

Editorial

Hot Topics in Knowledge Organization

1. Classification is : Establishing Relationships...

This 30-year old definition, the full text of which is found in the Proceedings volume of the Elsinore conference (1), forcefully came to my mind at this year's Convention of German Documentalists (2) when the Joint Session 8 of the Committees on Artificial Intelligence and Knowledge Processing (KWV), and Thesaurus Research (KTF), together with ISKO and AG-IS/GfKL was paying attention to the Semantic Retrieval System RELATIO/IR. Gerhard Rahmstorf, of IBM Heidelberg, presented this system as one using natural language for information request and description and in which the representation of the concepts is anchored in a conceptual structure, with the relevance of the concepts of this structure being determined by rules that are independent of the given application (3). He distinguished between concepts and semantic relations as the necessary inventory for giving expression to subject headings, without, however, regarding the latter, known in philosophy as *synkategoremata*, likewise as concepts (4). Thus it seems opportune to recall once more in this issue the memorable work of Jean Perreault, which he started exactly 30 years ago at the moment I am writing this. Yes, it was in fall 1964 that Jean and I, privileged as we were at the time to work as Research Associates at the first US university library which had a computer at its disposal. It was at Florida Atlantic University Library where Ed Heiliger was able to realize the results set forth in the 'Silver Book' (5). We were giving thought to the problem of how content description might be improved. Together we studied Eric de Grolier's seminal work (6) and the relational concepts contained in it, from which Jean developed his famous scheme, which was prepared for the 1965 FID conference in Washington, D.C. and appeared in the final issue of the FID journal *Revue Internationale de Documentation* in 1965 (7). In 1967 a Russian translation of this entire article was published and in 1974 a German one of the actual scheme only (8). In his book *Towards a Theory for UDC* (9) Perreault summarized the results of the ensuing relevant discussions and reprinted the scheme in an additional chapter. This revised scheme we reprint also in this issue, without, however, preparing an index for it - this we would like to leave to the interested reader and user of this scheme.

2. Classification Online

A really exciting seminar, attended by some 100 participants, was recently staged in Illinois by Pauline (Atherton) Cochrane as the 36th Allerton Institute on the

subject *New Roles for Classification in Libraries and Information Networks* - see also Nancy Williamson's pertinent report under FID/CR News in this issue. The computerization of the universal systems such as DDC, LCC, UDC, etc. is in full swing, with the various systems competing with each other on who will have the most to offer. It was most surprising for all to hear DDC editor Joan Mitchell, UDC editor Ia McIlwaine, and LCC specialist Rebecca Guenther (responsible for the input of the LCC according to the MARC format for classification specially developed for this purpose) report on the respective states of their relevant work and also to be informed by Eric Coates of the work on the Bliss Classification and his BSO. We are happy to be able to present in this issue, through R. Guenther's contribution (*The Library of Congress Classification in the USMARC Format*) also an insight into the LCC data input process. Because of the enormous size of the LCC (48 volumes by now) and its numerous precombinations in notation and class description, a data input process covering the entire LCC is undoubtedly an extraordinary achievement. Much less effort and time would probably be involved in subjecting any faceted system to the same process - let's hope therefore that the new possibilities now available will prove sufficiently attractive for all other systems, too, to pursue their computerization! For such computerization would simultaneously be a necessary prerequisite for realizing the goal of many dreams: a 'black box' for all universal classification systems, the switching mechanism already envisioned by the 1971 UNISIST Report (10). Another preparatory stage for this is the intellectual task of bringing about compatibility between systems.

3. Once more on Compatibility and Integration of Classification Systems

At this September's ISKO conference in Bratislava on *Environmental Knowledge Organization and Information Management* (a detailed report with the recommendations of this conference will follow in our next issue) it was proposed that, following the preparatory work of various nature on this subject in the early 80s (11), an ISKO Conference on these questions be held next year in Poland. The contribution by Prof. Scibor and Ms. J. Tomasik-Beck in this issue (*On the establishment of concordances between indexing languages of universal or interdisciplinary scope*), may be regarded as preparatory to this conference. Meanwhile a growing number of starts have been made in this direction and there are also already some accomplishments, vide the work being done for UMLS and now also in the agricultural field. That both works are predestined, as it were, for the environmental sciences goes without saying. Here an immense field of work has opened up for us, for technology alone, of course, will never do the job; in order to be able to compare the concepts of the systems with each other, a corresponding conceptual analysis will be necessary.

However, analysis of concepts on the basis of definitions or of contexts of their use in systems or in language are not only necessary for arriving at compatible systems, but also for questions of terminology and of translation and finally for effective collaboration between the elaborators of thesauri, classification systems and terminologies. There is no end to the research projects that might be taken in hand here, but it should also be insured that we will not lose our overview of what has been taken in hand and what is going on. New initiatives have now been taken through the founding of institutions in France, Russia, and Germany (see the notes on it under *Reports and Communications*), while on the international scene it is of course the meritorious work of Infoterm in Vienna with its many conferences and publications which deserves to be mentioned here.

4. A New Look at Abstracting

Apart from gaining greater clarity about our concepts and thus also about our knowledge there is today a further activity of acute actuality: the condensing of texts, of information and of knowledge through abstracting, through summarization. From *B. Endres-Niggemeyer* we have received a report on the December 1993 *Dagstuhl Seminar*, and we recommend its reading. Here, too, intellect and technology must 'join hands' for maximum effectiveness, and the spectator can only be amazed at what the human brain, that miraculous organ, is capable of when trying to get on the trail of the wonders of man's thinking capacity. Here, work is being done on the very frontline. Let us hope that these lofty goals will not prove too lofty and that they will find the general interest and recognition so necessary for their attainment.

5. Technology Assessment and ISKO?

A further topic and a new idea: what can, what should we do in view of that part of the ongoing technological development which is not serving the good of mankind? *Holger Nohr* takes up the subject of Technology Assessment and in so doing appeals also to the responsibility shared by every knowing person in view of those developments which are leading to irreversible ruining effects on the entire globe, such as e.g. the destruction of our forests. So what can we do?

Hot topics..... May the contributions in this issue and especially also the very last one not only find attentive

readers, but also be found worthy of intensive reflection, causing us to react and to listen attentively to our inner voice reminding us *to respond* and to act accordingly! The divine command *Make the earth subject unto you!* given at the time to Adam and Eve did not mean that man should take this materially and feel free to exploit the earth as he sees fit, but rather that the material things should be spiritualized, taken into spiritual possession by man, the carrier of the spirit, so that they should serve the human spirit and its consummation rather than man's material world. May more and more of our contemporaries recognize and realize this invitation!

Ingetraut Dahlberg

References

- (1) Atherton, P. (Ed.): Classification Research. Proc. 2nd Int. Study Conf., Elsinore, Denmark, 14-18 Sept. 1964. Copenhagen: Munksgaard 1965. p.544.
- (2) Neubauer, W. (Ed.): Deutscher Dokumentartag 1994. Blick Europa. Trier, 27-30 Sept. 1994. Frankfurt: Dt. Ges. f. Dokumentation 1994. 511p.
- (3) See also thereport: Fugmann, R.: Semantic Retrieval. Workshop on 15-16 March 1994 at Heidelberg. Knowl. Org. 21(1994)No.2, p.94
- (4) Rahmstorf, G.: Semantisches Information Retrieval. In (2), p.237-260. (Rahmstorf has written his doctoral dissertation 1983 on "Die semantischen Relationen in nominalen Ausdrücken des Deutschen". University of Mainz).
- (5) Schultheiss, L.A., Culbertson, D.S., Heiliger, E.M.: Advanced Data Processing in the University Library. New York 1962. (A description of the FAU computerization procedures was published in April 1965: Dahlberg, I.: Verwirklichung einer modernen Universitätsbibliothek. Mitteilungsblatt Verb. Bibl. Land NRW 15(1965)No.2, p.86-105)
- (6) Grolier, E.de: A Study of General Categories applicable to Classification and Coding in Documentation. Paris: UNESCO 1962. 248p.
- (7) Perreault, J.M.: Categories and relators: a new schema. Rev. Int. Doc. 32(1965)No.4, p.136-144
- (8) Dahlberg, I.: Grundlagen universaler Wissensordnung. München: K.G.Saur Verlag 1974. p.316-317
- (9) Perreault, J.M.: Towards a Theory for UDC. London: C.Bingley 1969. 241p.
- (10) UNISIST Study Report on the feasibility of a World Science Information System. Paris: UNESCO 1971. 161p. (Chapt.6.2.4)
- (11) see the relevant papers (by J.I.Litoukhin, J.Aitchison, M. Dienes, D.Soergel, and I.Dahlberg) in the volume Riggs, F.W.(Ed.): The CONTA Conference. Proc. Conf. on Conceptual and Terminological Analysis in the Social Sciences, Bielefeld, May 24-27, 1981. Frankfurt: INDEKS Verlag 1982. See also the articles in International Classification 81-2 (Aitchison and Dahlberg), 81-3, 82-1, 82-2 (Sager, Somers, McNaught) and 82-2 (deHart).