Reports and Communications

Knowledge Communication in an Era of Information Explosion

This was the topic of a Symposium held at Johannes Kepler University Linz, Austria, on January 15, 1993 meant to find remedies out of the information flood by the help of a philosophical reconsidering and a rethinking about technical and organizational devices. The Symposium was organized by the University's Institute for Philosophy and Theory of Science, its Library, and Culture Institute in addition to the Austrian Society for Documentation and Information, Vienna. The conference language was German.

Three workshops were held in the morning on the overall topic of *Information barriers or information trust?* with Dr.Gerhard BUDIN, Dr.Christian ENICHLMAYR, and Dr.Gerhard FRÖHLICH chairing. In the afternoon, under the heading: *Networks of knowledge - the sciences as information and communication systems*, the following lectures were held: Norbert HENRICHS: Philosophy as information science - information science as philosophy. - Erhard OESER: Science as means of information densification. Is an involution of the sciences ahead of us? - Rafael CAPURRO: Information and interpretation. - Gerhard FRÖHLICH: Disparities in scientific communication. - Two further workshops took place in the evening entitled *Telescience? The future of scientific communication* with the speakers: (1) Florian BRODY: The Electronic Book: The future of electronic publishing; and (2) Rainer BORN: Virtual realities: Concerning the future of construction and communication of technical-scientific knowledge. - During the day online and CD-ROM presentations were given. The Symposium was opened by Prof. Dr. Rudolf WOHLGENANNT, Director of the University Institute for Philosophy and Theory of Science and Dr. Herwig JOBST, President of ÖGDI.

Similarity, Clusters, and Concepts.
Conference at TH Darmstadt, FB Mathematik

This conference, already announced in IC 92-4, was held on March 17-20, 1993. Its organizers, the "Research Group on Concept Analysis" and the "Ernst Schröder Center for Conceptual Knowledge Processing" had listed the following 23 papers on the program sheet. These were partly in English (en) and partly in German (de): ZELGER, J.: Verbal cluster and gestalt formation (de). - BURGARD, P.: Cluster analysis of longitudinal diet parameters (de). - BANDELT, H.-J.: Overlapping clusters (de). - ORTH, B.: MOnotonic Network Analysis (MONA) (en). - WILLE, U.: Coordinatization of ordinal structures (en). - JANOWITZ, M.F.: Compatibility of cluster methods with isotone mappings (en). - STRAHRINGER, S.: CONCLASS - CONceptual CLustering ASSistant (en). - SEBAG, M.: Similarity learning from examples (en). - ZICKWOLFF,

M.: Concept formation in knowledge acquisition - A comparison between conceptual clusters and formal conceptanalysis (de). - BENNETT, M.K.: Orthoalgebras (en). - PAGLIANI, P.: A logical counterpart of cluster analysis induced by a multivalued context: Nelson logic (en). - MEDER, N.: On the theory and the concept of similarity (de). - HELLER, J.: Similarity and representation of characteristics in psychology (de). - LENGNINK, K.: An order-theoretic foundation for similarity measures (en). - BARTEL, H.-G.: Formal concept analysis of chemical aromaticity (en). - BEST, H., OHLY, R.: Correspondence analysis of bibliographic profiles (en). - WOLFF, K.E.: Correspondence analysis and formal concept analysis (en). - SKORSKY, M.: TOSCANA'1 - Management system for conceptual data (en). - KOLLEWE, W.: An application of TOSCANA'1 to literature of interdisciplinary technology research (en). - HEBISCH, U.: A concept analytical system to classify coniferae (de). - VOGT, F.: Ideas of algebraic concept analysis (en). - MUCHNIK, I.: Quasi-convex set functions and fixed points approach to clustering (en). - WILLE, R.: Towards a philosophical foundation of data analysis (en). - For further information, please turn to Prof.Dr.Rudolf Wille, TH Darmstadt, FB Mathematik, Schloßgartenstr.7, D-6100 Darmstadt.

Subject Indexing: Principles and Practices in the 90's

Just before this years' IFLA Conference at Barcelona, its Section on Classification and Indexing is organizing a "Satellite Meeting" from 17-18 August 1993 in Lisbon, Portugal, on the above topic, sponsored by the Portuguese National Library. Session 1 on the first day will be devoted to "*Systems and Practices Today: An Overwiew*" and will have the following 12 papers to be presented: DECOURT, E., GUERREIRO PACHECO, S.M.: Subject access in the Brazilian library network. - PARENT, I.: A balancing act between conformity and divergence: subject access to library materials in Canada. - WILLER, M.: Subject access systems in use in Croatia. - JOUGUELET, S.: Evolution des pratiques d'indexation par sujets en France. - REINER FREILING, M.: Subject indexing in the 90's: the situation in Germany. - SOLTANI, P.: Subject access in Iran. - KINGMA, J.: Subjec indexing in combination with a classification: the new PICA system in the Netherlands. - SADOWSKA, J.: Subject catalogs in Poland. - LOPES, I.: Subject indexing in Portuguese libraries: a new approach with SIPORbase. - CASTELLOTE, P.B.: L'indexation matière à la Bibliothèque Nacionale d'Espagne. - McILWAINE, I.: Subject control: the British viewpoint. - CHAN, L.M.: Subject access systems in the USA.

Session 2 of the second day will discuss "*Current issues in subject indexing*" with the following 4 papers: FUGMANN, R.: The complementarity of natural and controlled languages in indexing. - SVENONIUS, E.: Pre-coordination or not? - REY, J.: Tendences internationales en terminologie et indexation. - WILLIAMSON, N.: Standardization and subject description: the state-of-the-art. - There will be an introductory paper by D.McGARRY,

chair of the IFLA Section on Classification and Indexing to open the first day and a Summary paper by J.BEALL before the formal closing. - For further information contact: Ms. Donna Duncan, McLennan Library, McGill University, 3459 McTavish Street, Montréal, Québec, H3A 1Y1, Canada, or Ms.Ines Lopes, Instituto da BibliotecaNacional e do Livro, Campo Grande 83, 1751 Lisboa Codex, Portugal.

TKE'93. Third International Congress on Terminology and Knowledge Engineering

The preliminary program (18p.) for this Congress, to take place from 25-27 August 1993 at Cologne, Germany, has been despatched by Mid-May 93. It is available from the Congress organizer, Prof.Dr.Klaus-Dirk SCHMITZ, FHS Köln, FB Sprachen, Mainzer Str. 5, D-50678 Köln.

The scientific program comprises the following 8 sessions, each organized by one of the members of the Program Committee.

(1) *Terminological Knowledge Engineering: Theoretical Principles* (Organizer: Erhard Oeser). Papers: OESER, E.: Theoretical principles of terminological knowledge engineering. - LERA, J.C.: Towards a qualification of concepts and terminology for KBS. - BUDIN, G.: Knowledge, organization and modelling of terminological knowledge. - SKUJINA, V.: Some aspects of the specific character of the semantic level in terminology. - RAHMSTORF, G.: Ways of sub-reading and views concerning terminological definition. - GERSTENKORN, A.: Synonymy and homonymy. - MERTEN, P.: Semantic terminological networks and micro-domains. -

(2) *Terminology and Knowledge Acquisition* (Organizer: A.Min Tjoa). Papers: AHMAD, K.: Terminology and knowledge acquisition: A text based approach. - SCHWEIGHOFER, E., WINIWARTER, W.: Refining the selectivity of thesauri by means of statistical analysis. - QUIRCHMAYR, G.: Open texture and knowledge representation. - de SCHAETZEN, C.: Terminology as a didactic tool for teaching science. - WAGNER, R.: Databases and knowledge bases: A survey on their acquisition aspects. - LUKAS, H., STOCKINGER, J., TJOA, A.M.: TONDONG: An example of multiperspective representation of ethnological alliance theory using hypermedia.

(3) *Terminology and Knowledge Management.* (Organizer: Ch. Galinski) Papers: WALLMANNSBERGER, J.: From hypertext to hyperaction: towards an ecology of electronic knowledge processing. - MEYER, K., BOWKER, L.: Beyond "textbook" concept systems: Handling multidimensionality in a new generation of term banks. - HESSER; W., DÜSTERBECK, H.: Terminology and product knowledge in enterprises. - MURASZKIEWICZ, M., REBINSKI, H., STRUK, W.: Methodology for multilingual thesaurus software building. - ZHONGSHAN, W.: On fundamentals of computer information protection. - Toft, B.: Conceptual knowledge of objects as the core of an information system. -

(4) *Translation-oriented Terminology Work* (Organizer: S.E.Wright). Papers: WALKER, D.G.: Translation pro-

blems as they occur in everyday practice. - GOMEZ-PEREZ; A., JURISTO, N.: Towards a consensus on the English-Spanish translation of knowledge engineering. - CITKINA, F.: Methods and procedures in comparative terminology science. - STER, Th.v.d., ROUMEN, R.: A ContextBank: A new concept in computer-aided translation. - MAYER, F.: Entry models in translation-oriented computer-assisted terminology. - KLEIN, F.: The Infotrans expert translation and terminology management system. -

(5) *Terminology and Documentation* (Organizer: G.Budin) Papers: ROULIN, C.: Bringing thesauri together: Terminological problems and interests. - OHLY, H.P.: A social network layer as knowledge-based assistance for conceptual retrieval problems. - JACQUEMIN, Ch.: Representing and parsing terms with acceptability controlled grammar. - DEDEYAN, R.-C.: Terminology and documentation: Considerations applied to the economic field. - VASARHELYI, P.: Computerized explanatory dictionary as a support for engineering teaching and international cooperation.

(6) *Exchange of Terminological Data* (Organizer: A.K.Melby) Papers: STELLBRINK, H.-J.: Selling terminology at a price - the wrong approach. - WRIGHT, S.E.: Special problems in the exchange of terminological data. - STANCIKOVA, P.: Information management system for international data exchange in terminology. - REINKE, U.: Towards a standard interchange format for terminographic data. - Le MEUR, A.: Tools and procedures in exchange of terminological data.

(7) *Terminological Knowledge Enginering: Practical Approaches* (Organizer: H.Picht). Papers: HEID, u.: On the representation of collocational phenomena in sublanguage lexicons. - SINDRE, G., SORUMGARD, S.: Terminology evolution in component libraries. - MÖHR, W.,ROSTEK, L.: TEDI: An object-oriented terminology editor. - FISCHER, D.H.: Consistency rules and triggers for multilingual terminology. - QUIST, Ch.: Concept and term - a terminological knowledge engineering system. - BALL, S.: The European Parliament's Euterpe Database: A brief introduction. - TASIEMSKI, M.: Business terminology in multilingual vcocabulary management systems for PC DOS. - WILLIAMS, M.: TERMIUM and LATTER: An update. - LOSCO, P., CHELYAH, H., Mlouka, M.: GELEM, a multilingual lexicon's management system. - EISELE, H.: Speed training via terminology. - DJINTCHARADZE, A.K.: Terminology, classification, knowledge bases. Methodology and practice. - VOLKOVA, I.N., PAPAEV; S.T.: Computerization and new information technologies in terminological activities. - SHRIVASTAVA, R.K.: Conceptual-terminological system: A GST approach to ordering of terminology. - CONDAMINES, A., AMSILI, P.: Terminology between language and knowledge: an example of terminological knowledge base.

(8) *Terminology and Technical Writing* (Organizer: T.Wettengel) Papers: KUKULSKA-HULME, A.: From words, through rhetoric, to knowledge needs. - SKUCE, D.: A system for managing knowledge and terminology

for technical documentation. TEICHMANN, H.T.: International standardization of letter symbols to be used in electrical technology. - WETTENGEL, T.: Terminology in the technical writing process.

There will be five workshops preceding the congress on Aug.23 and 24: (1) *Microcomputer-Based Terminology Management Software*. Organizer: F.Mayer/K.-D.Schmitz. - (2) *Teaching Methods and Teaching Material for Terminology*. Organizer: H.Picht. - (3) *Copyright in Terminology*. Organizer: Ch.Galinski. - (4) *Terminology Interchange Format (TIF)*. Organizer: G.Budin, A.Melby, S.E.Wright. - (5) *INTERCOCTA Workshop*. Organizer: F.Riggs.

Congress language will be English. An exhibition is also foreseen. The proceedings are planned to be available at conference beginning.

The Congress will be held at Maternushaus Congress Centre, Kardinal Frings-Str., 5000 Köln, Germany.

News on the Library-Bibliographical Classification

The Library-Bibliographical Classification Scientific Research Department of the Russian State Library started issuing a new information bulletin called *LBC Bulletin*. Its Board comprises some 16 members, named and shortly described on p.16. The Bulletin is mainly devoted to publish regularly the revised divisions of the LBC tables in the form of discussions next to dealing with theoretical, methodological and practical problems facing classification at present.

The first number - in English! - contains among others an article by Tamara GOLTVINSKAYA: *LBC: Modern period of reorganization and perspectives of development* (p.3-7), the revised section "CH 30/49 Education", and a draft of a new structure of "E Religion. Atheism." The new version of the LBC will be appearing as an electronic catalogue and will also be published and available on a diskette. For further information contact: Dr.T.S.Goltsvinskaja, Chief, Department of LBC, Russian State Library, Vozdvizhenka 3, 101000 Moscow, Russia.

The Committee for Scientific Terminology, Russian Academy of Sciences

The former Committee for Scientific and Technical Terminology of the USSR Academy of Sciences is now officially called *Committee for Scientific Terminology and Fundamental Research, Russian Academy of Sciences*, (CST). The Chairman of the Committee is Prof.Nicolai A.KUZNETSOV, the Scientific Secretary is Dr.Yuri I.KRYUKOV.

The Committee is a leading scientific centre in the fields of basic terminological research, normative terminology in various knowledge areas, lexicography, terminological expertise, applied terminology, etc. Along with these traditional directions the CST is now actively developing modern computer-based terminological information systems. The goals of the CST have every support of the Russian Academy of Sciences. The problemms of compu-

terization, knowledge engineering, artificial intelligence, information processing, data communication for terminology are being considered in close cooperation withh other institutes in the Academy, in particular with the Institute for Information Transmission Problems.

The CST organizes the work of dozens of special problem teams for terminology of subject fields in which hundreds of experts in these fields take part.

The CST is ready to continue and develop the cooperation with international, regional and national organizations, universitites, research centres, companies, etc. It is suggested to extend mutual information about activities and events, and also exchange lecturers and researchers, joint publications, invitations to seminars and conferences, translation of books and papers in the area of terminology. The former address and telephone number are still valid, however it is more reliable to mail the correspondence to: Committee for Scientific Terminology, Russian Academy of Sciences (care of the Institute for Information Transmissioon Problems) 19, Ermolovoy Str. , 101447 Moscow GSP-4, Russia.

Broad System of Ordering

Of interest to FID/CR members will be the announcement that an expanded version of the Broad System of Ordering (BSO) is now available on computer disk. The copyright for BSO has been handed over to the former FID/BSO Panel, which has formed a limited non-profit distribution company (BSO Panel Ltd.) whose objective is support for the continuous updating and maintenance of an expanded machine-readable BSO through the sale, under licence, of floppy disk copies of the system.

The machine-readable BSO is contained on a set of three 3.5 inch disks formatted by MSDOS in a form which can be printed out if desired. Disk 1 includes introductory matter, including a brief history of the scheme since its inception by FID and Unesco in 1973, detailed instructions on the use of the scheme and a preliminary outline of the fields of knowledge by which the scheme is ordered. Disks 2 and 3 contain the full classification schedules, comprising a faceted arrangement of approximately 12,000 subject concepts with combinatory facilities and an alphabetical index to the schedules. The BSO is useful as an aid in formulating and modifying search strategies, as a tool for subject cataloguing and as an adjunct to other methods of subject retrieval.

The BSO panel of directors includes E.J. COATES (U.K.), J.E. LINFORD (Italy), S. MARICIC (Croatia) and C. NIELSON (U.K.). Consultancy on the application and development of BSO for special requirements is available and the system is being produced in machine-readable form only. Further information may be obtained from the BSO Panel Ltd., 11 Mount Pleasant, St. Albans, Herts., AL3 4QH, United Kingdom. Telephone: +44 (0)727 853982.   Nancy Williamson

Information and Documentation - Vocabulary

Meeting of ISO/TC 46/SC3, Vienna, 24-26 Febr.1993
Even though standardization activities of ISO/TC 47 Information and Documentation" might not be of immediateimportance to translators, lexicographers and terminologists, the activities of its Subcommittee 3 certainly are. In addition to several already published parts of the International Standard ISO 5127 (pertaining to basic concepts; traditional documents; iconic documents; acquisition, identification, and analysis of documents and data: documentary languages and others) a number of additional parts are now in preparation.

The recent meeting in Vienna was devoted to one of the future parts of said terminology standard, viz. Part 13 "Terminology of Museum Documents" and the revision of part 9 "Administration and Organization of Archives, Libraries, Documentation Centres and Museums".

Given the fact that ISO 5127, originally published in English and French (including definitions of the concepts in question), will eventually be available in many languages (some of the existing parts exist already in German, Italian, Dutch, Japanese, Spanisch and others), including Russian, Bulgarian, Chinese and others, it will undoubtedly become an indispensable tool both for I&D experts, students, translators, interpreters, and language mediators alike. It is also envisaged to establish this vocabulary as a multilingual terminology databank; a pilot project covering four parts of ISO 5127 is already underway at Infoterm.

(From Infoterm Newsletter 66, 1993, p.2)

UN-EARTH: The United Nations: what it is and what it does

The Advisory Committee for the Co-ordination of Information Systems (ACCIS) has recently announced version 1.0 of UN-EARTH, a "user-friendly PC-based information system developed by ACCIS". It answers questions such as: What countries are member states of the UN? Where are UNICEF offices located? Is there a peacekeeping operation in Lebanon? One can find out about the objectives, location of offices, information services, databases, and sales offices of the different agencies of the United Nations system. Tabulated information on human resources and development projects by organization or by country can be viewed. Collections of United Nations publications by country can be located.

To use UN-EARTH, one needs an IBM-compatible microcomputer with a DOS operating system (release 3.0 or higher) with 640K of memory, of which 500K must be available when using the system. 12Mb of free space is necessary on the hard disk. UN-EARTH can be used on a local aread network and downloaded or as files printed directly from it. Installation takes about 5 minutes and a user's guide comes with the system. Price: US$ 60.00. ISBN 92-1-100385-7, Sales No: GV.E.9304. Available from the United Nations (Publ.Div., Sales Section, New York, NY 10017 or Palais des Nations, CH-1211 Geneva 10, Switzerland).

Catalogue of Russian Information Resources

The International Bureau for Information and Telecommunications, MBIT, has just published its first Catalogue (Issue 1, 1993, 139 p., ISBN 5-7035-0546-1) to be issued quarterly from 1993 on. It lists available databases in 25 groups, such as: Address Reference Registers, Info on Industrial Enterprises, - on Agricultural Enterprises, Financial Institutions, Scientific Institutions, Price Information, Statistics, Products and Technologies, Legal and Regulative Acts, Dictionaries, etc. For each database the following data are given: Name, Number, Contents. Type, Language, Number of fields, Number of records, Disk space required, Computer type, Operating system, Application software, Search modes, Database updatable by the user, Updated version delivered (e.g.quarterly), Method of updating, Database protection, Number of installations, Services, Database owner, Data plus application price, Updating price, One record price. And in each case there is one record sample in the Russian original and in English translation. For subscriptions or orders of individual databases, please turn to: Mrs.Shcherbakova E.A., "MBIT" p/ b 44, Leningradsky prosp., 80/2, Moscow 125190, Russia.

DATALOGIC/R - A new Form of Data Intelligence

REDUCT Systems Inc. has started shipping version 1.2 of DataLogic/R, its software for database "mining" and decision support. The software is based on the methodology of rough sets which facilitates discovery of logical dependencies and relationships between classes of objects. DataLogic/R analyzes various levels of knowledge representation (granularity) and uncovers patterns which are inaccessible with other methodologies. The system can handle any type of data, generates simple and easy to use knowledge rules, and provides full auditability of rules and decisions.

Version 1.2 introduces a new type of rule for working with weak and/or noisy data patterns. The rules can be used in knowledge acquisition, classification, predictive modelling or for expert system building. A royalty free C-code with imbedded rules can be exported to expert system shells. The result is faster knowledge acquisition from data and shorter expert system development time.

DataLogic/R requires an AT-class PC, 640K RAM, hard disk, DOS 3.1 or higher and VGA graphics. The system can handle up to 2000 attributes (DataLogic/R+) and starts at $1,495 US (DataLogic/R). For further information please contact: Adam J.Szladow, President, REDUCT Systems Inc., P.O.Box 3570, Regina, SK, Canada S4P 3L7. Fax (306) 5866-9442.

(News Release of Jan.6, 1993 from REDUCT Systems, a computer software and hardware company specializing in Artificial Intelligence machine learning technologies.)