
ISKO News 18

ISKO's Membership soon at 500

Indeed, at a steady pace our membership is growing and we are approaching the landmark of the first 500. Whoever will make it to receive this membership number will get a special prize: our newest conference proceedings volume of our 3rd International ISKO Conference at Copenhagen (more on this see below)!

Third International ISKO Conference, Copenhagen, 20-24 June 1994

Our 3rd International Conference was a success indeed due to Hanne Albrechtsen's very careful preparations and her good spirits which had thought of just any detail to please all of us so gently.

Those "early birds" who had registered for the excursion to Elsinore to commemorate the remarkable 2nd FID/CR Conference 30 years ago went through a unique experience on June 20. In a most beautiful weather the bus took us along the Sund to the Hamlet Castle, passing by the 1964 Conference Hotel Prince Hamlet, seeing the Castle of Fredensborg and dining extravagantly the Danish way at a historic place in Bregnerød.

Late in the afternoon of the 20th the conference started with P.A. Cochrane's Keynote on "Elsinore Revisited", reminding especially of the recommendations of that famous conference and what remains to be considered: the problems of compatibility of documentary languages need still to be solved, now more urgently than ever before.

The evening was concluded with a reception sponsored by the Royal School of Librarianship (also the conference site), introduced by Prof. Ole Harbo and accompanied by genuine classic chamber music - by students - just for our pleasure!

The next four days meant heavy but enjoyable work (for the approx. 120 participants) in 18 sessions altogether, with plenary sessions in the mornings and parallel workshop sessions in the afternoons until M.A. Gopinath from the DRTC in Bangalore presented his fine conference summary on Friday 24th late in the afternoon; it follows below.

Two further evenings were reserved for social events: Unforgettable was the gorgeous historic place selected for our conference banquet at Frederiksberg with Björn Tell's pleasant banquet speech on Tuesday evening, June 21. On Thursday evening busses took us to the Copenhagen Business School to admire a fascinating modern architecture and to visit the library with its books shelved according to the UDC. On Wednesday evening we had our 4th Membership Assembly including elections. The minutes are also given below.

When at the end on Friday afternoon Hanne Albrechtsen expressed her thanks to Gopinath for his grand summary with a bouquet in orange colours we learned from her also that orange was the colour of Denmark (that's why she had been dressed in orange all week long!). But she apparently did not realize that orange is also the colour given to the concept of 'order'. Thus we were guided exactly to the right place with our 3rd Conference! A Royal Conference it was indeed - thank you once more, dear Hanne! I.D.

Knowledge Organization and Quality Management - a Conference Summary

We live in a world of complexity. Knowledge is the summum bonum of our living. Knowledge is capable of improving the quality of our life. Knowledge helps in the co-existence and co-operative living of all people all over the world.

Knowledge is needed for informed decisions. Quality of knowledge is reflected in such decisions. Decision needs alternatives resulting from problem analysis and solution and is always replenished and updated through knowledge acquisition or learning. All of this calls for knowledge organization and quality in knowledge organization.

In research of a desirable quality of knowledge, we are in a relay team engaged in collaboratively conducted research. This has led to interdisciplinary activities calling for inputs from the fields of cognition and learning, leadership and control, of changes of societal and institutional frameworks and a continuous process of analysis and synthesis leading to a harmonious integration, to peaceful and progressive achievement, to improved quality and excellence in human living.

We have applied our collective minds towards the design, development and implementation of knowledge systems. To this end we recommend several methods and applications of the same in different contexts and in different ways but with the one common goal of meeting the required quality of representation appropriate to the demand.

In the very *first session* we set the parameters for knowledge systems - particularly the qualitative parameters. We wanted an organization which helps predict the contents, give reliability to the source, adaptability and assimilability to the receiver and in general a smooth and transparent flow of knowledge between source and the recipient. We listened to papers from *H. Löckenhoff*, *E. Sukiasyan*, and *L. Howarth*.

The interactive nature of knowledge, its purposive and progressive combination to generate creatively new structures of knowledge, for the beneficial use of our society was discussed in the *second session*. The epistemology, or the socioepistemology of knowledge was analyzed. It brought into focus, the capabilities of universal models of knowledge (*H.A. Olson*). They could provide with dexterity the required special formations. They have the capacity to get the shape needed by the seeker. Like water, the models shape knowledge in the required quantum, shapes and sizes demanded or modeled by the end users. Exam-

ples for these were provided by *J. Garcia Marco*, *B. Hjørland*, *E. Jacob* and *B. Frohmann*. They checked the veracity of knowledge structures in the light of the contemporary social fabric of knowledge.

Language and linguistics provide the communication frame for knowledge flow. Language acts as a harbinger of knowledge. The grammar of a language which provides the expression of knowledge is a modular expression. Can morphosyntactics and semantics of knowledge be processed to provide clusters harmonious to knowledge seekers? The work in the field of computation linguistics showed resilience towards this end. The Algers group - *Khelalfa* et al. presented the SIGNAR system towards a question-answering system with a natural language processor. *Nakamura* showed the capability of case grammar for interlingual processing in the Japanese, Chinese and Finnish languages. *Sophia Ananiadou* gave the potential of computational linguistics and in particular morphosyntactics to present a methodology for Automatic term recognition. *Schipper* gave details of the Hypertext case for knowledge structures and strategies for storing and accessing. We had dual presentations by *A. Bech* and *C. Navarretta* as methodologies for constructing knowledge bases for NLP systems. *R.E. Kent* provided the basis for rules for forming a thesaurus using mathematical and linguistic and conceptual frames, the *Sedelows'* further extended the lattice structures to thesaurus representation and indicated the existing multi-dimensionality in the process of representation. *Andreas Björklind* and *Lisbeth Björklund* of LIBLAB (Sweden) explored the base for collaborative and dynamic processes in the structuring of knowledge and representation in thesaural systems. The use of faceted classifications to organize and develop terminology and terminology science was explored by the UMIST representatives *Lynne Bowker* and *Timothy Lethbridge*. They felt that faceted classification gives an intellectual qualitative framework for terminology studies. The use of a psychoanalytical frame designed by specialists helps in understanding the knowledge seeking mode of end users.

Knowledge organization in specific domains is an interesting field. The focus on image databases led to interesting discussions in areas of tuning human intellect and knowledge-based systems of image representations. Work needed for multi-media and motion picture representation in databases was also recognized. *Susanne Oernager* gave an exposition on this.

Representational processes and means were analyzed for artefacts of Japanese lacquer art and furniture, and a multi faceted micro-thesaurus was presented (*Donatella Failla*). Thesaurus for improving the legal knowledge base and its framework were analyzed and presented for analysis and studies by *Antonio Camelli* and *Florenza Soggi*.

An excellent term-generated and term processed collection of thoughts of authors, users and indexers was presented by *Annelise Mark Pejtersen* in a domain analysis. She presented the parameters needed in a fiction classification.

Communication patterns in collaborative fields was presented by *Lisbeth Björklund* and in historical preservations by *Ada D. Jarred* and *Martha V. Henderson*. They posed a set of practical quality demands. An excellent analysis of product-market-consumer complex knowledge seeking pressures and the methodology of concurrent engineering for the representation of knowledge-seeking patterns was presented by *D. Sonnenwald* and *Annelise Mark Petersen*.

Classification schemes as support-base have provided scope for the articulation of technical documentation. They have also provided a base for complex industrial production processes.

The idea of using computer-communication media as thinking partners for developing flexible knowledge structures and surrogate generators was studied in a variety of ways. *Brigitte Endres-Niggemeyer* provided the model for abstracts, *Gopinath* for classifying and *H.P. Ohly* for networking, *Lars Johnson* for texts in hyperobjects networks. *Jacob Schipper* viewed knowledge representation in an entirely human field and found it to be good for cognitive representations. He recognized the problem of contextual dependency and the need for timely human judgments in the thought processing by machines. He called for the use of hypertext as a base for knowledge representation.

While it is interesting to cognitively recognize knowledge seeking patterns and input them into various information retrieval systems, it is necessary to understand the epistemic processes that lead to the nuances of thesaurus frames in end-users. A pattern was presented in which about a third of the terms presented were useful for searchers. And a display limit of 20 terms per frame was specified, with related and equivalent terms playing their role in initial question-negotiations. The studies on the thesaural structures may provide a cognitivity quality base for knowledge structures. Interactive expert systems for user-enquiries provide a fine approach towards a quality representation in knowledge organization. The role of classification systems in guiding online search is well articulated in the studies by *Efthimiadis*, *Bosman*, and *Shoham*. Use of modern tools and techniques emerging out of information technology and intellectual structures have been presented by *A. Massimiliano* and *Giliola Negrini* in "Clasthes". Multiple neural topographies and novelty decision processes were also presented as well as human-assisted automatic constructs of UDC and CC numbers.

Developments in information technology, particularly in the intellectual processing of knowledge were presented for an interactive thesaurus to navigate, to develop thesaural facets and knowledge representation structures, and the toning of all the search quality using well-organized thesaural cues; relational guiding has been presented for studies.

The inter-organizational and compatibility aspects of classification schemes towards giving multi-representational systems for a variety of surrogates were presented by *Joseph Busch* for the Art and Architecture Thesaurus. An

interesting collaboration study of the universal classification models such as UDC and BBC has been explored by *Nancy Williamson* and *I.C. McIlwaine*. Team and relay methods for knowledge-bases for universal schemes are being worked on. They will surely improve the quality of class numbers in their representational capabilities. It appears to lead to integrative processes to meet universal needs as well as situational needs. We have also an excellent presentation in inter-convertibility of pre-coordinate systems of knowledge to post-coordinate systems when needed. (*Gerhard Riesthuis*). The UDC provides the base-structure. But it should supplement several thesaurus processes for more and better searches.

Robert Fugmann in his relentless and yet economical investigations brings here the focus of predictability. The postulate of representational predictability is the prime focus for all representation in surrogates, in texts, in images, on a multimedia basis while evaluation, reliability, consistency, exhaustivity, precision, recall are all quality measures, whose frames, however, have to be studied with the "predictability" factor. It is at this point that the human indexer is needed and that conceptual perceptions of indexing need to be understood. Otherwise we would miss the bus for representational quality in the organization of knowledge.

Mirja Iivonen pointed out that 'inconsistency' is in the searcher base. Sometimes we cannot avoid or ignore it, as in spite of the best quality work there are inconsistencies in representations brought about by authors, indexers and searchers alike. The time and climes add their own inputs. But analysis of intra-searcher and inter-searcher inconsistency and the building of an intercompatibility process will help to overcome the deficiencies of hierarchical, associative and coordinative relations. There is a synergism between individual systems and selecting processes in knowledge gathering and processing, retrieval, presentation and assimilation.

The Subject Access Project (SAP) was surveyed by *Irene Wormell*. The change seems to be in sorts of documents, rather than in semantic entities or expressiveness of the subject surrogation. The new parameters of intellectual subject access are:

1. Software developments in scanning and coding as well as the appearance of the SGML standard and applications of electronic publishing.
2. The exchanges, in the formal process in WAN, the attempt to meet all the levels of physical, bibliographic, and intellectual nature. Modern technologies attempt to gather these physical aspects along with the retention needed for representation and for physical and bibliographic access.

In the course of the five-day event attempts were made:

1. To invest excellence and quality in representation of knowledge in a variety of forms and formats.
2. To set conducive approaches in knowledge organization to promote assimilation of thoughts in sources by the seekers in a harmonious and fast manner.

3. To develop knowledge organization, flexible for human modeling and more geared to instant classification and compatibility for searchers/seekers processes.
4. To make use of the intellectual processes available in modern information technology for supplying interfacing information to users in a variety of ways.
5. To integrate the various methods, tools, techniques and theories of knowledge to provide a helpful approach to accessing knowledge and facilitate its utilization.

We have attempted to identify the quality needed in the representation of knowledge. However, we have still to proportionate it to the context in which it is to be effected. Achievements towards quality, in spite of the speed at which we should handle the increasing volume of knowledge, requires intellectual aids in the form of technology of communication for integrating a variety of fields.

Quality in the organization of knowledge is an essence in the synthesis of the analytico-synthetic process. We are working toward this goal in ISKO. M.A.Gopinath

ISKO General Assembly 1994

The 1994 ISKO General Assembly convened at the Royal School of Librarianship, Copenhagen, Denmark, Wednesday, June 22, 1994.

1. Opening

Dr. Ingetraut Dahlberg welcomed the ISKO members and guests as observers.

2. Acceptance of or Additions to the Agenda

The Agenda was approved without change.

3. Election of the Assembly Chair and the Secretary

Prof. Dr. K.-E. Wolff served as Chair and Prof. Nancy Williamson agreed to serve as Secretary for the 1994 Assembly.

4. President's Progress Report

At the beginning of her report I. Dahlberg announced the death of ISKO member Götz Greiner and the Assembly observed a minute's silence.

Since the last Assembly in Madras *Bylaws* have been finalized (and published) concerning ISKO Regional Chapters, ISKO Conferences and ISKO Bodies.

Five new *ISKO Coordinators* have started to become active in their respective countries (Canada, Portugal, Austria, China, and USA) - in addition to the ones already having started in Brazil, Denmark, France, Hungary, Italy, and Japan.

ISKO Chapters have been established in India, Russia and Spain in addition to the ones already existing in Germany, Slovakia and Bulgaria.

There is still a need for ISKO activities in England, Ireland, the Netherlands, Belgium, Sweden, Norway, Finland, Switzerland, Greece, Israel, Turkey, most of the East-European countries, South America, Australia, a.o..

Reports for publication in ISKO News of relevant activities in different countries would be welcome.

Chapter Chairs present gave short reports on their activities. Prof. Curras and Prof. Garcia Marco spoke for *Spain* where a Regional ISKO Conference was held in the Fall of 1993, Proceedings and a Newsletter are planned; Dr. Sukiasyan spoke for *Russia* and reported on the Regional ISKO Conference there in May 1993 and the Call for Papers prepared for the next conference in May 1995. Dr. Stancikova spoke for *Slovakia*, where an ISKO Chapter was founded in the fall of 1990 and a first Regional ISKO conference had been held already in 1991 at Bratislava (with the proceedings displayed in the hall) and the first European ISKO Conference on Environmental Knowledge Organization will be held in Sept. 1994. Dr. Dahlberg spoke for *Germany* where the ISKO Chapter was also founded in the Fall of 1990 and where the first international and two regional conferences (in 1991 and 1993) were held with proceedings volumes published and in preparation.

5. The Report of the Treasurer

In the absence of the Treasurer, Prof. Dr. Meder, Dr. H. Löckenhoff reported on the auditing having been done by himself and by Mr. Nikolas Paulus resulting in the statement that the finances of the Society were in good order.

6. Diskussion of points 4 and 5.

There was no discussion.

7. Acceptance and Approval of the two Reports

Both reports were accepted and approved on a show of hands.

8. Election of the Auditor and Deputy

Mr. Nikolas Paulus had agreed to continue for the next period. A deputy auditor would be needed, however, he should come from Germany in order to save travel money. The Assembly agreed to transfer the appointment of the second auditor to the Executive Board.

9. Discussion of the Procedure for the Election of the Executive Board

Dr. Dahlberg outlined the procedure in which a President, two Vice-Presidents, a Treasurer and 3 new members to the Executive Board would be elected. Voting would be by secret ballot. The question was asked "Is there a quorum?" The Statutes do not stipulate specific numbers. A quorum is assumed to be a majority of the members present.

10. Elections

Results of the balloting were:

| | |
|-------------------|---|
| President: | Ingetraut Dahlberg |
| Vice President 1: | Robert Fugmann |
| Vice President 2: | Hanne Albrechtsen |
| Treasurer: | Hellmut Löckenhoff |
| Members: | Gerhard Riesthuis Pavla Stancikova Nancy Williamson |

11. Proposals of the Membership for Further Activities of ISKO

1. It should be considered to make ISKO known to philosophers and psychologists. One suggestion was made to be

more restrictive in the disciplines and subject matter of papers for conferences. The suggestion was however vetoed by the Assembly as being too narrow and approach.

2. Discussion of a proposal to raise the ISKO fee from 60.- to 70.- DM. Concern was expressed about the effects on membership. To be considered this needs to be made an agenda item through a motion. Prof. Curras proposed that it be made an agenda item for the next conference.

3. e-mail addresses should be included in the Who's Who.

12. Proposals for Topics, Places and Dates of the 4th and 5th International ISKO Conferences 1996 and 1998

It was suggested to have the 1996 conference in the United States with regard to commemorating 120 years of the Dewey Decimal Classification. The 1998 conference should be in Europe again, perhaps in the Netherlands, the UK or Austria.

The topic of the next conference was to be discussed by the Scientific Advisory Council on the following day.

The attendance list showed 21 members present.

Toronto/Frankfurt, 26 July 1994

Signed: N. Williamson, I. Dahlberg

Advances in Knowledge Organization, Vol. 4 published

The proceedings volume of our 3rd International ISKO Conference in Copenhagen was published on June 17, 1994, three days before the conference started and given to the participants of the conference. The bound volume of 448 p. (ISBN 3-88672-023-3) is available from INDEKS Verlag, Woogstr. 36a, D-60431 Frankfurt, Germany for DM 88.- in general and for ISKO members with a 25% reduction.

Call for Papers, 4th German ISKO Conference, Trier 1995

This 4th German ISKO Conference will be devoted mainly to the problems of *Case-Based Reasoning*. A Call for papers has been published and is added to this issue of KO going to the German ISKO members and German readers. The Conference will be held at the Trier University, from 17-20 Oct. 1995. It is organized by Prof. Dr. H. Czup. For further information please turn to him at Universität Trier, Fachbereich BWL, Wirtschaftsinformatik, D-54286 Trier, Germany.

Conceptual Knowledge Processing - Methods and Applications

This will be the topic of a conference to be held at Darmstadt, Febr. 22-25, 1995. In continuation of a series of annual conferences since 1986, the Research Group on Concept Analysis together with the Ernst-Schröder Center for Conceptual Knowledge Processing and ISKO invite to register and propose papers. For further information please turn to Prof. Dr. Rudolf Wille, FB Mathematik, Technische Hochschule, Schloßgartenstr. 7, D-64289 Darmstadt.