurus. - 4-087 Smith, L.C.: UNISIST revisit-

ed: Compatibility in the context of collaboratories. - 4-088 Stiles, W.G.: Notes concerning the use of chain indexing as a possible means of simulating the inductive leap within artificial intelligence. - 4-089 Svenonius, E.; Liu, S., Subrahmanyam, B.: Automation of chain indexing. - 4-090 Turner, J.: Structure in data in the stockshot database at the National Film Board of Canada. - 4-091 Vizine-Coetz, D.: The Dewey Decimal Classification as an online classification tool. - 4-092 Williamson, N.J.: Restructuring UDC: Problems and possibilities. - 4-093 Wilson, A.: The hierarchy of belief: Ideological tendentiousness in universal classification. - 4-095 Wilson, B.F.: An evaluation of the systematic botany schedule of the Universal Decimal Classification (English Full Edition, 1979). 4-095 Zeng, L.: Research and development of classification and thesauri in China.

4-096 06.91-08-19
McGarry, D.: IFLA Section Activities at Moscow Conference 1991. Orig.en. Int.Classif. Vol 19, No 3, 1992. p.146-147

4-097 06.91-09-16/18
Conference on Knowledge Organization and Term Analysis. Papers and Summaries of KOTA'91, Varna, Sept.16-18, 1991. Orig. en. Int.Classif. Vol 19, No 2, 1992. p.65-100
The issue contains the two plenary session papers and summaries of the contributed ones, arranged in a systematic order.

4-098 06.92-04-30, -07-02
U.K.: CRC Meetings 286 and 287. Orig. en. Int.Classif. Vol 19, No 3, 1992. p.165

4-099 06.92-05-29
Ranganathan Jubilee Meeting in Moscow. Orig.en. Int.Classif. Vol 19, No 3, 1992. p.159

4-100 06.92-06-5/6
TAMA'92: 2nd TermNet Symposium: Terminology Applications and Microcomputers, Avignon, 5-6 June 1992. Orig.en. Int.Classif. Vol 19, No 3, 1992. p.148

4-101 06.92-06-21/24
Belin, N.; Ingversen, P., Pejtersen, A.M. (Eds.): SIGIR'92: Proceedings of the 15th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval. Orig.en. SIGIR Forum, 1992, Special Issue, 353p.

The Conference was organized by the Royal School of Librarianship in Copenhagen and was held in cooperation with AICA-GLIR (Italy), BCS-IRSG (UK), DD (Denmark), GI (Germany), INRIA (France). It had support from Apple Computer, Denmark. The volume contains the 32 papers and Reports on the two panel sessions, moderated by W.B.Croft, and R.Krovetz, respectively. It ends with an Author Index.

4-102 Haman, D.: Relevance feedback revisited. - 4-103 Aalbersberg, I.J.: Incremental relevance feedback. - 4-104 Tague-Sutcliffe, J.: Measuring the informativeness of a retrieval process. - 4-105 Lewis, D.D.: An evaluation of phrasal and clustered representations on a text categorization task. - 4-106 Blossville, M.J.; Hébrail, G., Monteil, M.G., Pénot, N.: Automatic document classification: Natural language processing, statistical analysis, and expert system techniques used together. - 4-107 Masand, B.; Linoff, G.; Waltz, D.: Classifying news stories using memory based reasoning. - 4-108 Keen, E.M.: Term position ranking: Some new test results. - 4-109 Crouch, C.J.; Yang, B.: Experiments in automatic statistical thesaurus construction. - 4-110 Grefenstette, G.: Use of syntactic context to produce term association lists for text retrieval. - 4-111 Anick, P.G.; Flynn, R.A.: Versioning a full-text information retrieval system. - 4-112 Burkowski, F.J.: Retrieval activities in a database consisting of heterogeneous collections. - 4-113 Deerwester, S.C.; Waclena, K.; LaMar, M.: A textual object management system. - 4-114 Nie, J.-Y.: Towards a probabilistic modal logic for semantic-based information retrieval. - 4-115 Wang, A.W.; Wong, S.K.M.; Yao, Y.Y.: An analysis of vector space models based on computational geometry. 4-116 Bartell, B.T.; Cottrell, G.W., Belew, R.K.: Latent semantic indexing is an optimal special case of multidimensional scaling. - 4-117 Glavitsch, U.; Schäuble, P.: A system for retrieving speech documents. - 4-118 Margulis, E.L.: N-Poisson-Document Modelling. - 4-119 Hess, M.: An incrementally extensible document retrieval system based on linguistics and logical principles. 4-120 Cooper, W.S.; Gey, F.C., Dabney, D.P.: Probabilistic retrieval based on staged logistic regression. - 4-121 Fuhr, N.: Integration of probabilistic fact and text retrieval. 4-122 Croft, B.; Smith, L.A., Turtle, H.: A loosely-coupled integration of a text retrieval system and an object-oriented database system. - 4-123 Dumais, S.T.; Nielsen, J.: Automating the assignment of submitted manuscripts to reviewers. - 4-124 Gost, M.A.; Masotti, M.: Design of an OPAC database to permit different subject searching accesses. 4-125 Robertson, A.M.; Willett, P.: Searching for historical word-forms in a database of 17th-century English text using spelling correction methods. 4-126 Fax, E.A.; Chen, Q.F., Heath, L.S.: A faster algorithm for constructing minimal perfect hash functions. - 4-127 Moffat, A.; Zobel, J.: Parameterised compression for sparse bitmaps. 4-128 Grandi, F.; Tiberio, P., Zezula, P.: Frame-sliced par-

tioned parallel signature files. - 4-129 Cognitive differences in end user searching of a CD-ROM index. - 4-130 Sonnenwald, D.H.: Developing a theory to guide the process of designing information retrieval systems. - 4-131 Cutting, D.R.; Pedersen, J.O., Karger, D., Tukey, J.W.: Scatter/Gather: A cluster-based approach to browsing large document collections. - 4-132 Chalmers, M.; Chitson, P.: Bead: Explorations in information visualization. - 4-133 Williamson, Ch.; Shneiderman, B.: The dynamic HomeFinder: Evaluating dynamic queries in a real-estate information exploration system.

4-134 06.92-08-26/28
Dahlberg, J.: 2nd International ISKO Conference, Madras, Aug. 26-28, 1992. Orig.en. Int.Classif. 19(1992)No 3, p.159-161
Report on surprises this conference held for participants.

4-135 06.92-09-02
Williamson, N.: IFLA Section on Classification and Indexing. Orig.en. Int.Classif. Vol 19, No 3, 1992. p.163-169
Report on the papers of the meeting of this Section during the IFLA Conference at New Delhi, Aug.29-Sept.5, 1992 and on some further activities.

08 Other Monographs

4-136 08
Henzler, R.G.: Information und Dokumentation: Sammeln, Speichern und Wiedergewinnen von Fachinformation in Datenbanken. (Information and Documentation: Collection, Storing and Retrieving Specialized Information in Databases) Orig.de. Berlin etc.: Springer 1992. 322p., 155 refs., ISBN 3-540-55703-2
The volume contains some chapters of interest here, viz. (3) on storage media and classification, (6) on organization of the online-retrieval, and (8) on retrieval-software, languages and strategies.

4-137 08.3
Boyce, B.R.: Book review of Lancaster, F.W.: Indexing and abstracting in theory and practice. Champaign, IL: Graduate School of Library and Information Science, University of Illinois 1991. 328p. Orig.en. J.Amer.Soc.Inform.Sci. Vol 43, No 6, 1992 p.456

4-138 08.03
Rasmussen, E.M.: Book review of Lancaster, F.W.: Indexing and abstracting in theory and practice. Champaign, IL: Graduate School of Library and Information Science, University of Illinois 1991. 328p. Orig.en. Cat. & Classif.Quart. Vol 15, No 1, 1992. p.85-87

4-139 08.33
Milstead, J.L.: Book review of Wellisch, H.H.: Indexing from A to Z. New York: H.W.Wilson 1991. XXVI, 461p. Orig.en. Libr.Quart. Vol 62, No 2, 1992. p.245-247

4-140 08.765
Fidel, R.: Book review of Chamis, A.Y.: Vocabulary control and search strategies in online searching. Westport, Conn.: Greenwood Press 1991. XV, 121p. Orig.en. Libr.Quart. Vol 62, No 3, 1992. p.347-349

09 Standards, Guidelines

4-141 09.33
Sukiasyan, E.R.: Indexing of documents. General requirements for classifying and subject indexing. Orig.ru. Moskva, RJ: Russian State Library. Dept. for Systematic and Subject Cataloguing 1991. 61p.
This booklet contains an explanation of the USSR COST Standard 7.59-90 and gives directions and a commentary for librarians.

4-142 09.33; 812
Geisselmann, F.; Bellgardt, S.; Kelm, B.: Praxisregeln zu den Regeln für den Schlagwortkatalog (RSMK) und der Schlagwortnormdatei (SWD). (Practice rules to the rules for the Subject Catalogue (RSMK) and the Standard Subject File (SWD)) Orig. de. Frankfurt/Main: Deutsche Bibliothek 1992. ISBN 3-922051-37-5
The new rules are introduced in an article by F.Wende in Dialog Bibl. 4(1992)No.3, p.10-12

4-143 09.365
Regeln für die Signaturvergabe. (Rules for call number application, 5th ed.) Orig.de. Regensburg, DE: Universitätsbibliothek 1992. 52p.

4-144 09.812
Kelm, B. (Ed.); Kommission des Deutschen BibliotheksInstituts für Sacherschließung, Arbeitsgruppe RSMK-Musik: Regeln für den Schlagwortkatalog: RSMK: Musikalien und Musikträger: Entwurf. (Rules for the Subject Heading Catalogue (RSMK) Music and Music Data Carriers.) Orig.de. Berlin, Deutsches Bibliotheksinstitut 1991. 27p.

1 THEORETICAL FOUNDATIONS

11 Order and Classification

See also 4-064

4-145 111
Malla, N.: Classification of knowledge: a study in the foundation of library science. Orig.en. Granthana: Indian J.Lib. Studies Vol 2, No 2, 1991. p.163-168

Attempts to present a logical analysis of the concept of classification with special reference to library science. (Author)

117 Object-Oriented Database Management

See also 4-361

4-146 117; 174
Higa, K.; Morrison, M.; Morrison, J.; Sheng, O.R.L.: Object-oriented methodology for knowledge base/database coupling. Orig.en. Communicat.ACM Vol 35, No 6, 1992. p.99-113, 50 refs.

4-147 117
Jose, J.M.; Viswanathan, T.: Object-oriented database management systems - a new tool for information centers. Orig.en. Annals Libr.Sci.& Doc. Vol 39, No 3, 1992. p.74-80, 4 refs.
Object-Oriented Database Management Systems (OODBMS) are a recent development in the field of database systems. The relational model of data presents a tabular view of the world. It assumes that every entity has a fixed number of descriptive attributes and the values of these may be presented in a tabular form. A document, may however, be composed of pictures, graphs, text, etc. To handle these, a database should support complex extensible objects. The adoption and use of OODBMS will increase the capabilities and efficiency of an information center as they eliminate the disadvantages of the classical DBMS. (Author, amended)

4-148 117
The Object-Oriented Database Task Group. Orig.en. Computer Standards and Interfaces Vol 13, No 1-3, (Special Issue) 1991. 331p.

The special issue is devoted to OODBMS and contains the following 37 papers with an editorial by J.L. Berg and a guest editorial by C.Thompson.

4-149 Berg, J.L.: Object-Oriented Database Systems Task Group (Editorial). - 4-150 Thompson, C.: Object-oriented database management system standards. - 4-151 Stull, E.L., Berg, J.L.: The role of standards. - 4-152 Andrews, T.: Plan and organization for Object-Oriented Database Task Group (OODBMS). - 4-153 Otis, A.: A reference model for object data management. - 4-154 Marrs, K.A.; Robinson, L.G.: Object-oriented DBMS requirements. - 4-155 The Committee for Advanced DBMS Function: Third-generation database system manifesto. - 4-156 Osborn, R.: OODB standardization. - 4-157 Guzenda, L.; Wade, A.E.: A taxonomy of standards. - 4-158 Kent, A.: The object standardization challenge. - 4-159 Krueger, J.W.: Application object model for engineering information systems. - 4-160 Chang, T.-H.: An entity-oriented data model - MIX. - 4-161 Li, Q.: Object data model = object-oriented + semantic models. - 4-162 Lowry, E.: Towards an optimum language data model. - 4-163 Marcus, R.: An enhanced neutral object-oriented data model. - 4-164 Loney, F.: Principles for persistent object access. - 4-165 Atwood, T.; Orenstein, J.: Notes toward a standard Object-Oriented DDL and DML. - 4-166 Perez, E.: A strawman reference model for an application program interface to an Object-Oriented Database. - 4-167 Moore, P.; Wade, A.E.: An approach to standard DDL for OODBMS. - 4-168 Orenstein, J.; Bonte, E.: The need for a DML: Why a library interface isn't enough. - 4-169 Richardson, J.D.; Wheeler, T.J.: A two-layered interface architecture. - 4-170 Özsü, M.T.; Straube, D.D.: Issues in query model design in object-oriented database systems. - 4-171 Khoshafian, S.: Intelligent SQL. - 4-172 Blakeley, J.A.; Thompson, C.W., Alashqur, A.M.: Strawman reference model for Object Query Languages. - 4-173 Kent, W.: Important features of Iris OSQL. - 4-174 Davis, K.C.; Delcambre, L.M.L.: Foundations for object-oriented query processing. - 4-175 Khoshafian, S.; Blumer, R.; Abnous, R.: Inheritance and generalization in intelligent SQL. - 4-176 Beech, D.; Özbütün, C.: Object databases as generalizations of relational databases. - 4-177 Wang, C.C.: A strawman reference model in transaction processing for an Object-Oriented Database. - 4-178 Rotzell, K.: Transactions and versioning in an ODBMS. - 4-179 Joseph, J.; Shadowens, M.; Chen, J.; Thompson, C.: Strawman reference model for change management of objects. - 4-180 Zicari, R.: Primitives for schema updates in an Object-Oriented Database System: A proposal. - 4-181 Barghout, N.S.; Sokolsky, M.H.: Object-oriented data modeling in rule-based software development environments. - 4-182 Gilbert, J.P.: Supporting user views. - 4-183 Ashby, V.; Schipper, L.: Security standards for Object Data Management Systems. - 4-184 Sanderson, D.B.: Position paper: Data exchange issues for standardization. - 4-185 Sanderson, D.O.: Requirements for a new object-oriented methodology. - 4-186 Pathak, G.; Stackhouse, B.; Heller, S.: EIS/XAIT project: An object-based interoperability framework for heterogeneous systems. - 4-187 Wade, D.: Goals and Requirements Storage Manager (SM) Working Group Design Data Management TSC, CFI.

12 Conceptology in Classification

4-188 1232
Lelchik, V.M.; Shelov, S.D.: Commensurability of scientific theories and analysis of terminological definitions. Orig.ru, transl. Into en. Nauchno-tekhn.inform., Ser.2 Vol 25, No 8, 1991 p.9-15, 31 refs.

Definitions of scientific concepts in terminological dictionaries and science texts are discussed. In particular, nonrigid definitions on fuzzy semantics of natural language units are considered. They permit the variability of interpretation and are affected by underlying theories. (Authors)

4-189 126; 717
Chisholm, R.M.: An intentional explication of universals. Orig.en. Conceptus Vol 26, No 66, 1992, 1 ref.

The term 'universal' is here taken to mean the same as 'attribute' or 'property'. It is contended here that attributes should be understood both intensionally and intentionally. The nature of an attribute lies in the fact that it is an ens rationis - the kind of entity that can be grasped and made the content of thinking and believing. (Author, abbr.)

4-190 128
Umstätter, W.: Die Skalierung von Information, Wissen und Literatur. (The scaling of information, knowledge, and literature) Orig.de. Nachr.Dok. Vol 43, No 4, 1992. p.227-237, 241-242, 36 refs.

Explains the relationship between the three topical concepts.

13 Mathematics in Classification

4-191 133
Kurikalov, Y.L.: Classification as a type of semiotic modelling. Orig.ru. Nauchno-tekhn.inform., Ser.2, No 11, 1991. p.1-5, 24 refs.

Examines the classification process from the point of view of modelling principles. Establishes that natural classification systems represent a characteristic type of semiotic models. The connection between classification and modelling, conceptually described, should help to develop a theory of semiotic management in complex systems. (Author)

4-192 133
Solov'eva, E.A.: Mathematical modelling of the cognition system and a method for developing a natural classification system together with its criteria. Orig.ru, transl. into en. Nauchno-tekhn.inform., Ser.2 Vol 25, No 4, 1991. p.1-10, 51 refs.

14 Systems Theory in Classification

See also 4-032

4-193 147
Strickmuster der neuen elektronischen Intelligenz. (Kritikmodelle of the new electronic intelligence) Orig.de. HighTech Vol 11, 1991. p.64-75

Introductory text into neural networks, the model of which is the brain structure. As a sort of refined software simulation are neural networks learning devices which may well enlarge the boundaries of computer science. A flood of industrial applications is starting.

4-194 147
Fulcher, J.: Neural networks: Promise for the future? Orig.en. Future Generation Computer Systems Vol 6, No 4, 1990/91. p.351-354, 18 refs.

The features of neural networks are examined. They are balanced against the lack of understanding about what is taking place within the neural network itself. What emerges is a set of sober conclusions concerning realistic expectations for the future. (Author)

4-195 147
Schümann, J., Kreßel, U.: Neuronale Netze in der Mustererkennung: Multilayer-Perzeptron und Polynom-Klassifikator. (Neural networks in pattern recognition: Multilayer perceptron and polynomial classifier). Orig.de. HMD. Handbuch d.Modernen Datenverarbeitung, Vol.28, No.159, p.110-122, 12 refs.

15 Psychology and Classification

4-196 153
Batra, D.; Davis, J.G.: Conceptual data modelling in database design: Similarities and differences between expert and novice designers. Orig.en. Int.J.Man-Machine Studies Vol 37, No 1, 1992. p.83-101, 39 refs.

Exploration of the similarities and differences between experts and novices engaged in a conceptual data modelling task,

a critical part of overall database design, using data gathered in the form of think-aloud protocols. It was found that the experts focussed on generating a holistic understanding of the problem before developing the conceptual model. They were able to categorize problem descriptions into standard abstractions. The novices tended to have more errors in their solutions due to their inability to integrate the various parts of the problem description and map them into appropriate knowledge structures. The study also found that the expert and novice behavior was similar in terms of modelling facets, like entity, identifier, descriptor and binary relationship, somewhat different in modelling ternary relationship, but quite different in the modelling of unary relationship and category. These findings are discussed. (Authors, abbr.)

4-197 156; 757
Ercegovac, Z.: A multiple-observation approach in knowledge acquisition for expert systems: A case study. Orig.en. J.Amer.Soc.Inform.Sci. Vol 43, No 7, 1992. p.506-517, 45 refs.

The article describes (1) the elicitation component of knowledge acquisition (KA) in the domain of cartographic cataloging of single-sheet maps produced by three U.S.map-making agencies and (2) the performance evaluation results that demonstrate the effectiveness of the elicitation method. A multiple-observation approach was used to elicit knowledge that human experts use when solving descriptive cataloging problems. The use of the elicitation techniques is discussed in view of problem identification goals and their applicability for this study. A body of published knowledge was integrated with a body of elicited personal knowledge to form the knowledge base of an experimental cataloging advisor - Mapper. The study demonstrates that library students, who are map cataloging novices, can produce significantly better cataloging answers when assisted by the Mapper than can those who were not assisted by the Mapper. (Author, abbr.)

4-198 156
Vickery, A.: Book review of Scott, A.C., Clayton, J.E., Gibson, E.L.: A practical guide to knowledge acquisition. Reading, MA.: Addison-Wesley 1991. XV, 509p. J.Doc. 48(1992)No 2, p.245-248

16 Development of Science and Classification

4-199 162
Qqanyan, E.A.; Shreider, Yu.A.: Disciplinary structure of the humanities. Orig.ru, transl. into en. Nauchno-tekhn.inform., Ser.2 Vol 25, No 7, 1991. p.1-8, 8 refs.

Discussion of the disciplinary structure of the humanities and its reflection in classification systems and rubricators.

4-200 165
Fagin, R.; Halpern, J.Y.; Vardi, M.Y.: What can machines know? On the properties of knowledge in distributed systems. Orig.en. J.Assoc.Comput.Machinery 39(1992)No 2, p.328-376, 27 refs.

4-201 165
Okko, M.: Ranganathan's models for the growth of knowledge and on the comprehensibility of borrowed concepts. Orig.fi. Kirjastoiede ja Informaattikka Vol 11, No 2, 1992. p.53-60, 10 refs.

Discusses Ranganathan's modes of tactics for the growth of knowledge: Lamination, Loose-Assemblage, Denudation, and Dissection which he had borrowed from Geology and establishes a relationship of their geological meaning and their capacity to describe the tactical processes.

4-202 165; 751
Shreider, Yu.A.: The cognitive approach: A tool to resolve the opposition between technical and cultural aspects of knowledge. Orig.en.ru. Int.Forum Inform.& Doc. Vol 17, No 2, 1992. p.3-6, 10 refs.

Also in: Gödert, W. et al: Kognitive Ansätze zum Ordnen und Darstellen von Wissen. 2.Tagung d.Dt.ISKO-Sektion, Weilburg, 15.-18.10.1991. Frankfurt: INDEKS Verlag 1992. p.24-30
Human knowledge can exist in two alternative forms: personal (mostly implicit) knowledge (PK) and social knowledge (Information = SI). Direct interpersonal communication is described by the scheme PK--SI--PK. Ten principles that underly bridging the gap between PK and SI are discussed. Indirect communication is connected with transferring symbolic texts like parables. (Author)

4-203 165
Waern, Y.; Hägglund, S.; Löwgren, J.; Rankin, I.; Sokolnicki, T.: Communication knowledge for knowledge communication. Orig.en. Int.J.Man-Machine Studies 37(1992)No 2, p.215-239, 48 refs.

Three aspects of communication knowledge are identified and research related to them presented. These are domain-related knowledge, discourse knowledge and mediating knowledge. This frame of reference is applied in the context of knowledge acquisition, user interface management in knowledge systems, text generation in expert critiquing systems and tutoring systems. The implications of the proposed framework in terms of implemented systems are discussed and a future research agenda emanating from the analyses is suggested. (Authors, abbr.)

17 Problems in Classification

See also 4-217

4-204 171
Porter, L.: Quality assurance: going round in circles. Orig.en
Aslib Inform. Vol 20, No 6, 1992. p.240-242

4-205 173
Stepniakowa, E.: Problems in subject cataloguing: Multiple de-
scription in the subject headings. Orig.pl.
Przegląd Biblioteczny Vol 59, No 2, 1991. p.157-166, 35 refs.
Overview of the Polish and selected foreign literature concern-
ing the problems of multiple description in the subject head-
ings language. Describes also the practice of the Library of
Congress and the libraries of the former USSR in this field.
(Author)

4-206 173.25
Sandor, D.: From automatic classification to morphologies of a
higher level. Orig.hu. Könyvt. Figyelo Vol 37, 1991. p.418-22
Automatic classification can only be reliable if different al-
gorithms lead to the same result. After a repeated classifi-
cation procedure the filtered, solid excerpts may be looked at
as morphologies of a higher level. Astronomy is used as a
metaphor for this: the factor-analytic observation space is
the universe, which is entered by invisible wavelengths; the
matter groups in it are the so far invisible galaxies. The
conception of such forms or morphemes by analysis of knowledge
fields, modelling of their evolution, and navigation among
them are only some of interesting possibilities.
(Author, transi. and abbr.)

4-207 174
Jank, D.: Die Nicht-Gleichbehandlung von Frauen und Männern in
der Schlagwortnormdatei - ein offener Brief. (The unequal
treatment of women and men in the standard subject file - an
open letter) Orig.de. Bibliotheksdienst Vol 25, No 9, 1991.
p.1418-1421

This article fights for recognition of the female aspect to be
included in cataloging and classification systems, here with
special regard to the Standard Subject File (SIO) in Germany.
The argument is documented in a number of examples.
The article raised two responses by D.Ahlhelm and F.Geißelmann
in Bibliotheksdienst 25(1991)p.1805-1808; and by M.Heiner-
Freiling in Bibliotheksdienst 25(1991)p.1808-1811. It found a
"facit" by D.Jank in Laurentius 9(1992)No.1, p.56-59.

4-208 175; 194
Dong-Vinh, G.: BN-Sycomore ou l'automatisation de la communi-
cation et du récolement dans les départements des Livres Imprimés
et des Périodiques. (BN-Sycomore or the automation of the
communication of checking in the Department of Printed Books
and Periodicals). Orig.fr. Bull.Inform.-Assoc.Bibi.France, No
153, 1991. p.27-31
Reminder of the history of the origin of the classification
system of the French National Library (BN) (the System of Ni-
colas Clément) is presented by the Project SYCOMORE of the BN
as one of reconstitution and restitution of a national heri-
tage. The article describes the project, the software of which
has been elaborated by Alcatel TITN (Answare). It should be
operational in 1992.

4-209 177
Kuznetsov, S.O.: Complexity of learning and classification
based on a search for set intersection. Orig.ru, transi.info
en. Nauchno tekhn. Inform., Ser. 2 Vol 25, No 9, 1991. p.8-15
Algorithmic complexity of learning is studied in terms of a
search for similarity of positive and negative examples of
construction of a classification on the basis of learning-der-
ived hypotheses. Descriptor language, i.e. representation of
examples by sets, are discussed. Hypotheses are defined as in-
tersections of positive examples which are not subsets of ne-
gative examples. We prove $\#P$ -completeness of the problem of
determination of the number of all minimal hypotheses. NP-com-
pleteness, and polynomial solubility of certain problems of
hypothesis generation with limits on the size and number of
supporting examples. Classification of examples on the basis
of hypotheses in the general case is shown to be a difficult
problem. Polynomial solubility of special important cases is
proved. (Author)

179 Trends and Future Tasks in C&I

See also 4-328

4-210 179
Coetzee, H.S.: Cataloging and classification in the nineties.
Orig.af. South African J. of Libr. & Inform. Sci. Vol 59, No 4,
1991. p.282-293, 45 refs.
The drastic changes regarding cataloging and classification
have occurred worldwide. Technology, rising costs, increas-
ing user demands will need still more drastic adjustments.
The traditional division between technical and public services
needs attention as well as further development of appropriate
technology, cost-effectiveness of cataloging, staff require-
ments, image of the cataloger, a.o.

19 History of Classification

See also 4-082, 4-208

4-211 192
Künzel, W.; Cornelius, H.: Die Ars Generalis Ultima des Ray-
mundus Lullus. Studien zu einem geheimen Ursprung der Compu-
tertheorie. 5. bearb. u. erw. Aufl. (Studies on a secret source of
computer theory. 5th enlarged ed.) Orig.de. Berlin, DE: Edition
Olivia Künzel 1991. 170p.

2 STRUCTURE AND CONSTRUCTION OF CS & T

21 General questions of CS & T

213 Management of CS Includ. Computerization
See also 4-288, 4-289

4-212 213
Huws, H.; Wintrub, M.; Martin, N.: Knowledge-based systems dev-
elopment: A methodology for management. Orig.en.
Inform. Systems Management Vol 9, No 3, 1992. p.51-56
The article provides a context for understanding the difficul-
ties unique to a knowledge-based systems development project
and describes one methodology that offers solutions to many of
the management problems confronting the responsible for such
development and implementation efforts. (Author)

4-213 214
Wereszczynska-Cisko, B.: Defining the descriptor language.
Orig.pl. Zag. Inform. Nauk. Vol 56, No 1, 1990. p.3-25, 4 refs.

4-214 218
Rousseau, R.: Use of an existing thesaurus in a knowledge based
indexing and retrieval system. Orig.en. Annals of Libr. Sci. &
Doc. Vol 38, No 4, 1991. p.127-130, 17 refs.
A simple heuristic method is proposed to use an existing the-
saurus for weighted indexing.

4-215 218
Sarvamangala, G.: Design and development of a database using
CS/ISIS: An analytical-synthetic classification approach.
Orig.en. Libr. Sci. & Doc. Inf. Stud. Vol 27, No 3, 1990.
p.173-182, 2 refs.

22 Elements of CS & T

See also 4-294

4-216 222
Browne, G.: Scope notes for LISA subject headings. Orig.en.
Online Review Vol 16, No 1, 1992. p.3-19, 17 refs.
Scope notes are added to some subject headings in thesauri to
make their scope, meaning, usage, and history clearer. In the
first edition of LISA: Online User Manual, scope notes are
used for seven message types and in one case fifteen note pat-
terns are used to express the same meaning. In the second
edition notes are expressed more consistently, and are mainly
used to indicate indexing errors. Other thesauri are compared
briefly. (Author)

4-217 222; 242
Ciganik, M.: From key words and phrases to relationally-system-
ized entity term. Orig.sk. Kn. ved. Inform. Vol 22, No 6, 1990.
p.241-252, 11 refs.

23 Construction of CS & T

See also 4-084, 4-109

4-219 232
Wozniak, J.: Designing the information retrieval language as
element of an information retrieval system. Orig.pl.
Zag. Inform. Nauk Vol 56, No 1, 1990. p.201-211

4-220 233
Kovacova, S.: An object-attribute language - one of the ap-
proaches to the construction of an information retrieval lan-
guage for data-oriented information systems. Orig.sk.
Kn. Ved. Inform. Vol 23, No 3, 1991. p.97-101, 6 refs.

4-222 234
Bielicka, L.A.; Sclbor, E.: Linguistic tools used in data bases.
Orig.pl. Zag. Inform. Nauk 57(1990)No 2, p.109-145, 21 refs.

4-223 234
Gendina, N.I.: Linguistic support of the automated library sy-
stem. Orig.ru. Alma-Ata, Kazakh. Rep.: GILIM 1991. 221p.
Textbook for library and information specialists and students.
Contents: Information-retrieval language, structure and func-
tions: Basic types of IRL; Indexing, types, principles, and
quality control; Linguistics of automated library systems.

24 Relationships

See also 4-059, 4-062, 4-217, 4-240

4-224 247
Brathwaite, K.S.: *Relational databases: concepts, design, and administration*. Orig.en. London: McGraw-Hill 1991. 294p., J. Ranade TBW Series, ISBN 0-07-007242-3

A textbook for the mainframe computing professional. Chapters are devoted to introduction; aspects such as structure, design and retrieval concepts; languages such as ORACLE, SQL and DB2; relational databases and older DBMS; data administration and technical support. Concludingly Relational DBMS are compared with each other. Selective bibliography.

4-225 247
Scherff, J.: *Gewährleistung der semantischen Datenintegrität von relationalen Datenbanken*. (Guaranteeing semantic data integrity of relational databases) Orig.de. HMD - Handbuch d. modernen Datenverarbeitung 29(1992)No 163, p.62-79, 12 refs.

25 Numerical Taxonomy

See also 4-206

4-226 251
Kaganskii, V.L.: *Classification, area separation and mapping of semantic spaces*. Orig.ru. Nauchno-tekhn.inform., Ser.2 Vol 25, No 3, 1991. p.1-8, 24 refs.

4-227 258-26
Faulon, J.-L.: *On using graph-equivalent classes for the structure elucidation of large molecules*. Orig.en. J.Chem.Inform.Comput.Sci. Vol 32, 1992. p.338-348, 28 refs.

26 Notation, Codes

4-228 263
Jones, R.: *The future of Braille access to math and scientific notation*. Orig.en. EDUCOM Review, July/August (1992) p.46-49. Discusses alternatives to Braille for scientific usage.

4-229 267
Sosinska-Kalata, B.: *Notation systems in information retrieval languages. An attempt at presenting the typology*. Orig.pl. Zag.Inform.Nauk Vol 57, No 2, 1990. p.21-44, 12 refs.

4-230 267; 365
Guenther, R.S.: *The development and implementation of the USMARC format for classification data*. Orig.en. Inform.Technol. & Libraries Vol 11, No 2, 1992. p.120-131, 12 refs.
The potential uses within an online system and the development as one of the USMARC standards is discussed. The paper presents a summary of the fields in the USMARC format for classification data and outlines its possible implementation. Currently an experiment is conducted at the Library of Congress to create USMARC classification records using a database for the classification of materials in the social sciences.

27 Revision, Updating, & Maintenance

See also 4-293, 4-294, 4-299, 4-300

28 Compatibility and Concordance

See also 4-087, 4-297

4-231 284; 487; 678
Greif, S.: *SV - Gemeinnützige Gesellschaft für Wissenschaftsstatistik mbH im Stifterverband für die Deutsche Wissenschaft: Patente und Wirtschaftszweige: Zusammenführung der Internationalen Patentklassifikation und der Systematik der Wirtschaftszweige*. (Patents and economic branches: Matching the International Patent Classification with the Classification System of the Economic Branches) Orig.de. Köln, etc.: Heymann 1990. XII, 375p., ISBN 3-452-21706-X

The book consists of two parts: Pt.1 describes the indicator function of patents according to areas, efficiency of the indicator, and foundation and application of it. Pt.2 is concerned with the mapping of the International Patent Classification with the Classification for Economic Branches (of the Federal Office for Statistics) with subchapters on the aims, the methodology, the results, and the possibilities for implementations and enlargements. Tables are given, appendices, and a bibliography.

4-232 284; 2858-51/4
Honeyman, J.P.: *Vocabulary mapping of subject headings of medical and health-related government documents at the University of Massachusetts Medical Center Library*. Orig.en. Reference Librarian Vol 32, 1991. p.229-245, 27 refs.

Description of a project in which the Massachusetts University Medical Centre Library is embarking. It will identify, integrate and map a subject-heading vocabulary of medical and health-related documents.

3 CLASSING AND INDEXING

31 Theory of Classing and Indexing

See also 4-036, 4-063, 4-116, 4-137-139

4-233 311
Laur, W.: *Bibliothekarische und dokumentarische Sacherschließung auf gemeinsamem Weg in die Zukunft? (Subject analysis for librarians and documentalists together into the future? A documentalists point of view.)* Orig.de. Z.Bibl.wes.Bibliogr. 53 (1991), Special issue, p.141-147, 1 ref.

4-234 311
Jüngling, H.: *Bibliothekarische und dokumentarische Sacherschließung auf gemeinsamem Weg in die Zukunft? Aus bibliothekarischer Sicht. (Subject analysis for librarians and documentalists together into the future? A librarian's point of view)* Orig.de. Z.Bibl.wes.u.Bibliogr. 53(1991), Special issue, p.148-169, 20 refs.

4-235 311; 44; 448
Chan, L.M.; Hodges, T.: *Subject cataloging and classification. The late 1980s and beyond*. Orig.en. In: Coman, M. (Ed.): *Technical Services Today and Tomorrow*. Englewood, CO: Libraries Unlimited 1990. p.74-85, 19 refs.
The chapter deals with methods of subject cataloging, subject analysis, and representation of library materials and outlines the practice of subject searching in library catalogs after the introduction of online catalogs. The vocabulary control methods in the Library of Congress Classification and LCSH are described and strategies for the use of these systems in online retrieval situations are outlined.

4-236 311
Todd, R.J.: *Academic indexing: what's it all about?* Orig.en. Indexer Vol 18, No 2, 1992. p.101-104, 19 refs.
While the literature identifies some broad approaches to subject analysis there is little supporting empirical evidence and few attempts to explicate any specifiable procedures. A productive step forward with indexing research would be to begin by examining how indexers actually undertake the process of subject analysis and to explore systematically factors that guide and influence this process. This would shed some light on a theory of subject analysis, clarify some of the central concepts of indexing, and provide an intelligent knowledge-base for effective, academic indexing practice. (Author)

4-237 313
Ménillet, D.: *Grilles d'indexation et de préindexation; l'exemple de PASCAL. (Indexing and pre-indexing tables: the example of PASCAL)* Orig.fr. Documentaliste Vol 29, No 4-5, 1992. p.183-190, 4 refs.
Some tools developed by INIST for use by indexers of its PASCAL databank. Indexing tables were created by broad subject area that make it possible to identify the concepts treated in the documents. For each area, pre-indexing tables were then prepared in which the relevant terms are presented in an organized and structured manner so that they can be transcribed into the appropriate information language. These tables should be a fundamental step in knowledge base development. (Author)

4-238 316; 391
Weinberg, B.H.; Cunningham, J.A.: *Rates of assignment of thesaurus terms (Letter to the Editor)*. Orig.en. J.Doc. Vol 46, No 2, 1992. p.220-221, 5 refs.
On p.221 of this issue, this letter was answered by V.Diodato, the co-author of the paper in question (J.Doc. 47(1991)No.3, p.276-283) which gave rise to the 'surprise' of B.H.Weinberg.

4-239 317
Hutchinson, T.P.: *Self-indexing*. Orig.en. Indexer Vol 18, No 2, 1992. p.105-106, 4 refs.
An author gives his reasons for doing the indexing of his books himself.

4-240 318; 117; 241; 753
Kenper, A.; Moerkotte, G.: *Access support relations: An indexing method for object bases*. Orig.en. Information Systems Vol 17, No 2, 1992. p.117-145, 24 refs.
In this work 'access support relations' are introduced as a means for optimizing query processing in object-oriented database systems. The general idea is to maintain separate structures (dissociated from the object representation) to redundantly store those object references that are frequently traversed in database queries. The proposed access support relation technique is no longer restricted to relate on object (tuple) to an atomic value (attribute value) as in conventional indexing. Rather, access support relations relate objects with each other and can span over reference chains which may contain collection-valued components in order to support queries involving path expression, the best of which has to be determined according to the application-specific database usage profile. An analytical performance analysis of access support relations is developed. This analytical cost model

Is, In particular, used to determine the best access support relation extension and decomposition with respect to specific database configuration and usage characteristics. (Authors)

32 Subject Analysis

See also 4-003, 4-218, 4-301

4-241 321
Case, D.O.: Conceptual organization and retrieval of text by historians: the role of memory and metaphor. Orig.en. *J.Amer.Soc.Inform.Sci.* Vol 42, No 9, 1991, p.657-668, refs.

The article suggests how future models of text storage and retrieval can be informed by research on subject aspects of cognition; future designs may draw upon cognitive theories of categorization and metaphor to understand how users interact with text, both paper and electronic. The results from the study of 20 American historians imply the importance of metaphors for storage and retrieval of documents. (Author, abbr.)

4-242 323
Manecke, M.; Manecke, H.-J.: Erschließung und Strukturierung von Informationen aus unterschiedlichen Quellen; Beispiel: Buchhistorische Quellen. (Subject analysis and structuring of information from different sources. Example: Book history sources) Orig.de. *Nachr.Dok.* Vol 43, No 6, 1992, p.365-372, 4 refs.

To meet increasingly complex information services the existing IR systems for bibliographic and factographic data must be further developed into knowledge-based systems. The architecture of such systems must be based on very specific investigations of user and functional needs. The core of the conception presented are ideas on unified knowledge models in a system with information from and about differing book history sources. Models of content analysis and database structuring are described in detail. (Authors, amended)

4-243 324
Nahl-Jakovovits, D.; Jakovovits, L.A.: A content analysis method for developing user-based objectives. Orig.en.

Research Strategies Vol 10, No 1, 1992, p.4-16, 12 refs. The article explains content analysis, a method whereby statements taken from oral or written library user comments are labeled as particular speech acts. These speech acts are then categorized into the three behavioral domains: affective, cognitive, and sensorimotor, and used to construct user-based instructional objectives. (Authors)

4-244 324
West, A.N.: Primary process content in the King James Bible: the five stages of Christian mysticism. Orig.en. *Comput.Humanity* Vol 25, No 4, 1991, p.227-238, 35 refs.

Freud described primary process thought as an archaic, global, non-temporal mode of consciousness in which logic and disbelief are suspended. Hypothetically, it is the form of awareness associated with mystical experiences. The Regressive Imagery Dictionary (Martindale, 1975) is a well-validated computerized content-analytic measure of primary process thought in natural language texts. The dictionary was used to assess mystic content in the King James Bible.

4-245 326
Goodier, J.: CAIN, a Computer Assisted INDEXing system. Orig.en. *Aslib Proc.* Vol 44, No 6, 1992, p.251-252

Paper presented at a joint meeting of the Aslib Biosciences Group and ALISSE entitled "New Dimensions in Agricultural Information", held in Reading on 1 Nov.1991. The CAIN indexing system was demonstrated. The paper gives some details of the operation of the system. Some comments on the practical and theoretical background are made. (Author)

4-246 328-51/4
Morrioni, E.; Mancini, C.; Minutoli, D.: Retrieval tools of databases in selected biomedical special libraries. Orig.it. *Bol. Inform.Assoc.Ital.Bibl.*, N.S. Vol 31, 1991, p.139-144, 8 refs.

Statistics on the use, efficiency and error rate of descriptor lists, thesauri, classification systems. It seems that from the viewpoint of users considering the modern storage media, as e.g. CD-ROM, the use of descriptor lists and thesauri may not be necessary, however, from the librarians point of view aiming at reliable retrieval results, thesauri must be available and must be kept up-to-date constantly.

33 Classing and Indexing Techniques

See also 4-002, -088, -089, -141, -142, -291, -368, -410, 4-442, -443, -448, -449

4-247 33.173
Rasmussen, L.: Selected linguistic problems in indexing within the Canadian context. Orig.en. *Indexer* Vol 18, No 2, 1992, p.87-91, 5 refs.

Takes into account the linguistic characteristics of Canadian English and of Canadian French as well as the problems involved in bilingual indexing because of the trend in the English language towards nominalization. (Author, abbr.)

4-248 335
Nesterov, P.V.; Benonogov, G.G.; Zelenkov, Yu.G.; Kuznetsov, B.A.; Pashchenko, N.A.: An interactive system for automated abstracting using a standard phrase dictionary. Orig.ru, transl.into en. *Nauchno-tekh.Inform.*, Ser.2, Vol 25, No 7, 1991, p.13-15
Linguistic and programming aspects of the REFERAT system are described. The system abstracts and indexes scientific documents using a dictionary of standard phrases and a dictionary of keywords and key phrases. It includes programs for executing these functions in an interactive mode. (Authors)

4-249 337
Darányi, S.: "The stem and the branches". Knowledge organization and syntax. A review of Tibor Horvath's thesis for candidate's degree, Pt.2. Orig.hu. *Könyvtári Figyelő* Vol 8, No 2, 1992/3, p.445-452, 5 refs.

The first part of the review was published in No 1-1992 of *Könyvtári Figyelő* (p.50-58). This part deals with the PRECIS indexing language and its application in Hungary, describing the indexing system developed by the staff members of the Országos Pedagógiai Könyvtár és Múzeum (Central Library and Museum of Education) for the indexing of literature in the field of education. The PRECIS syntax can be applied to different kinds of indexing units, e.g. free text, descriptors or keywords, the goal being the construction of a synthesized subject heading from the independent indexing elements, similar to a sentence in the natural language. Due to the peculiarities of the Hungarian language, suffixes as well as the transformation of predicates caused special problems. The reviewer presents excerpts from the thesis, providing some comments and explanations on the relevant parts. (Orig.abstract)

4-250 337; 448
Tonta, Y.: LCSH and PRECIS in library and information science: A comparative study. Orig.en. Urbana-Champaign, IL: University of Illinois 1992, 68p., 56 refs., Occasional Papers, No.194

Subject headings and PRECIS strings assigned for 82 titles are analyzed and the two major access systems are compared with respect to the number of entries, exhaustivity, and specificity of entries provided and the variety of subdivisions.

34 Automatic Classing and Indexing

4-251 341
Purcell, R.: Wanted: fully automated indexing. Orig.en. *Library Software Review* Vol 10, No 6n 1991, p.390-395, 21 refs.

An algorithm for automated indexing is outlined. The stages of indexing are analyzed and 3 language forms of indexing are explained. Computer-aided indexing and the components of an expert system for indexing are described. Highly inventive individuals might be able to show the way to further advancement.

4-252 342
Silva, W.T.da; Milldui, R.L.: Information indexing and retrieval with a belief function model. Orig.pt.

Ciência da Informação Vol 20, No 2, 1991, p.155-164, 13 refs. Proposal of a belief function model for automatic indexing and ranking of documents with respect to a given user query. The model is based on a controlled vocabulary, such as a thesaurus and on term frequency in each document. Each descriptor in this vocabulary is a term among its synonyms which has been chosen to be the index term. A descriptor can have a subset of broader, narrower and of related descriptors. They are not mutually exclusive, naive probabilistic models are not adequate. A belief function can still be defined over a subset of atonic descriptors, viz. those without narrower terms (denoted 'omega'). Subsets of 'omega' can be viewed as broader terms, or as related terms. Thus, the belief function over 'omega' can estimate the semantic content of a document. A weighted user query can be seen as another belief function. Since both functions are defined over 'omega', one can compute the conflict between them. The inverse of this computed conflict is a measure of agreement between the document and the user query. The authors propose that the set of documents be ranked by their agreement with the given user query.

4-253 343; 872
Rabitti, F.; Savino, P.: Automatic image indexing to support content-based retrieval. Orig.en. *Inform.Process. & Management* Vol 28, No 5, 1992, p.547-565, 14 refs.

The article presents a new approach for the automatic interpretation of the content of graphical and pictorial images and the creation of access structures based on this analysis. The automatic Indexation of images is necessary to support the access to a database of images, giving conditions on the semantic image content. The key aspect of the image analysis process is on the composition of objects, in terms of other objects, taking into account different interpretations and different levels of recognition. The image analysis process can be applied to images belonging to specific domains, described in advance to the system. Image analysis is performed in two steps: in the first step, simple objects are recognized starting from basic graphical/pictorial elements; in the second step, complex objects are recognized. (applying domain rules)

as compositions of simpler objects and different interpretations are generated. The image query language allows the user to express conditions on the objects to be found in the images, on their relative positions, on their interpretation and degree of recognition. A comprehensive example, based on 2D graphical images, is discussed, and the implemented prototype is described. (Authors)

4-254 34:3; 255
Thiel, T.J.: Automated indexing of document image management systems. Orig.en. Documentation Image Automation Vol 12, No 2, 1992. p.43-49

The need to manage the ever-increasing morass of paper more effectively and efficiently has led to the evolution and acceptance of optical disk electronic document image processing (DIP) systems. But converting information on paper to a DIP system requires labor-intensive indexing. This automation effort generally includes optical character recognition (OCR) and intelligent character recognition (ICR) to convert all or selected portions of the document base to ASCII characters and the use of full-text indexing and retrieval systems. Bar-coding is also being used to automate the document indexing step. Automated indexing with OCR/ICR and bar-coding is being effectively used in DIP systems. Several examples are presented. (Author)

4-255 34:31
Lomet,D.B.; Salzberg, B.: The hB-tree: a multiattribute indexing method with good guaranteed performance. ACM Transactions on Database Systems Vol 15, No 4, 1990. p.625-658, 19 refs.

4-256 34:32; 348
Pozhariskii, I.F.: Automatic document indexing (Case study of an automated geological information system). Orig.ru, Transf. into en. Nauchno-tekhn.inform.,Ser.2, Vol 25, No 10, 1991. p.5-13, 25 refs.

Automatic indexing of documents (AID) obtained from several information centers is described. AID includes standardization of lexical units of document search patterns to create conditions for quality information search. The Skobki operating system identifies single-word terms represented by various parts of speech, forms of word combinations, and assigns auxiliary rubricator codes to terms of space and time categories. The indexing system includes decomposition of compound words. Three prefixes, a word stem, and three inflections are identified and converted. The operation performances of two information systems with AID and intelligent (manual) indexing are compared. (Author)

4-257 34:32
Robredo, J.: Automatic text indexing: an improved and simple approach. Orig.pt. Ciencia da Informacao Vol 20, No 2, 1991. A modification of the computational-linguistic approach to automatic processing of textual information, based on the elimination of non-significant words is described. It has been tested and applied and became a component of the AUTOMINDEX System which is an integrating part of the System BIB/DIALOCO. Examples of application are given. (Author, abbr.)

4-258 34:38 pt
Braga Manfrim,F.P.: Representation of contents by the automatic indexing process of full texts in Portuguese language. Orig.pt. Ciencia da Informacao Vol 20, No 2, 1991. p.191-199

4-259 34:39
Nesterov,V.P.; Belonogov, G.G.; Kuznetsov, B.A.: Computer linguistics at VINITI. Orig.ru. Nauchno-tekhn.inform.,Ser.2, No 5, 1991, p.1-3
Review of major computer linguistics projects carried out at VINITI. These include the development of an industrial system for automatic identification and correction of spelling errors, a system for automatic indexing of documents, an experimental system for automatic indexing and one for automatic abstracting.

4-260 34:4
Buchan, R.L.: Quality indexing with computer-aided lexicography. Orig.en. Information Services & Use Vol 12, No 1, 1992. p.77-84, 40 refs.

With the aid of computer-aided lexicography, both indexing and indexing tools can provide standardization, consistency, and accuracy, resulting in greater quality control than ever before. A brief survey of computer activity in indexing is presented with detailed illustrations from NASA activity. Applications from techniques mentioned, such as Retrospective Indexing (RI), can be made to many indexing systems. In addition to improving the quality of indexing with computers, the improved efficiency with which certain tasks can be done, is demonstrated. (Author)

4-261 34:7; 356
Mhashi,M.; Rada,R.; Beck,E.; Michallidis,A.; Zeb,A.: Computer-supported discussion and annotation. Orig.en. Inform.Process. & Management Vol 28, No 5, 1992. p.589-607, 40 refs.
Discussion and annotation are two important activities in col-

laborative work with documents. HERD (Hypertext Environment for Reasoned Discourse) is an issue-based information system which effectively supports informal discussions about requirements documents. HERD was used to support a discussion; while in another case study, HERD was used during annotation of an online textbook. The hypothesis was that the processes of annotation and discussion are sufficiently similar that a discussion system could support annotation. Although HERD provided a useful environment for discussion it was not especially suitable for annotation, because it did not allow users to directly point to the document which was being annotated... A system called MUCH (Multiple Users Creating Hypertext) was developed to support collaborative authoring. The MUCH system supports document creation and includes features for 'discussing', 'authoring', 'annotating', and 'document reuse'... The two systems were compared and the data of discussion and annotation case studies were analyzed. (Authors, abbr.)

4-262 34:7; 752
Coral, L.: Indexing and retrieving special materials in online catalogues. Orig.en. Intern.Cataloguing & Bibliographic Control Vol 21, No 2, 1992. p.29-31

4-263 34:7; 753
Stadler, U.: Die Erweiterung von Online-Katalogen durch die Aufnahme von Angaben aus Inhaltsverzeichnissen und Registern mit dem Ziel einer besseren sachlichen Erschließung. Lösungsansätze unter Berücksichtigung des "Subject Access Project" der Syracuse University. (Enhancing online catalogues by adding entries from contents lists and indexes for better subject indexing. Approaches to solutions considering the Syracuse University SAP work) Orig. de. Köln: FHB 1992.

4-264 34:8
Geus, D.de; Roosmalen, M.van: Practical experiences ...: automated classification control. Orig.nl. Open Vol 23, No 7/8, 1991. p.262-265

Report on experiences with an automated system for additions and amendments to the indexing of newspaper cuttings in the offices of the Dutch "De Volkskrant" newspaper. The subject file uses some 3,000 headings from the UDC. It requires constant updating.

4-265 34:8; 355
Losee, R.M.: A Gray Code based ordering for documents on shelves: Classification for browsing and retrieval. Orig.en. J.Amer.Soc.Inform.Sci. Vol 43, No 4, 1992. p.312-322

A classification system is proposed that can classify documents without human intervention. A measure of classifier performance is developed, and used to evaluate experimental results comparing the distance between subject headings assigned to documents given classifications from the proposed system and the Library of Congress Classification system. (Author, abbr.)

4-266 34:8
Wang,M.Q.; Hirschberg, J.: Automatic classification of intonational phrase boundaries. Orig.en. Computer Speech & Language Vol 6, No 2, 1992. p.175-196, 32 refs.

The relationship between the intonational characteristics of an utterance and other features inferable from its text represents an important source of information both for speech recognition, to constrain the set of allowable hypotheses, and for speech synthesis, to assign intonational features in predicting the location of one particular intonational feature - intonational phrase boundaries - in natural speech. The corpus for this investigation is 298 utterances from the 774 in the ARPA-collected Air Travel Information Service (ATIS) database. For statistical modelling, classification and regression tree (CART) techniques were employed. Success rates of just over 90% were achieved. (Authors, abbr.)

35 Manual and Automatic Ordering

See also 4-072, 4-265 (Shelflisting)

4-267 35:4
Boyce, B.R.; Stowe, M.: A brief investigation of U.S. Superintendent of Documents filing practice. Orig.en. Government Publ.Rev. Vol 18, No 4, 1991. p.347-352, 5 refs.

Describes an automated programme to produce a shelf list of Superintendent of Documents Classification arranged publications by sorting them on the components of their SuDoc numbers. A survey of 139 depository libraries concerning their SuDoc filing procedures produced 87 usable responses, for a return rate of 64%, 39%, or 34%, file all numbers before all letters with some variation on the 2nd level, 48%, or 42%, file all letters before numbers with small variations on the 2nd level. The remaining 13%, or 11%, utilize a mixed filing system, making use of an order based upon the components of the notation rather than their alphabetic or numeric characteristics. (Authors)

356 Hypertext/Hypermedia

See also 4-261

4-268 356.02
 Bogaschewsky, R.: Hypertext-/Hypermedia-Systeme - Ein Überblick. (Hypertext/Hypermedia systems - a survey) Orig. de. Informatik Spektrum Vol 15, No 3, 1992. p.127-143, 112 refs.
 Survey on Hypertext-/Hypermedia-systems and applications. Important parts of Hypertext systems are shown. Selected systems and developments are presented with their essential characteristics in the frame of a rough classification. Some problems associated with the implementation of hypertext-systems are addressed. Finally it is attempted to sketch the possible future of hypertext/Hypermedia. New application possibilities are seen especially in the integration of hypertext and knowledge-based systems, or in utilizing hypertext-systems for knowledge acquisition which are perhaps looked at as expert systems. (Author, transl.)

4-269 356
 Carlson, P.A.; Slaven, M.: Hypertext tools for knowledge workers. The next frontier: Tools that teach. Orig. en. Information Systems Management Vol 9, No 2, 1992. p.53-61, 7 refs.

4-270 356
 Nesterov, A.V.: Hypertext: A tensor approach. Orig. ru, transl. into en. Nauchno-tekhn. Inform., Ser. 2, Vol 25, No 8, 1991. p.22-26, 8 refs.
 The paper is published in an unconventional form as submitted by the author since its text itself is a sample of the "hypertext approach". A tensor is a mathematical concept: a quantity defined by numbers and laws of their transformation. Likewise, the author "defines" a hypertext by types of its nodes (text, fact, or comment) and rules for manipulating them. This article has not been edited to avoid distorting the author's intent. (Orig.abstr.)

4-271 357
 Bradley, N.: SGML concepts. Orig. en. Aslib Proc. Vol 44, No 7/8, 1992. p.271-274
 The abbreviation SGML stands for Standard Generalized Markup Language. Markup refers to adding style and formatting information to text prior to publication. It is a Standard because SGML has been accepted and published by the ISO, and is not owned by any manufacturer or software vendor. It is Generalized because SGML is powerful and flexible, allowing it to be used in many applications. And it is a Language that embodies a specification for creation of a set of rules to define the structure of a document. SGML has been designed to easily cross incompatible computer platforms, and its "open" nature allows for relatively simple access and manipulation of an SGML conforming document by both people and computers. Above all, SGML proposes a new way of thinking about document creation and presentation, by shifting document style considerations to the publication process rather than the creation process. This is done by dividing the document into names, logical elements, to which any style can be later applied. A by-product of this approach is the effective creation of a flexible database, providing further access to the data for information retrieval or for re-publication. (Author)

4-272 357
 Dasser, S.: ODA - La nouvelle architecture de documents. (ODA - The new document architecture) Orig. fr. Tech. Mitt. PIT Vol 70 No 2, 1992. p.51-63, 19 refs.

4-273 357
 Kircz, J.G.: Rhetorical structure of scientific articles: the case for argumentational analysis in information retrieval. Orig. en. J. Doc. Vol 47, No 4, 1991. p.354-372, 43 refs.
 In this paper the extent to which modern indexing and information retrieval research meets the needs and requirements of different types of readers is criticized. The main problem is identified as the assumption that knowledge contained in a scientific article can be represented by a semantic network only, and therefore can be manipulated by formal logic approaches. Complementary to this, a plea is made to start an argumentational analysis of the - highly structured - corpus of scientific articles (mainly in physics). Such an analysis might lead to an argumentational syntax which will enable the non-expert to browse through large quantities of electronically stored articles. A first attempt at such an approach is given. Furthermore the possible use of the SGML approach in relation to a hypertext environment for a possible application is discussed. (Author)

36 Coding

4-274 363
 Fan, D.P.; Curtsinger, J.M., Johnson, L., Kalkhar, S., John, J. St.: Unitized Data System: A new formalism for encoding and presenting data from the scientific research literature. Orig. en. J. Amer. Soc. Inform. Sci. Vol 43, No 5, 1992. p.371-383, 16 refs.
 Description of a unitized data system (UDS) for a scientific database where descriptions of individual experimental steps are stored as separate text based subunits together with appropriate linking signals. (Authors, abbr.)

365 Encoding of Catalogue Data

See also 4-143, 4-230

37 Reclassification

4-275 374
 Maccaferri, J.T.: Managing authority control in a retrospective conversion project. Orig. en. Cat. 6 Classif. Quart. Vol 14, No 3/4, 1992. p.145-167, 45 refs.
 Authority control is an essential component of the retrospective conversion process. Libraries contemplating authority control in this context need to consider the source of the converted records, the nature of the collection being converted, when and by whom the source records were cataloged, and the extent to which the converted records should approach local authority control standards. Choices for processing these records include manual and machine techniques or a combination of the two, while the actual work may be done in-house, by a vendor, or by dividing the work between local staff and a vendor. Decisions on which techniques and approaches to use will depend on local resources and standards. (Author)

38 Index Generation and Programs

4-276 381
 Parsons, J.: Finding your way around the information maze: indexes as a signpost to information retrieval. Orig. en. Inform. Management & Technol. Vol 25, No 3, 1992. p.120-122
 Consideration of some of the choices for computerization of indexes, including word processing, records administration systems, and text retrieval packages. Some of the general concepts relating to indexes are also covered, including various approaches to indexing such as subject, word, and hierarchical indexing, and the use of coordinated themes. The options available within each type of computerization of indexing are also specified. (Author)

4-277 382
 Dodd, J.A.: F&S Index plus text on compact disc: Added value for a familiar resource. Orig. en. CD-ROM Professional Vol 5, No 6, 1992. p.84-88, 3 refs.
 F&S Index plus Text on Compact Disk was introduced by Predicasts in 1991. The "plus Text" results by linking abstracts, excerpts, and full-text records from Predicasts' PROMT database with F&S Index entries. (Author, abbr.)

4-278 383
 O'Brien, J.K.: Creating keyword indexes using PC-File Plus. Orig. en. Libr. Software Rev. Vol 10, No 2, 1991. p.105-109
 Description of the work undertaken at the Owen Science and Engineering Library, Washington State University, to create a keyword index to the National Library of Medicine's Quick Bibliography Series using the PC-File Plus software.

387 Software

See also 4-006, 4-066

4-279 387.99
 Otis, A.: A reference model for object datamanagement. Computer Standards & Interfaces Vol 13, No 1-3, 1991. p.19-32

4-280 387
 Zbornik, S.; Glasen, F.: ESURS: ein System zur Übersetzung von Retrievalsprachen. (ESURS: a system for translating retrieval languages) Orig. de. Nachr. Dok. 42(1991)No 4, p.271-281, refs.
 ESURS translates a number of the OCL retrieval commands into the commands used by DIALOG, STAIRS/MIKE, and DSO. ESURS uses techniques of compiler theory.

4-281 388-26
 Klein, D.J.; Mihalić, Z.; Plavšić, D.; Trinajstić, N.: Molecular topological index: A relation with the Wiener Index. Orig. en. J. Chem. Inform. Comput. Sci. Vol 32 1992. p.304-305, 15 refs.
 It is shown analytically that the recently introduced molecular topological index and the Wiener Index, known since 1947, are closely related graph-theoretical invariants for acyclic structures. (Author)

4-282 388-66
 Symondson, B.: The Consolidated Index to law reports. Orig. en. Indexer Vol 18, No 2, 1992. p.79-82
 Describes the history of law reporting by the Incorporated Council of Law Reporting for England and Wales and the procedure for preparing the consolidated index to The Law Reports. (Author)

39 Evaluation of Classing and Indexing

See also 4-102, 4-103, 4-238

4-283 391
 ISKO WC Content Analysis: User evaluation of information systems. ISKO-WC-CA Recommendation for Organization, R-01, Oct. 1992. Orig. en. Int. Classif. Vol 19, No 3, 1992. p.151-152
 The first recommendation of the International Society for

Knowledge Organization (ISKO), Working Group on Content Analysis discusses the following and recommends measures concerning the problems of evaluation by the users of information systems, system survival power and noise, system survival power and information loss, delegatability of a search order. A system in order to function properly needs to be supplemented and interpreted by an information specialist. (German version on pages 153-154 of that issue.)

4-284 391
Jones, J.W.: An alternative to precision. Orig.en. ASIS'91. Systems understanding people. Proc. 54th Ann. Meeting ASIS, Vol. 28. Washington, DC, 27-31 Oct. 1991. Medford, NJ: Learned Inform. 1991. p.102-105, 9 refs.
Presents a new measure of retrieval evaluation, called 'corrected precision', which attempts to refine the traditional precision measure by taking account of differences between users in their selectivity when judging the relevance of documents. Presents the formula for calculating corrected precision and brief remarks about its development and use, advantages and disadvantages, and summary statistics comparing the 2 from an empirical study of relevance. (Author)

4-285 392
Burgin, R.: Variations in relevance judgments and the evaluation of retrieval performance. Orig.en. Inform. Process. & Management Vol 28, No 5, 1992. p.619-627, 37 refs.
Investigation of the degree to which variations in relevance judgments affect the evaluation of retrieval performance. Four sets of relevance judgments were used to test the retrieval effectiveness of six document representations. In no case was there a noticeable or material difference in retrieval performance due to variations in relevance judgment. Additionally for each set of relevance judgments, the relative performance of the six different document representations was the same. Reasons why variations in relevance judgments may not affect recall and precision results were examined in further detail. (Author)

4 ON UNIVERSAL SYSTEMS

41 On Universal CS & T in General
See also 4-071, 4-075

42 On the Universal Decimal Classification
See also 4-054, 4-061, 4-092, 4-094

4-286 42.119
Haarala, A.R.: The role of UDC in Finnish classification policy. Orig.en. Int. Cataloguing & Bibliogr. Control Vol 20, No 3, 1991. p.43-46, 6 refs.
The use of the UDC in Finnish library catalogues and in online retrieval systems are reviewed and the state of classification research in Finland and the work of the System Development Task Force are pointed out.

4-287 42.213
Hennes, H.-J.: Neues Management für die Dezimalklassifikation. (New Management for the UDC) Orig.de. Nachr. Dok. Vol 43, No 6, 1992. p.408-409

4-289 42.213
Mendoca, A.M.de; Poni, C.: Subject index: the experience of USIMINAS Technical Information Center in the system implementation in microcomputer. Orig.pt. Ciência de Informacao Vol 20 No 2, 1991. p.238-240, 4 refs.
The paper describes the development and implementation by microcomputer of the subject index used for information storage and retrieval through UDC at Usiminas Technical Information Center. The index is composed of terms and their classifications, additional information (explanatory notes, information about process/products, etc) and cross-references, in a total of 9,350 files. Programmed dBase III was used, in a Nexus 2 600 microcomputer of Scopus. Access to the system is made through menus, allowing searches by terms, classification and filing number; changes (inclusion, modification or data detections); and listings. The systematization of job development and the benefits arising from automation are discussed. (Author)

4-290 42.287
Himanka, J.; Kautto, V.: Translation of the Finnish abridged edition of UDC into general Finnish subject headings. Orig.en. Int. Classif. Vol 19, No 3, 1992. p.131-134, 11 refs.
A method to convert assigned UDC numbers into subject headings is examined. The method consists of two phases. In the first phase, a dictionary is created that maps UDC numbers to subject headings, and in the second one this dictionary is mechanically applied to convert the bibliographic databases. The first phase is tested with 15 different parts of the UDC, with translation success and problems recorded. The problems of each part are scrutinized, and three main types of UDC classes are described: the synthetic, the shallow enumerative and the deep enumerative. The time spent in the first phase is found

tolerable, and the initial question of translatability of the whole UDC is considered in the light of the results. (Authors)

4-291 42.333
Mandryka, T.N.; Shcherbina-Samojlova, I.S.: Quality analysis of indexing the domestic bibliographic units according to the Universal Decimal Classification. Orig.ru. Nauch. tekhn. Bibl., No 6, 1991. p.23-25, 4 refs.

43 On the Dewey Decimal Classification (DDC)
See also 4-057, 4-091

4-292 43.6-93
Redfern, B.: On first looking into Dewey Decimal Classification 20, Class 789: a review article. Orig.en. Brfo Vol 28, No 1, 1991. p.19-28, 11 refs.

44 On the Library of Congress Classification
See also 4-081

4-293 44.272
Cathoun, K.; Oskins, M.: Rates and types of changes to LC authority files. Orig.en. Inform. Technol. & Libraries 11(1992) No 2, p.132-135, 2 refs.

448 On the Library of Congress Subject Headings
See also 4-218, 4-250

4-294 448.273
Drabenstott, K.M.: The need for machine-readable authority records for topical subdivisions. Orig.en. Inform. Technol. & Libraries Vol 11, No 2, 1992. p.91-104, 25 refs.

4-295 448
Schnelling, H.: Book review of Studwell, W.E.: Library of Congress Subject Headings: Philosophy, practice and prospects. New York - London: Haworth Press 1990. 120p. Orig.en. Int. Classif. Vol 19, No 3, 1992. p.166

45 On the Bliss Classification (BBC)
See also 4-053

46 On the Colon Classification (RCC)
See also 4-079

48 On Other Universal Systems
See also 4-444

4-297 485
Pleuß, A.: ASB: ein trostloser Zustand: die Sachklassifikation tritt auf der Stelle. (ASB, in a miserable state: subject classification does not move forward) Orig.de. Buch u. Bibliothek Vol 43, 1991. p.853

4-298 485.06
Hoffmann, U.; Schmitz, H.K.: RSWK und SWD an Öffentlichen Bibliotheken. Kolloquium in Düsseldorf. (Colloquy in Düsseldorf on the Rules for Subject Cataloguing and the Standard Subject File) Orig.de. Bibliotheksdienst Vol 26, 1992. p.34-37

4-299 485.272
Lehmann, K.: Einzelfragen der Überarbeitung der KAB/E. (Some revision problems of KAB/E) Orig.de. Bibliotheksinfo Vol 1, 1991. p.613-618

4-300 485.272
Jonzeck, M.; Lehmann, K.: Zur erneuten Überarbeitung der KAB/E. (On renewed revision of the KAB/E) Orig.de. Bibliotheksinfo Vol 1, No 5, 1991. p.310-312

4-301 485.328-39
Hinweise zur Klassifizierung nach KAB/E. (Hints for classing according to KAB/E) Orig.de. Bibliotheksinfo Vol 1, No 4, 1991 p.249-251

4-302 485.6834
Diener, H.; Lehmann, K.: Neue KAB/E-Untergruppen M 032 und M 033. (New subdivisions in KAB/E) Orig.de. Bibliotheksinfo Vol 1, No 5, 1991. p.312-314

4-303 486
Gendina, E.I.: The Russian Rubricator: A unified system of classificatory indexing languages. Orig.en. Int. Classif. Vol 19, No 3, 1992. p.126-130, 3 refs.
In the early 80's a common nation-wide automated scientific and technical information system with the Russian acronym GASNTI was developed in the then Soviet Union of which one component was a classification system called Rubricator. This system is still in use in Russia and is described in detail: its main classes are listed and also its Common Auxiliaries. Its structure is explained as well as its synthetic features and an example is included of class 20: Informatics.

See also 4-231

5 ON SPECIAL OBJECTS CS

4-305 5192
Cuzenda, L.; Wade, A.E.: A taxonomy of standards. *Computer Standards and Interfaces* Vol 13, No 1-3, 1991, p.65-70, 1 ref.

4-306 5265
Petitjean, M.: Applications of the radius-diameter diagram to the classification of topological and geometrical shapes of chemical compounds. *Orig.en. J.Chem.Inform.Comput.Sci.* Vol 32, 1992, p.331-337, 10 refs.

6 ON SPECIAL SUBJECTS CS & T

61 On CS & T in the Form and Structure Area 1

4-307 618
Sutter, E.: Standardization - An international classification for standards. *Orig.fr. Documentaliste* Vol 29, No 4-5, 1992, p.221-223

The International Standards Organization will be publishing an international standards classification which will come into use from 1994. The objectives and structure of this classification is described.

4-308 6194
Kehoe, A.; Parker, G.A.: An IKB defect classification system for automated industrial radiographic inspection. *Orig.en. Expert Systems* Vol 8, No 3, 1991, p.149-157, 14 refs.

The IKB defect classification system presented is based on a hierarchical frame-based knowledge representation and a backward chaining production rule system. Examples of the frame structures, frame taxonomies and the data-driven procedures, which maintain the knowledge base are given, along with an outline of the defect classification rules and the inference mechanism for dealing with uncertainty by means of confidence factors. (Authors, abbr.)

64 On CS & T in the Bio Area 4

4-309 648
Hendricks, T.C.: Langual. An automated method for describing, capturing and retrieving data about food. *Orig.en. World Rev.Nutr.Diet.* Vol 68, 1992, p.94-103

4-310 649
Gayle, P.; Stoss, F.W.: Environmental terms and phrases: a suggested list. *Orig.en. Database* Vol 14, No 4, 1991, p.22-26

65 On CS & T in the Human Area 5

651/4 On CS and T in the Medical Sciences

See also 4-040

4-311 651/4
Bronson, R.J.: NLM's MeSH vocabulary file. *Orig.en. Medical Reference Services Quart.* Vol 11, No 2, 1992, p.47-57
The following printed publications list the MeSH headings: The Annotated Alphabetic List, the Tree Structures, the Permuted MeSH, the Medical Subject Headings Supplementary Chemical Records, and the "Black and White MeSH", which is shipped as part of an Index Medicus subscription. An online database is available which combines the features of these publications and can provide useful information to searchers of NLM's computer databases. Describes the scope, searching strategies and special features of the online MeSH Vocabulary File. (Author)

4-312 656; 88-56
Kuznetsov, S.O.: The complexity of classifying in education based on the matching up of the majority of attributes. *Orig.ru. Nauchno-tekhn.Inform., Ser.2, No 9, 1991, p.8-15, refs.*

67 On CS & T in the Econ. & Production Area 7

4-313 6723
Hendley, T.: Workflow management software. *Orig.en. Inform.Management & Technol.* Vol 25, No 4, 1992, p.170-174
Report on the UKAIM Seminar on Workflow Management Software and presentation of a classification of workflow systems.

676 On Commodity and Product CS

See also 4-231

4-314 6764
Barbe, M.: Appelation et classification des papiers. *Orig.fr. ARBIDO-R* Vol 7, No 3, 1992, p.75-82
There exist thousands of paper qualities and fiberproducts. Paper classification is not easy, the present article attempts to show this. It also offers many relevant definitions.

68 On CS & T in the Science & Inform. Area 8

4-315 6825.2
Wasowitz, L.: (Book review of) *Centre Terms: A thesaurus for use in rare book and special collections cataloging*. Prep.by Bib-Tlogr. Standards Comm. (ACRL/ALA). Chicago: Assoc.of College & Res.Librs.1991. VII, 78p. *Libr.Quart.* 62(1992)No 3, p.363-365

4-316 6817
Korennoi, A. A.: *Scientometrics classification of research groups*. *Orig.en. Int.Inform., Commun.& Educ.* Vol 11, No 1, 1992, p.13-25, 10 refs.

4-317 6833
Farrés, J.: *Classifying electronic data interchanges*. *Orig.en. Comput.Standards & Interfaces* 14(1992)No.1, p.13-21, 12 refs.
Some general criteria are presented which allow many concurrent standards for EDI, document marking, message interchange, etc. to be classified in a homogeneous framework. At the same time, the same criteria provide simple guidelines on how to identify and analyse the user exchange requirements leading, frequently, to the right EDI choice. (Author, abbr.)

4-318 683
Nieneyer, St.: *Arbeitskreis Systematik legt wichtige Ergebnisse vor*. (The Working Group on Classification presents important results). *Orig.de. Neue Bäch* (1991)p.500-502
The Groups work on 'computer technology' and 'amateur work' (basteln) of the ASB classification system are introduced and presented.

4-319 6842
Ang, J.: *A classification of advanced office systems to aid in their development*. *Orig.en. Information & Management* Vol 23, No 3, 1992, p.115-122, 78 refs.

Building on previous work, a classification of office systems was developed using both, the level of support and the underlying conceptual framework as discriminating dimensions. (Author, abbr.)

4-320 6852
Kunanz, A.: *Erstellung eines Thesaurus für eine Kongreß-Datenbank*. (Thesaurus elaboration for a congress database) *Orig.de. Hannover, DE: FHS, FB BID; Thesis* 1991. 40p.

69 On CS & T in the Humanities Area 9

See also 4-078

4-321 6918
Bies, W.: (Book review of) *Fachsystematik und Einzelsprachensystematik des Instituts für Allgemeine Sprachwissenschaft d. Westfälischen Wilhelms-Universität Münster*. Münster 1989, 3rd ed., 305p. *Orig.en. Int.Classif.* 19(1992)No 3, p.166-8, 2 refs.

4-322 6918
Hosaka, J.; Takezawa, T., Ehara, T.: *Classification of conjunctive postpositions in spoken language towards speech recognition*. *Orig.en. Literary & Linguistic Computing* Vol 6, No 4, 1991, p.253-258, 9 refs.

A classification of postpositions for spoken Japanese speech recognition based on empirical data is proposed.

694 On CS in the Arts

See also 4-041, 4-067

4-323 6944
Gnam, M.: *Das Fachgebiet Kunst in der Systematik. Vergleichende Betrachtung von Systematiken hinsichtlich Struktur und Verwendbarkeit in Bibliotheken*. (Classification of the subject field "arts". Comparative investigation concerning structure and applicability of classification systems in libraries). *Orig.de. Stuttgart, DE: FHS Bibliothekswesen; Thesis* 1992.

7 CLASSIFICATION AND LANGUAGE

71 General Problems of Natural Language

4-324 711
Burger, H.G.: *Roget, Darwin, & Bohr: Parallelizing evolutionary diversification with conceptual classification*. *Orig.en. Int.J.Lexicography* Vol 4, No 1, 1991, p.23-67, 60 refs.

An ideal word-system must actively scan the real-world's occupations. Following Niels Bohr's 'complementarity', conceptual sequencing requires the segregation of structural form from processual words. Each environmental impact should be 'binarized' as the immediately preceding transitive plus the addendum. Thereby all fall into branched sequences. Such a 'cladistic' system reproduces causality, and enables traceability, hence environmental maneuverability. Just such a system, "The Wordtree", has now been published. Roget's Thesaurus will remain a brilliantly useful, modestly updatable arrangement of synonyms, desirable for those who wish to describe the world but not to engineer it. (Author, abbr.)

715 Artificial Intelligence

See also 4-030

4-325 715; 757
Barth, G. et al.: Künstliche Intelligenz. Perspektive einer wissenschaftlichen Disziplin und Realisierungsmöglichkeiten. (Artificial Intelligence. Perspectives of a scientific discipline and possibilities for its realization). Orig.de. *Informatik-Spektrum* 14(1991)p.201-206

4-326 715; 757
Gillman, P.: Book review of Ford, N.: Expert systems and artificial intelligence: An information manager's guide. London: Library Assoc. 1991. XIV, 277p. J.Doc. 48(1992)No 2, p.241-242

4-327 715
Sadovskij, V.N.; Kostjuk, V.N. (Eds.): Artificial intelligence and knowledge organization problems: Collection of scientific papers. Orig.ru. Moskva: USSR Academy of Sciences Institute for System Studies, VNIISI 1991. 108p., Sbornik Trudov Vyp.8, ISBN 5-201-09945-9

Some actual problems of artificial systems elaboration are considered. General methodological questions and questions of working out special nonclassical logics which can be effectively used in artificial intelligence systems are discussed. The authors offer some approaches to solving different engineering and system tasks arising in designing those systems. (Authors)

4-328 715; 179
Pospelov, D.A.; Levitin, K.E. (Eds.): The future of artificial intelligence: Collection of papers and statements of Russian and foreign scientists. Orig.ru. Moskva: Nauka 1991. 302p.

72 Semantics

See also 4-031

4-329 725
Ciganik, M.: A useful kernel representation of a text. Orig.sk *Kniznice a informacie* Vol 24, No 10, 1992. p.417-424, 5 refs.

4-330 725; 08
Sowa, J.F. (Ed.): Principles of semantic networks. Explorations in the representation of knowledge. Orig.en. San Mateo, CA: Morgan Kaufmann Publ. 1991. 582p., ISBN 1-55860-088-4

The 19 "chapters" (each paper being considered a chapter) are arranged in the following three sections: (1) Issues in Knowledge Representation, (2) Formal Analyses, (3) Systems for Knowledge Representation, each with an introduction.

4-331 Woods, W.A.: Understanding subsumption and taxonomy: A framework for progress. - 4-332 Schubert, L.K.: Semantic nets are in the eye of the beholder. - 4-333 Shastri, L.: Why semantic networks? - 4-334 Shapiro, St.C.: Cables, paths, and "subconscious" reasoning in propositional semantic networks. - 4-335 Sowa, J.F.: Toward the expressive power of natural language. - 4-336 Wilensky, R.: Sentences, situations, and propositions. - 4-337 Thomason, R.H.; Touretzky, D.S.: Inheritance theory and networks with roles. - 4-338 Stein, L.A.: Extensions as possible worlds. - 4-339 Selman, B.; Levesque, H.J.: The tractability of path-based inheritance. - 4-340 Crawford, J.M.; Kuipers, B.: ALL: Formalizing access-limited reasoning. - 4-341 Nebel, B.: Terminological cycles: Semantics and computational properties. - 4-342 Zadrozny, W.: Logical dimensions of some graph formalisms. - 4-343 MacGregor, R.: The evolving technology of classification-based knowledge representation systems. - 4-344 Brachman, R.J.; Guinness, D.L.; Patel-Schneider, P.F.; Resnick, L.A.; Borgida, A.: Living with classic: When and how to use a KL-One-like language. - 4-345 Kobsa, A.: Utilizing knowledge: The components of the SB-ONE Knowledge Representation Workbench. - 4-346 Hartley, R.T.; Coombs, M.J.: Reasoning with graph operations. - 4-347 Hewett, R.; Hayes-Roth, B.: Representing and reasoning about physical systems using prime models. - 4-348 Jacobs, P.S.: Integrating language and meaning in structured inheritance networks. - 4-349 Skuce, D.: A frame-like knowledge representation integrating abstract data types and logic. - An index concludes the work.

4-350 725; 08
Wilks, Y.: Book review of Jackoff, R.: Semantic structures. Cambridge, MA: MIT Press 1990. XIV, 322p. Orig.en. *Computational Linguistics* Vol 18, No 1, 1992. p.95-97

4-351 726
Machova, S.: Book review of Steele, J.: Meaning-text theory: Linguistics, Lexicography, and Implications. Ottawa: Univ. of Ottawa Press 1990. XI, 439p. Orig.en. *Computational Linguistics* Vol 18, No 1, 1992. p.108-111, 4 refs.

73 Automatic Language Processing

4-352 732
cRoy, S.W.: Using multiple knowledge sources for word sense discrimination. Orig.en. *Computational Linguistics* Vol 18, No 1, 1992. p.1-30

74 Grammar Problems

4-353 744
Gazdar, G. (Ed.): Special Issue on Inheritance: I. Orig.en. Computational Linguistics Vol 18, No 2, 1992. p.132-238

Inheritance mechanisms and their implications for description, theory, and processing have become an increasingly important research topic in computational linguistics. In two special issues of this journal, a sample of current research in this area is being presented. (from the Editors' Note).

4-354 Fraser, N.M.; Hudson, R.A.: Inheritance in word grammar. - 4-355 Zajac, R.: Inheritance and constraint-based grammar formalisms. - 4-356 Bouna, G.: Feature structures and nonmonotonicity. - 4-357 Daefemans, W.; De Smedt, K.; Gazdar, G.: Inheritance in natural language processing. - 4-358 Linden, E. van der: Incremental processing and the hierarchical lexicon.

4-359 744
Rakhilina, E.V.: Adjectives through the prism of nouns and vice versa. Orig.ru. *Nauchno-tekhn. Inform. Ser. 2*, No 9, 1991. p.26-8

75 Question-Answering Systems, Online Techn

751 General and Theoretical Problems

See also 4-202

4-360 751
Gel'bukh, A.F.: Minimization of the number of attempts in accessing the disc memory facility for vocabulary and morphological analysis. Orig.ru. *Nauchno-tekhn. Inform. Ser. 2*, No 6, 1991. p.15-18, 8 refs.

4-362 751; 754; 756
Chen, H.: Knowledge-based document retrieval: framework and design. Orig.en. *J. Inform. Sci.* 18(1992)p.293-314, 53 refs.

A semantic network structure was adopted to represent subject knowledge and classification scheme knowledge and experts' search strategies and user modelling capability were modelled as procedural knowledge. These functionalities were incorporated into a prototype knowledge-based retrieval system, Metacat. Description of the accomplishments with this system.

752 Online Catalogues

See also 4-262

4-364 752
Husain, Sh.; O'Brien, A.: Recent trends in subject access to OPACs: An evaluation. *Int. Class. 19(1992)N3*, p.146-5, 43 refs.

4-365 752
Kinnucan, M.T.: Fisheye views as an aid to subject access in online catalogues. Orig.en. *Canadian J. of Inform. Sci.* Vol 17, No 2, 1992. p.25-40, 35 refs.

There are many problems with subject access in online catalogues. One of the major problems is information overload. One kind of this occurs when the display consists of a lengthy segment of the subject index in which a single subject heading is followed by a bewildering array of subdivisions, qualifications, and phrases. This problem can be alleviated by presenting the subject index in a summary form that the user can expand to provide more detail as appropriate. Such an approach could be realized within the context of a direct manipulation style of user interface. In particular, a manner of displaying information called "fisheye views" could be applied to the subject index display. (Author)

4-366 752; 812
Tar, K.; Novak, I.: Subject authority control in an online catalogue for periodical articles and in the subject indexes of the printed versions. Orig. hu. *Könyvtári Figyelő* Vol 38, No 2, 1992. p.59-65, 5 refs.

The authors' solution to subject authority control in the Library Science Library's online catalogue MANCI is presented. The authority control of terms is based on a machine-readable database created from the library's printed thesaurus using the Micro-ISIS package, as well as a simple thesaurus software written in the ISIS-PASCAL language. Relying on the relations of the descriptors in the thesaurus database a reference-selecting program has also been written, by which the see and see also references are automatically selected. (Authors, abbr.)

753 Online Activities, Query Optimization

See also 4-240, 4-263, 4-380

756 Thesaurus/Classif.-based Queries

See also 4-140, 4-362

757 Expert Systems

see also 4-197, 4-325, 4-326

4-367 757; 99
Deschamps, P.B.: Standards for expert system tools. Supporting the technology's integration. Orig. en. *Information Systems Management* Vol 9, No 1, 1992. p.8-14

4-368 757.33
Kuntz, R.: The application of expert systems to indexing. Orig.en. *Current Studies in Librarianship* Vol 15, No 1-2, 1991, p.3-26, 23 refs.

4-369 7578-487
Valkonen, P.; Nykänen, O.: An expert system for patent classification. Orig.en. *World Patent Inform.* Vol 13, No 3, 1991, p.143-147, 13 refs.
Difficulties in using the IPC, especially for infrequent users are discussed and the feasibility of producing an expert computer program to assist users is considered. A prototype IPC expert system generated in Finland on a Macintosh personal computer is described. (Authors)

4-370 7578-66
Wagner, R. (Ed.): Special Issue: Expert Systems and Law. Orig.en. *Expert Systems with Applications* 4(1992)No 4, p.333-422
Roland Wagner starts this special issue with a Guest Editor's Note, introducing the following nine contributions:
4-371 Smith, J.S.; Gelbart, D., Graham, D.: Building expert systems in case-based law. - 4-372 Barklund, J.; Hamfelt, A., Wünsche, J.: Building modular legal knowledge systems. 4-373 Bench-Capon, T.J.; Coenen, F., Dunne, P.E.S.: Integrating legal support systems through document models. - 4-374 Galindo, F.: Expert systems as tools for the explanation of the legal domain: The ARPO experiences. - 4-375 Baaz, M.; Quirchmayr, G.: Logic-based models of analogical reasoning: A fundamental basis for the design of legal expert systems. - 4-376 Thanasset, C.; Blanchard, F., Paquin, L.-C.: Loge-Expert: Strategies to integrate legal knowledge modelization, non-expert user interface, and textual data base into the development of an expert system in law. - 4-377 Di Giorgi, R.M.; Fameli, E., Nannucci, R.: A legal expert system prototype integrated with databases. 4-378 Cammelli, A.; Socci, F.: Informatics for the law: LEXIS - a legal expert system on Italian family law. - 4-379 De Mulder, R.V.; Noortwijk, C.van, Kerkmeester, H.O., Wees, J.G.L.van der: Knowledge systems and the law: the JURICAS Project.

4-380 757.753
Zahir, S.; Chang, Ch.L.: Online-Expert: An expert system for online database selection. Orig.en. *J.Amer.Soc.Inform.Sci.* Vol 43, No 5, 1992, p.340-357, 28 refs.
The design of an expert system called ONLINE-EXPERT is discussed. It was built after acquiring knowledge from available human experts and printed documents such that users could obtain advice on the selection of appropriate databases. To further enhance the knowledge base, a multicriteria decision analysis technique called the Analytic Hierarchy Process (AHP) was used to construct a decision model that provided, within the framework of the expert system, the ranking of databases and hosts in order of preference. (Authors, abbr.)

4-381 757.772
Wijnands, P.H.: La néonymie et les systèmes experts. (Neonymy and expert systems) Orig.fr. *Banque des Mots* Vol 42, 1991, p.15-26

76 Lexicon/Dictionary Problems

4-382 762; 767
Boguraev, B.; Neff, M.: Text representation, dictionary structure, and lexical knowledge. Orig.en. *Literary & Linguistic Computing* Vol 7, No 2, 1992, p.110-112, 6 refs.
Text encoding, when applied to complex text types, requires principled separation of (visual) presentation properties of text from (conceptual) functional organization of content. This is particularly pressing when machine-readable dictionaries (MRDs) are being analyzed for implicit lexical semantic content. It is argued that a current proposal for text encoding guidelines falls somewhat short of making such a separation; it is furthermore argued for such a separation, by demonstrating the benefits it brings to a methodology for extracting lexical data from MRDs. (Authors)

77 General Problems of Terminology

See also 4-097, 4-100, 4-145

4-383 77.07
Leclercq, H.: Book review of Sager, J.A.: A practical course in terminology processing. Amsterdam, etc.: J.Benjamins 1990, XI, 254p. Orig.fr. *Int.Classif.* Vol 19, No 3, 1992, p.169

4-384 771
Gilreath, Ch.T.: Harmonization of terminology. An overview of principles. Orig.en. *Int.Classif.* Vol 19, No 3, 1992, p.135-9, 18 refs.
In terminology work there are four basic things needing to be harmonized: 1. concepts, 2. concept systems, 3. definitions, and 4. terms. These are briefly discussed, along with the related notions of extension and archetype (intension). Other factors covered include: participation, consensus, required attitudes, tools of explication, a.o. (Author, abbr.)

4-385 771
Hennans, A.: Language planning and terminology planning. Sociolinguistic aspects. Orig.en. *Meta* Vol 36, No 4, 1991, p.687-9, 7 refs.

772 Form and Designation of Terms

See also 4-381

4-386 772
Gajda, S.: The internationalization of terminology and terminological significance of Greek-Latin affixes. Orig.en. *Neoterm*, No 17-20, 1991, p.61-66, 12 refs.

4-387 772
Lerat, P.: L'analyse morphologique des termes nouveaux. (Morphological analysis of new terms) Orig.fr. *Banque des Mots*, 1990. N.S., p.23-34, 12 refs.

4-388 772
Wijnands, P.: Analyses néologiques à partir des mots nouveaux apparus depuis 1985. (Neological analyses of new words having appeared since 1985) Orig.fr. *Banque des Mots*, 1990. N.S. p.5-22

4-389 772
Cabre, T.: La néologie dans la presse Catalane: Premières données d'un observatoire de néologie. (Neology in the Catalan press: first data of a neology observatory) Orig.fr. *Banque des Mots*, 1990. N.S., p.75-84

4-390 776
Davidson, P.M.: Computerized terminological databases for translators who use word processors. Orig.en. *Meta* Vol 36, No 2-3, 1991, p.424-430, 6 refs.

4-391 776
Côté, C., Leide, J.E., O'Hearn Taminiau, J.A.: Terminologie - TERMIUM, une banque des données linguistique et un CD-ROM. (Terminology - TERMIUM: A linguistic databank and a CD-ROM). Orig.fr. *Documentaliste* 29(1992)No 4-5, p.215-217, 3 refs.
The article presents TERMIUM, a linguistic database originally created by the University of Montreal and which now belongs to the Federal Government of Canada, whose Secretary of State Department is responsible for its development and dissemination. The database, used by more than 3000 users in North America and Europe, is made up of one million records representing approximately three million words in all different fields of knowledge. TERMIUM is now offered on CD-ROM, which should favorize access by translators, editors and other information professionals, especially in Europe and the francophone community. (Author)

4-392 776 ru
Marchuk, Yu.N.: Contemporary terminology concepts. Orig.ru. *Nauchno-tekh. Inform.*, Ser.2, No 5, 1991, p.32-33, 3 refs.

4-393 777
Nouri, M.: Terminologie technique et arabization. (Technical terminology and Arabic scholarship) Orig.fr. *Banque des Mots* Vol 42, 1991, p.49-58, 7 refs.

4-394 777
Terminology activities in Bucharest, Romania, 2-5 June 1992. Orig.en. *Int.Classif.* Vol 19, No 3, 1992, p.147-148

4-395 777
Rijo da Fonseca Lino, M.T.: Néologie(s) et terminologie: observatoire du portugais contemporain. (Neology(ies) and terminology: observations in contemporary Portuguese) Orig.fr. *Banque des Mots*, 1990. N.S., p.67-74, refs.

4-396 777 be
Hennans, A.; Mayar, M.-P.: Ressources terminologiques belges récentes. (Recent Belgian terminology resources) Orig.fr. *Cahiers de la Doc./Bladen voor de Doc.*, No 1, 1992, p.14-24

78 Subject-Oriented Terminology Work

4-397 78-264
Eggert, A.A.; Jacob, A.T., Middlecamp, C.H.: Converting chemical formulas to names: An expert strategy. Orig.en. *J.Chem. Inform. Comput. Sci.* Vol 32, 1992, p.227-233, 12 refs.

4-398 78-4; 926
Blaine, L.: The CODATA Commission on standardized terminology for access to biological data. Orig.en. *CODATA Bull.* Vol 23, No 4, 1991, p.38-46

4-399 78-61
Mailhard, N.: Glossary fr-en: The variables in sociology. Orig.en,fr. *Terminologie et Traduction*, No 2, 1990, p.299-305
Lists 33 definitions in English and in French on kinds of variables, such as 'individual variable', 'absolute variable', 'relational variable', etc.

4-400 78-642
Chansou, M.: Termes de la finance et de la bourse. Essai d'organisation conceptuelle d'une terminologie. (Terms on finances and stock exchange: testing a conceptual organization of a terminology) Orig.fr. Banque des Mots, 1990. N.S., p.35-48

4-401 78-66
Gaudin, R.: Enquête sur l'impact des arrêtés terminologiques auprès des magistrats. (Survey on the impact of terminological orders for court officials) Orig.fr. Banque des Mots Vol 42, 1991. p.59-66, 3 refs.

4-402 78-824
Peterson, T.H.: An archival bestiary. Orig.en. Amer.Arch. Vol 54, No 2, 1991. p.192-205, 3 refs. This whimsical presentation analyzes the origins, relationships, and evolution of archival terms and expressions.
(Author)

4-403 78-837; 757
Comier, M.C.: Terminologie anglais-français des systèmes experts et des sujets connexes. (English-French terminology of expert systems and related subjects) Orig. en, fr. Meta Vol 36, No 2-3, 1991

79 Problems of Multilingual Systems

4-404 791
Durand, J.; Bennett, P., Allegranza, V., Van Eynde, F., Humphreys, L., Schmidt, P., Steiner, E.: The Eurotra linguistic specifications: an overview. Orig.en. Mach.transl. Vol 6, No 2, 1991. p.103-147, refs. (3p.)

4-405 791
Wright, S.E.: The role of terminology in translation-oriented quality assurance. Orig.en. In: Horizons: Proc.32nd Ann.Conf. Amer.Translators Assoc., Salt Lake City, UT, Oct.1991. Medford, NJ: Learned Inform. 1991. p.227-248
When applied to texts for translation, translation-oriented terminology work ensures repeatability and reproducibility, two primary components of quality assurance. By documenting functional equivalents in a subject field, individual translators can guarantee they will be able to repeat terminological performance from one translation job to another, and that other translators working with the same materials can reproduce the same level of terminological accuracy. These factors translate into higher quality and reduce the time required to produce the finished product, thus narrowing the quality/quantity gap that faces all translators, whether they work as freelancers or in bureaux and translation departments. (Author)

8 APPLIED CLASSING AND INDEXING (C & I)

81 General Problems of Applied C & I

812 Alphan. Subject and Classif. Catalogues

See also 4-142, 4-144, 4-366

814 Rules, Codes for Subject Cataloguing

See also 4-366

4-406 814
Loose, A.: Das Regelwerk des Schlagwortkataloges der Gleimbibliothek Halberstadt. (The rules for the subject catalogue of the Gleim-Library at Halberstadt) Orig.de. Leipzig: Fachschule für wissenschaftliches Bibliothekswesen, Abschlußarbeit 1991. 28p.

4-407 815
Clack, M.E.; Kumerer, M., James, B., Lenzini, R.T., Meglio, D., Lewicky, C.: The balance point: indexing policies. Orig.en. Serials Review Vol 18, No 3, 1992. p.49-58

4-408 818
Berndt, M.: Der Göttinger Schlagwortkatalog und die Zukunft der verbalen Sacherschließung in der SUB. (The Göttingen subject catalogue and the future of verbal subject analysis in the State and University Library) Orig.de. SUB-Kultur Vol 1, No 1, 1991. p.20-22

It was decided to close the Göttingen card catalogue for subjects and continue with the PICA Basic Classification and SWD.

4-409 818
Sokolova, N.G.: The subject catalogue of the USSR State Public Library of Science and Technology and its relation to the classified catalogue. Orig.ru. Nauch. i Tekhn. Biblioteki SSSR, No 11, 1991. p.20-23

4-410 818.333
Müller, E.: Suhler Erfahrungen mit der Schlagwortgebung. (Experiences with subject indexing at the Suhler WAB Library) Orig.de. Bibliotheksinfo Vol 1, 1991. p.761-763

4-411 818; 88
Wilson, N.: COMPASS. Orig.en. British Bibliographic Services Newsletter, No 4, 1991. 2p.

The article explains the COMPASS headings, their construction, their connectives, standards, reference structure, authority file and user manuals. COMPASS headings have been appearing in the British National Bibliography MARC based products supplied by the National Bibliographic Service since January 1991. The change from PRECIS to COMPASS by the British Library is also explained as well as COMPASS's relationship to PRECIS/DOC.

82 Data C & I

4-412 820
Semenova, S.Yu.: Algorithm for the extraction of information about parameters from the texts of reports and primary documents. Orig.ru. Nauchno-tekhn. Inform. Ser. 2, No 6, 1991. p.22-32, 8 refs.
Describes a database designed to store factual information extracted from the texts of primary documents and reports of research in the field of technical systems and technological processes.

4-413 82-86
Dias, J.R.: Deciphering the information content of chemical formulas: Chemical and structural characteristics and enumeration of Indacenes. Orig.en. J.Chem. Inform. Comput. Sci. Vol 32, 1992. p.203-209, 31 refs.

84 C & I of Primary Literature (Except 85)

See also 4-421

4-414 844
Baird, B.; Sheridan, S.: Indexing The Australian Women's Weekly. Orig.en. Australian Library J. Vol 41, No 2, 1992. p.145-150, 10 refs.

4-415 845
Todorov, R.: Displaying content of scientific journals. A co-heading analysis. Orig.en. Scientometrics Vol 23, 1992 No. 2, p.319-334, 10 refs.
A co-heading analysis is proposed for representing the subject content of scientific journals. It is based on the subject headings assigned to documents before their input in bibliographic databases. The analysis was applied in the field of superconductivity to display the content of some physics journals using data from 1984 Physics Abstracts. (Author, abbr.)

4-416 846
Ryans, C.C.: Cataloging theses and dissertations. An update. Orig.en. Cat. & Classif. Quart. 14(1991)No 1, p.83-87, 7 refs.

4-417 849
Boyce, B.R.; Douglass, S., Rabalais, L.J.: A sort procedure for the Superintendent of Documents Classification. Orig.en. Government Inform. Quart. Vol 6, No 2, 1989. p.175-182

86 C & I of Secondary Literature

4-418 864
DeHart, F.E.: Monographic references and information science journal literature. Orig.en. Inform. Process. & Management Vol 28, No 5, 1992. p.629-635, 10 refs.
The growing availability of full-text databases in the journal literature may eventually make it possible to perform automated citation analysis involving end-of-article references. This study explored the feasibility of automatically identifying and analyzing end-of-article monographic references in full-text databases for use in citation studies. (Author, abbr.)

87 C & I on Non-Book Materials

See also 4-253

4-419 872
Chang, Ch.-Ch.; Wu, Tz.-Ch.: Retrieving the most similar symbolic pictures from pictorial databases. Orig.en. Inform. Process. & Management Vol 28, No 5, 1992. p.581-588, 8 refs.
In this article, an iconic indexing mechanism is suggested for spatial similarity retrieval on iconic image databases based upon the spatial relationships among the objects in a picture. The iconic objects dealt with were some kinds of gross panorama of simple objects. (Authors, abbr.)

4-420 877
Richter, Ch.: Die inhaltliche Erschließung von Musikonträgern in Bibliotheken. Analyse und Bewertung verschiedener Erschließungsmethoden in ausgewählten Bibliotheken. (Subject indexing of musical data carriers in libraries. Analysis and evaluation of different indexing methods in selected libraries) Orig. de. Hamburg, DE: Fachhochschule Hamburg, FB Bibliothek u. Information, 1990/91. Thesis

4-421 879: 842
Myers, J.S.: Patent images on CD-ROM: Numeric vs classified sets. Orig.en. World Patent Information 14(1992)No 2, p.67-70
The costs of recording U.S.patents on CD-ROMs as numeric sets or classified sets (by class, technology group or subclass) are analyzed and compared. The advantages of the two types of sets, both for searching and document reproduction are discussed. (Author)

88 C & I in Subject Fields

4-422 88-0
Domokos, M.: Application of general subject headings in German and Austrian libraries. A review. Orig.hu. Könyvtári Figyelő Vol 38, No 2, 1992/3. p.453-460, 11 refs.

88-36 Indexing in Geology

See also 4-304

4-423 88-53/1
Fichtner, G.: Krankenunterlagen als Quellen. Auswahl und Erschließung aus der Sicht der Forschung. (Patients' data as sources. Selection and analysis from the point of view of research) Orig.de. Archivar Vol 44(1991)No 4, c.550-558, 37 refs.

88-56 Indexing in Education

See also 4-312

4-424 88-627
Chandler, H.E.: Indexing in and for Europe: a user's perspective. Orig.en. Indexer Vol 18, No 2, 1992. p.92-94, 12 refs.
An overview and evaluation of indexes and indexing services that provide access to European Communities information sources is given. It is argued that there is a need for more cross-references from natural phraseology to a harmonized controlled language; that this controlled vocabulary should be precise, comprehensible, and should not give rise to semantic dispute; and that the EC should provide the lead in European indexing generally. It is concluded that the growth of English as a teaching medium in Europe will necessitate more provision of English publications, which in turn may afford opportunities for professional indexers. (Author)

4-425 88-66
Moys, E.M.: Legal vocabulary and the indexer. Orig.en. Indexer Vol 18, No 2, 1992. p.75-78, 4 refs.
The article deals mainly with subject indexing of law books which are produced primarily for the use of the legal profession and law students. Vocabulary is specially important to lawyers, for whom definitions of words are vital. Lawyers' own terms, many of which are phrasal, must be used in indexes, although different works may require different approaches. The use of the words 'law' and 'legal' is examined, as are the order of words in headings, the use of prepositions and singular or plural forms. Specific rather than classified indexing is normally preferred. Advice is offered in relation to the indexing of references to legal matters in general books and in books on particular aspects of law for the layman. (Author)

4-426 88-692
Lehmann, K.: Zur Klassifizierung von Darstellungen über einzelne Familien. (On classing reports on individual families) Orig.de. Bibliotheksinfo Vol 1, 1991. p.455-457

4-427 88-92
Bell, H.K.: Should fiction be indexed? The indexability of text. Orig.en. Indexer Vol 18, No 2, 1992. p.83-86, 7 refs.
Considers what features of texts make them appropriate or necessary to be supplied with an index, and distinguishes between informational and literary text. Serious fiction is seen as comprising elements of both types of text, and the particular difficulties of indexing it, and the value of indexes to fiction, are considered. (Author)

4-428 88-92
Laakso, J.; Puukko, O.: Classification of fiction by topic in the light of experiments carried out in two public libraries. Orig.fi. Kirjastoiede ja Informatikka Vol 11, No 2, 1992. p.61-65, 10 refs.

4-429 88-962
Martin, M.M.: Subject indexing in the new "Ethnographic Bibliography of North America". Orig.en. Behavioral & Social Sci. Librarian Vol 11, No 1, 1991. p.13-26, 26 refs.

9 CLASSIF. ENVIRONMENT

92 Persons and Institutions

4-430 922
Rayward, W.B.: The legacy of Paul Otlet, pioneer of information science. Orig.en. Australian Libr. J. Vol 41, No 2, 1992. p.90-102, 24 refs.

Reprint of the introduction to the publication "International Organisation and Dissemination of Knowledge: Selected Essays of Paul Otlet". (Translated and edited with an introduction by M.Boyd Rayward). - The Introduction demonstrates the foresight of Paul Otlet. Although his lifetime lasted from 1868-1944, he anticipated the revolutionary technological developments of today. The article shows how much he was a forerunner to modern information science.

4-431 924
Dr.Heinz Höhne - 65 Jahre alt. (Commemorating the 65th birthday of Dr.Heinz Höhne) Orig.de. Dialog Bibl. Vol 4, No 3, 1992 p.29-30
H.Höhne had been working in the German Library, Leipzig for some 40 years. He was Department Head of alphabetical and subject cataloguing.

4-432 924.05
(Ranganathan Issue of the Annals of Library Science and Documentation). Ann.Lib. Sci. Doc. Vol 39, No 2, 1992. V, 71p.
The "Annals", having been started by S.R.Ranganathan, commemorate his jubilee year with a number of 8 articles in their second issue of 1992.

4-433 Viswanathan, T.: Reflections on Dr.S.R.Ranganathan's TITN law. - 4-434 Rajan, T.N.: The relevance of Dr.Ranganathan's ideas in the information age. - 4-435 Srivastava, A.P.: Lasting impact of Ranganathan. - 4-436 Gurcharan Singh: With Dr.S.R.Ranganathan on standards for documentation. - 4-437 Kumar, Girja: Creativity in the thought of Dr.S.R.Ranganathan. 4-438 Gopinath, M.A.: Ranganathan's approach to knowledge organization and its impact on modern library and information systems. - 4-439 Rajalakshmi, V.; Pal, R.: Ranganathan and the Annals. - 4-440 Mishra, S.; Joshi, M.K., Misra, M.K.: Relevance of Ranganathan's contribution in the age of information technology.

4-441 924
Sukiasyan, E.R.: Ranganathan and the Soviet Union. Orig.en. Library Science Slant Doc. 29(1992)No 2, p.65-76, 34 refs.
Identifies the various features that have led to a culture-based bond between India and the Soviet Union. Presents the various events that have led to the admiration which Dr.S.R. Ranganathan has found in the Soviet Union. Analyzes the contribution of Ranganathan and recommends greater attention to wards his seminal contributions to library science and service.

925 Societies, Research Groups

See also 4-096

4-442 925.33
Frankfurt/Main: Clearingstelle der Deutschen Bibliothek für RSK/SWD-Anwendung in Öffentlichen Bibliotheken. (Frankfurt (Main): Clearinghouse of the German Library for RSK/SWD-Application in Public Libraries) Orig.de. Bibliotheksdienst Vol 25, No 6, 1991. p.904-905

4-443 925.33
Kommission des Deutschen Bibliotheksinstituts f.Sacherschließung: Jahresberichte 1990 der Kommissionen des DBI, 12. (Annual Report for 1990 of the Committees of the German Library Institute) Orig.de. Bibliotheksdienst Vol 25, No 5, 1991. p.744-747

4-444 925.485
Niemeyer, St.: Arbeitskreis Systematik der Staatlichen Beratungsstellen. (Working Group on Classification of the Governmental Consulting Agencies) Orig.de. Die Neue Bücherei, No 5, 1990. p.497-498

4-445 925.77
ASS.I.TERM - the new Italian Association for Terminology. Orig.en. Int.Classif. Vol 19, No 3, 1992. p.147

926 International Societies and Groups

See also 4-398

4-446 926
Dahlberg, I.: International Society for Knowledge Organization. Orig.en. Int.Forum Inform. Doc. Vol 17, No 2, 1992. p.33-35
Reprint in English of the first ISKO brochure, April 12, 1991.

4-447 928
FID/CR Ranganathan Award for Classification Research. Int.Classif. 19(1992)No.3, p.163
The Award was presented to Prof.A.Neelamegham at the occasion of the FID/CR-ISKO Joint Meeting, Madrid, Oct.20, 1992.

93 Organisation on a Natl. & Internatl. Level

See also 4-032, 4-033

4-448 934.323
Caffo, R.: Indicazione per soggetto nell'ambito della cooperazione. (Cooperative subject cataloguing). Orig.it. Boll.Inform.Assoc.Ital.Bibl. Vol 31, N.S. 1991. p.145-152

4-449 934,33
 Rauhut, H.: Einige Thesen zur verbalen Sacherschließung in Konstanz. (Some theses on the subject cataloguing in Konstanz) Orig.de. Bibliothek aktuell, No 58, 1990. p.9-11

95 Education and Training

4-450 953
 Schulz, Ursula: Einführung in die Grundlagen der inhaltlichen Erschließung mit BISWAS am Fachbereich BID der FHS Hannover. (Introduction to subject indexing with BISWAS at the Hannover Polytechnic) Orig.de. ABI-Technik 11(1991)No 4, p.289-296
 Library education in subject indexing should include basic principles of automatic indexing and indexing for electronic media. Confinement to formal lectures is sufficient from a didactic point of view. BISWAS, a database programme, promises easy handling for beginners and proved well suited for exercises in subject indexing for first year students at the Department of Librarianship, Information and Documentation (BID) in Hannover. Examples of steps taken with BISWAS to practice subject indexing. (Author)

4-451 953
 Schulz, Ursula: Zur Didaktik der inhaltlichen Erschließung in der Ausbildung von Diplom-Bibliothekaren. (On the teaching methodology of subject indexing in the education of librarians) Orig.de. Bibliothek, Forsch.u.Praxis 16(1992)No 2, p.255-263, 19 refs.

Use of records retrieved from centralized cataloguing services and a new type of catalogue media (OPACs) will cause a lasting change to library subject indexing. Library education will have to respond to these developments. The paper discusses educational objectives, teaching and assessment methods and an integrated view of the occupation with subject indexing in library education. (Author)

4-452 958-916
 Emery, P.G.: Text classification and text analysis in advanced translation teaching. Orig.en. Meta Vol 36, No 4, 1991. p.567-577, 31 refs.

97 Economic Aspects

See also 4-363, 4-421

4-453 971
 On the financing of information services. ISKO-WG-CA Recommendation for Knowledge Organization, R-02, Oct.1992. Orig.en.de. Int.Classif. Vol 19, No 3, 1992. p.155-158
 The second Recommendation of the Working Group on Content Analysis of the International Society for Knowledge Organization (ISKO) treats in five sections the following topics: Introduction, Commercial vs. internal information systems, Storage-intensive vs. retrieval intensive IS, The technology illusion.

Personal Author Index

Aalbersberg, I.J. 4-103
 Aitchison, J. (Comp.) 4-026
 Albrechtsen, H. 4-066
 Allen, B. 4-129
 Amæshi, B. 4-067
 Anandson, N. 4-038
 Andrews, T. 4-152
 Ang, J. 4-319
 Anick, P.G. 4-111
 Armintor, B. 4-051
 Armstrong, J. 4-456
 Ashby, V. 4-183
 Atwood, T. 4-165

Baaz, M. 4-375
 Baird, B. 4-414
 Bal, C. 4-288
 Barbe, M. 4-314
 Barghouti, N.S. 4-181
 Barklund, J. 4-372
 Bartell, B.T. 4-116
 Barth, G. et al 4-325
 Batra, D. 4-196
 Beall, J. 4-057
 Beech, D. 4-176
 Beghtol, C. 4-058
 Belkin, N. 4-101
 Bell, K. 4-015
 Bell, H.K. 4-427
 Bench-Capon, T.J. 4-373
 Berg, J.L. 4-149
 Berman, S. 4-039
 Bernat, M. 4-408
 Bieflicka, L.A. 4-222

Bies, W. 4-321
 Bishoff, L. 4-043
 Blaine, L. 4-398
 Blakeley, J.A. 4-172
 Blossville, M.J. 4-106
 Bogaschewsky, R. 4-268
 Boguraev, B. 4-382
 Bouma, G. 4-356
 Boyce, B.R. 4-137 4-267 4-417
 Brachman, R.J. 4-344
 Bradley, N. 4-271
 Braga Mamfrim, F.P. 4-258
 Brathwaite, K.S. 4-224
 Bronson, R.J. 4-311
 Browne, G. 4-216
 Broxix, P.F. (Ed.) 4-023
 Blüch, G. 4-054
 Buchan, R.L. 4-260
 Burger, H.G. 4-324
 Burgin, R. 4-285
 Burkowski, F.J. 4-112
 Byrun, J. 4-045
 Cabre, T. 4-389
 Caffo, R. 4-448
 Calhoun, K. 4-293
 Cannelli, A. 4-378
 Carlson, P.A. 4-269
 Case, D.O. 4-241
 Chalmers, M. 4-132
 Chan, L.M. 4-235
 Chandler, H.E. 4-424
 Chang, Ch-Ch. 4-419

The failure of the free-market economy financing model. (German version of this recommendation on p.157-8)

4-454 971
 Huws, H.; Wintrub, M., Martin, N.: Knowledge-based systems development. A methodology for management. Orig.en. Inform. Systems Management Vol 9, No 2, 1992. p.51-56
 As more organizations start to consider the benefits of knowledge-based applications, they also experience the growth pains of learning how to manage knowledge-based systems projects. This article provides a context for understanding the difficulties unique to a knowledge-based systems development project and describes one methodology that offers solutions to many of the management problems confronting those responsible for knowledge-based systems development and implementation efforts. (Author)

4-455 977
 Milstead, J.L.: Methodologies for subject analysis in bibliographic databases. Orig.en. IEEE Proceedings, Part A Vol 28, No 3, 1992. p.407-432, 55 refs.
 Report on a subject analysis review undertaken to aid managers of databases in determining if new and little-known capabilities would improve the cost-effectiveness of subject analysis operations. Operational machine-aided and automatic indexing systems were found to form a continuum. Commercial automatic indexing packages were also reviewed. The primary obstacle to development of automatic indexing is the lack of machine understanding of natural language. Recommendations for action include: increasing the power of the indexer interface, studying indexing policies, enrichment of thesauri, and considering the development of machine-aided indexing.

98 User Studies

982 Requirements of C&I users

See also 4-294

4-456 983
 Armstrong, J.: Knowledge-based systems for users. Enhancing the productivity of help desks. Orig.en. Inform. Systems Management Vol 9, No 1, 1992. p.28-37
 Although knowledge-based systems are already assisting help-desk staff in the IS department to solve systems development and similar problems, they have yet to become a fully functional part of user support help desks. The two advisor applications described in this article illustrate how easily these knowledge-based systems can be developed and, even more important, how more productive they can make the help-desk staff and the users themselves.

99 Standardization

See also 4-149, 4-187, 4-279, 4-307, 4-361, 4-367

Chang, T.-H. 4-160
 Chansou, M. 4-400
 Chatterjee, A. 4-068
 Chen, H. 4-362
 Chisholm, R.M. 4-189
 Chisman, J.K. 4-278
 Ciganik, M. 4-217 4-329
 Clack, M.E. 4-407
 Cochrane, P.A. 4-069
 Coetzee, H.S. 4-210
 Cooper, W.S. 4-120
 Coral, L. 4-262
 Cormier, M.C. 4-403
 Côté, C. et al 4-391
 Craven, T.C. 4-059 4-070
 Crawford, J.M. 4-340
 Croft, B. 4-122
 Crouch, C.J. 4-109
 Cutting, D.R. 4-131
 Daelemans, W. 4-357
 Dahlberg, I. 4-071 4-134 4-446
 Darányi, S. 4-249
 Dasser, S. 4-272
 Davidson, P.M. 4-390
 Davis, K.C. 4-174
 De Mulder, R.V. 4-379
 Beerwester, S.C. 4-113
 DeHart, F.E. 4-418
 Deschamps, P.B. 4-367
 Di Giorgi, R.M. 4-377
 Dias, J.R. 4-413
 Diener, H. 4-302

Dodd, J.A. 4-277
 Dorokos, M. 4-422
 Drabenstott, K.M. 4-072 4-294
 Dumais, S.T. 4-123
 Duong-Vinh, G. 4-208
 Durand, J. 4-404
 Eggert, A.A. 4-397
 Elliott, P. 4-047
 Emery, P.G. 4-452
 Ercegovac, Z. 4-197
 Fagin, R. 4-200
 Fan, D.P. 4-274
 Farrés, J. 4-317
 Faulon, J.-L. 4-227
 Fax, E.A. 4-126
 Fichtner, G. 4-423
 Fidel, R. 4-073
 Fidel, R. 4-440
 Fornes Garcia, A. 4-021
 Fraser, N.M. 4-354
 Friedrich, R. (Comp.) 4-029
 Fugmann, R. 4-060
 Fuhr, N. 4-121
 Fulcher, J. 4-194
 Gajda, S. 4-386
 Galindo, F. 4-374
 Gaudin, R. 4-401
 Gayle, P. 4-310
 Gazdar, G. (Ed.) 4-353
 Geisselmann, F. 4-142