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Membership

ISKO's membership is growing at a constant pace. Recently we registered our 330th member and since our last Info-Brochure has been published in 1991, ISKO is now represented in the following 42 countries:

Argentina, Australia, Austria, Bangladesh, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Czechoslovakia, Denmark, England, Ethiopia, Finland, France, Ghana, Germany, Hungary, Iceland, India, Israel, Italy, Japan, Lithuania, Luxembourg, Malaysia, Netherlands, Nigeria, Poland, Portugal, Romania, Russia, Spain, South Africa, Sweden, Switzerland, Taiwan, Tanzania, Thailand, USA, Yugoslavia.

A new membership list as of March 1992 will be sent to ISKO members soon, together with material for the ISKO'92 conference in Madras and other relevant documents.

New ISKO Chapter in Bulgaria

At the recent KOTA'91 conference in Varna the Bulgarian ISKO Chapter was founded with Mr.Peter PETROV as its chairman (see also his report on KOTA'91 in IC 91-4). Through him our ISKO Brochure is also available in Bulgarian. For further information please write to: Mr.Peter Petrov, Department of Foreign Languages, Technical University, 9010 Varna, Bulgaria.

Russia has its ISKO Coordinator

As of 1992 Dr.Eduard SUKIASYAN is becoming active as ISKO Coordinator for Russia. Mr. Sukiasyan is also a member of ISKO'S Scientific Advisory Council. He plans to have a conference of the Russian ISKO Chapter in May 1993 in Moscow. For further information please turn to him at the Russian State Library, Pr.Kalinina, 3, 101000 Moskva, Russia.

Madras ahead of us

The topic of our 2nd international ISKO Conference in Madras, 26-28 August 1992 had been chosen by ISKO's Scientific Advisory Council to be "Cognitive Paradigms in Knowledge Organization" thus emphasizing the new trend in involving epistemological and conceptual approaches in the process of recognizing and organizing our knowledge for "information retrieval" - or should I rather say "knowledge retrieval"? During the past months the authors of abstracts have received comments on their contributions from a refereeing body who carefully examined each paper with respect to its pertinence. Thus this conference looks as if it would become a good step forward in the development of the knowledge of our own field! The organizers recently wrote:

"The international conference on 'Cognitive Paradigms in Knowledge Organization' to be held at Connemara Hotel in Madras from Wednesday 26 to Friday 28 August has achieved considerable publicity. In response to the announcement about the conference, enquiries/abstracts have been received from countries such as Bangladesh, Canada, China, Finland, France, Germany, Israel, Italy, Russia, Spain, Sweden, USA, Yugoslavia and of course India. Those authors who wish to present papers at the conference are requested to send full texts by 31 March. Papers received until then can be considered for inclusion in the proposed conference volume. Other papers received later may be published in a second volume. The decision to include a paper in the printed volume rests with the editor/publisher of the conference publication.

A detailed programme of the conference will be available by the first week of July. The provisional outline of the timetable will be: Wednesday 26 Aug., Evening: Formal Opening of the Conference; Thursday, 27 Aug., Morning: Sessions 1 & 2, Afternoon: Sessions 3 & 4; Friday 28 Aug., Morning: Sessions 5 & 6, Afternoon: Session 7 and the Concluding Session - 'Summing up' of the conference."

Any further details will be sent to the members directly. In addition I may perhaps mention that Prof.Eric de GROLIER has agreed to do the summing-up again, as already at our first international conference in Darmstadt. For any further information please turn to Dr.Suseela KUMAR, 5 Sivaganga Road, Madras-34, India.

Joint Meeting of FID/CR and ISKO Planned in Madrid

Depending on the interest of both our memberships a joint meeting is planned to take place during the conference week of FID preceding the congress week in late October '92. The date of a full-day meeting would be Oct.20 which is a day before the FID/ET (Education and Training) Seminar starts. (See also the pertinent news in the FID/CR News section of this issue). For further information turn to Prof.Dr.Emilia Curras, Universidad Autonoma de Madrid, Ciudad Universitaria de Canto Blanco, 28049 Madrid, Spain.

A new Edition of the 'Who is Who in Classification and Indexing'

In 1983 the INDEKS Verlag published - with support from the FID - a first *Who is Who* in our field of knowledge on the basis of the memberships of FID/CR and other international and national classification societies and groups. It informs on the affiliations, professional data, special fields of interest in classification, subject specialties and major articles and books of those entered. The arrangement is according to those 45 countries

from which data could be received. The volume of 174 pages has also alphabetical name and subject indexes and the reprint of the *Information Coding Classification* (ICC) which provides the subject codes according to which persons were classed. In 1993 the INDEKS Verlag intends to publish the next edition and will send out questionnaires soon. Of the first edition some extra copies are still available and will be given free of charge to ISKO members according to their request. Please write to the ISKO Secretariat at Woogstr. 36a, D-6000 Frankfurt 50.

Cognitive Approaches to the Ordering and Presentation of Knowledge:
2nd Conference of the German Chapter of ISKO, Weilburg, 16-18 October 1991

Founded in 1989, ISKO devotes itself statutorily to *"promoting the research, development and application of all methods for the organization of knowledge in general or of a special field"* and in particular the *"integration of the conceptual approaches of classification research and artificial intelligence"*, in which endeavor it stresses *"philosophical-logical, psychological and semantic approaches to conceputal order"*.

A near-paradigmatic function in the researching of knowledge organization falls to the concept 'cognition', understood here as a comprehensive cognitive activity comprising perception, memory, thinking and learning. *"Cognitive approaches to the ordering and presentation of knowledge"* thus was a natural skeleton subject for the 2nd German ISKO conference: central enough to permit a discusssion of the basic prerequisites for the organization of knowledge, and at the same time of wide enough a scope to allow for a trans- and interdisciplinary exchange of knowledge from the most varied fronts of theoretical and practical research: Information and Documentation Science, Library Science and Archivistics, Informatics and Artificial Intelligence.

As a result this conference was able to revert successfully to the synergetic effect of the 1990 first ISKO Conference (both an international conference and one of the German Chapter) in Darmstadt, with the 1991 event being held in a narrower German-European framework (with many guests again having come from abroad). The various papers read at the conference had been arranged into ten blocks of topics: "Order and Cognition", "Subject Analysis", "Knowledge Organization I-IV", "Cognitive Approaches I-II", "Origin and Development of Intelligence and Knowledge" and "Training in the Subject 'Knowledge Organization'". In addition there was a preconference, organized by the DGD's KTF Committee as a workshop, on the subject "Thesauri in Language Technology" as well as some other meetings on which will be reported below.

At the preconference, planned and chaired by W. SCHMITZ-ESSER by which the subject of the conference proper was well prepared, several contributions to the overall problem of thesaurus organization were presented and discussed in detail. Thus M.KRACKER proposed fuzzy thesauri as a possible solution for the case that no unequivocal and definitely binding conceptual relations can be established. F.SARRE explained that the machine learning of relationships is not only successfully applicable to thesauri but also to hypertexts. O.SECHSER (Zürich) stressed the importance of ISO Standard 8879 with its proposals for the universal exchange of texts. In the same manner, thesauri should reflect the universally valid. On the other hand, F.BELKE emphasized the unavoidable dependence of a thesaurus on its epoch, and R.JANSEN its dependence on certain conventions. H.ZIMMERMANN and H.LUCKHARDT stressed the context-dependence of language, which they illustrated with the aid of a language project for translations of patents. This preconference ended finally with proposals for supplementing or more exactly defining the thesaurus relations as described in DIN Standard 1463.

Although nearly all papers read at the main conference manifested an unmistakable practical interest in a concrete word/or data-processing problem in some narrower special field, there were a few contributions which were more concerned than others with the philosophical and epistemological foundations as well as the fundamental concepts and objectives of an organization of knowledge. In an introductory address I.DAHLBERG explained the construction postulates for a universal classification system of knowledge, presenting the principles for the shaping thereof (e.g. object and aspect orientation, reference to categories, faceting, use of defined relation systems, etc.) and discussing the requirements for its utilization with a view to different contexts. A stand against any one-sided praise of "order" - although such praise might seem to be a natural basic attitude for any study of knowledge organization - was taken by G.GREINER, who recommended that both in nature's and in man's manifold creations an interplay of ordered structures and of structures lacking a recognizable order from man's point of view, hence a complex combination of 'order' and 'disorder', should be perceived. J.SCHREIDER (Moscow) defmed knowledge-based systems and the concept of knowledge engineering with the aid of a knowledge-typological approach that distinguishes between a) the knowledge of an individual, b) social knowledge as guaranteed by the passing-on of cultural patterns, and c) the abstracted knowledge of modern information technology. The work of the knowledge engineer, for example, requires a Socratic dialogue with experts, a dialogue that must bridge the gap between personal and social knowledge in order to present, in the end, an expert's personal knowledge as the abstracted knowledge of an EDP-assisted knowledge system. In his paper *For the creative mastery of complexity in knowledge organization* H.LÖCKENHOFF pleaded for 'open approaches' of knowledge organization, thus advocating e.g., instead of rigid rules taken from existing systems flexible rules that are capable of learning and that master complexity by continuously

developing new and expanding ordering systems. In his paper *On the origin of intelligence* P.JAENECKE stressed the importance of creativity for the acquisition of knowledge: creativity as a characteristic of intelligence, as the ability to produce new things from given material, constitutes an abstracting process, a special form of knowledge acquisition which should find application also in the training of machine intelligence. As a basis for the generation of knowledge banks, W.UMSTÄTTER recommended biogenetic evolution strategy.

A number of contributions acquainted the audience with automated procedures for use in knowledge compilation and knowledge administration in special task fields. Thus the data modelling language EXPRESS and its graphic component which permit the simple and lucid construction of entity-relationship models were presented by A. HUNGER. M.SCHOPEN explained the working procedure of the GRIPS-MENU PC, which, as additions to an original search term, proposes a list of co-descriptors frequently occurring in the documents. P.ZOLLER explained convincingly that in the administrative activities of a large regional bank hierarchical access to a wide variety of data banks proves to be the most expedient procedure, i.e. prior to the conceptual search the working context needs to be further delineated. The role of knowledge base formation in information retrieval was discussed by H.P.OHLY, who presented a project for context-evaluating information retrieval (AKCESS). H.CZAP, using a business company as an example, explained that data transfer also requires an explicit datamodel, a fact which was likewise referred to in J.VISCHER's paper on 'Technical Documentation'. C.NEDESS and H.P.BORRMANN recommended 'wbDok' as an efficient system of knowledge-based documentation, making use of the empirical knowledge of industrial production, in order to improve error control and thereby 'Total Quality Management'. L.COUPRIE (Leyden) presented a highly culture-bound classification project serving for the iconographical description of works of art (the ICON Classification).

With respect to the area of subject analysis/indexing, E.MATER explained, in how far the results of automatic indexing depend on the concept system utilized.

Quite a few papers dealt in greater detail with the methods of knowledge analysis. Within the framework of the working group *Cognition and Knowledge Organization* H.GEIGER gave an introduction to neuronal networks. These prove to be suitable when target information is to be derived in optimal fashion from minute partial data and their context information. In a subsequent paper by R.DEFFNER the neuronal network procedure was related to the recognition of words from letters and of sentence elements from words. L.PREUSS (Zürich) demonstrated how from canonical - i.e. row and column-related - analysis a sharper information content may be obtained with the aid of entropy calculations. G.RAHMSTORF called attention to the parallelisms in the recognition of image and text. The greater the number of formal characteristics that can be indicated, the more precisely will the significance be circumscribed. Images, wholly unlike texts, present the problem that they can be interpreted in a great many ways, thus making it necessary to create first of all a suitable interpretation framework.

Finally, questions of knowledge organization specifically in library science were likewise discussed. Th.RIPLINGER perceived a great advantage in applying Eppelsheimer's method, though developed for conventional library catalogs, to EDP systems as well, in which procedure a reorientation of the indexing process - relational thinking instead of compartmentalizing thinking - could take place. B.W.J.LORENZ reported on his experiences with shared cataloguing in the library classification field, mentioning as example the Regensburg shelf classifications, while M.KUNZ used the subject authority file (Schlagwortnormdatei) of the Deutsche Bibliothek as an example for making clear how important an overseeable vocabulary and a transparent reference structure are for ensuring that the structure of a documentation language based on natural language can be intelligently used both by the indexer and the user. W.BIES emphasized the value of pragmalinguistics for subject analysis in the library: it can, among other things, promote user orientation in subject analysis and render valuable aid in the evaluation and optimalization of subjejct analysis for the OPAC. H.-D.MANN reported in his paper *Documentation and organization - remarks of a parliamentary archivist* on questions of knowledge organization in archivistics.

The urgent problems of knowledge and information organization also force us to intensify our efforts in the didactics of this field: a challenge which at the moment is discussed particularly in the library field. Thus M.DOMOKOS (Budapest) reported on her experiences with Hungarian students of library science (*How and what to teach about classification to library students*), while H.NOHR and H.PUHLMANN in their paper *Training in the subject 'Subject Analysis' against a changed technological background* stressed the undiminished importance of methodological and theoretical knowledge - knowledge which has not, as is sometimes light-heartedly claimed - been made superfluous by the new technological environment (OPAC, CD-ROM). The introduction of a special training program, even of a special discipline 'General Knowledge Organization and Information Technology' was demanded by N.MEDER.

In view of the wide variety of the disciplines, methods and approaches involved it is particularly difficult to formulate a final summing-up in which basic trends of the conference are reflected. One thing, however, became clear: The theory of knowledge organization must in the future - at least more intensively so than up to the present - loose itself from pre-imposed rigid classifications and ordering schemes, turning instead to 'open systems' and engaging more pronouncedly in relativist thinking, among other things for the sake of greater