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Introduction

The sixty-four papers collected in this volume have been divided into ten themes: Epistemology and Information Ecology, Cognitive Approaches, Computational Models, Development and Analysis in Classification Systems, Interdisciplinary Approaches, Design and Information Systems, Linguistic Aspects, The Comparative Approach, Conceptual Modeling and User Profile Modelling. They can be found in this order in the table of contents which follows the order of the Conference sessions.

But we can also attempt to regroup them more synthetically into three major families whose interaction lies at the root of ISKO's very raison d'être. The family of the Humanities, that of the professional designers of classification Systems and that of the computer specialists. Of course, we should be aware that these divisions are made mostly for practical reasons. These various "cultures" mix and interact freely during the conference and within the multidisciplinary research teams. As a matter of fact, one can find humanists among the computer specialists, classification experts among philosophers and computer buffs among librarians or documentalists. But every research object requires a distinct approach.

The "humanistic" approach, which we could almost call "philosophical", is evident in the papers dealing with the nature of Knowledge Organization and information seeking, with the exact nature of the various types of relations or in those questioning the logic of documentary research based on subject indexes. Other papers find in classical philosophy the very logic on which electronic data bases are built or see in the metaphor paradigm close relations with new technologies. Some brave souls even go to the extent of trying to define the Encyclopedia or Universal Lexicon of the future.

The specialists of classification Systems paint us a rather optimistic picture of the modernization efforts carried out during the last few years to update the old classificatory models (DC, CDU, Library of Congress). Computerization has played a major role and some are looking into ways of adapting DC to Internet searching. Others, inspired by the work of cognitive science specialists bring ever increasing degrees of sophistication to their analysis
of hierarchical relations, somewhat in the great tradition of Scholastic scholars. Some offer ideas on types of Universal Classification. As for Thesauri designers they show the vitality of this flexible model by offering to enrich it with new relations.

Artificial intelligence and cognitive science applications to information retrieval open enormous possibilities. A lot remains to be done in that direction. New and more sophisticated programs such as those on Conceptual modeling and Ontologies are described in several papers which should be eye-openers for non specialists. Several teams are trying to raise information retrieval to the level of an intelligent dialogue with the system, something which necessarily implies a Linguistic analysis of the requests. A rapidly expanding research field deals with attempts at modeling users needs in order to guide them in a cooperation mode.

As for any other closed classification, this tripartite presentation requires the creation of a class for unclassed elements. In those we would have to put the few but interesting papers dealing with image analysis, a complex language which has hardly been explored yet, and with the potentialities of graphics as a form of intuitive knowledge with a high degree of efficiency in the dialogue between Man and The Screen.

The conference itself is a magical combination of all that is relevant in improving our representations of knowledge and the means whereby we can share it more effectively. All of the work is making a contribution and the benefits to be obtained by getting the relationships right - in all meanings of the term - are very considerable. We should be seeking a bridge between the cognitive scientists, information scientists, system developers and service providers through improved tools - but for the tools to be effective we need more comprehensive representations of knowledge - whether you call them ontologies or semantic networks or rich thesauri.

Widad Mustafa el Hadi, Jacques Maniez and Steve A. Pollitt

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