Editorial

Knowledge Organization and Quality Management

When, 20 years ago, I wrote the first editorial for this journal and immediately afterwards switched on the radio, I did so right on time to hear an orchestra close the piece it was playing with a wonderfully harmonious ending accord, which sounded to me like a mighty stroke by a kettle-drummer, as if to confirm everything I had just started with this journal.

Now, with this issue, we are entering into our third decade, and I cherish the hope that at least the first contribution in this issue by Peter JAENECKE, „To what End Knowledge Organization" will likewise be for our readers something like a forceful stroke on a kettledrum! The above named topic of our forthcoming 3rd International ISKO Conference at Copenhagen, June 20-24, 1994 (see also the program under ISKO News) should truly be a guiding star for all our efforts, since Knowledge Organization has very much to do with orientation to quality and with a striving for truth and validity in everything we do and say.

Just what is to be understood by it in detail is something we will talk about in Copenhagen. Here, however, so that we may have something to think about in advance, P. Jaenecke submits his proposals for an ISKO action program, proposals which he presented at the start of the Weilburg conference of ISKO's German chapter (26-28 Oct.1993) and which will be printed in German in the proceedings of this conference.

Yes, it is true, we feel flooded by so-called information - rightly termed 'messages' by Jaenecke, and the effects of this flood are: the overstraining of our faculties and as a result: incompetence, wrong decisions, paralysis and much idle running in the business of science. What led to the so-called 'sputnik shock' some 35 years ago, namely the realization in the USA that not enough attention had been paid to the contents of Soviet scientific literature, causing the relevant publications on the construction of space missiles to have remained unknown in the USA had at least the consequence that from then on more funds were invested in a program for the adequate financing of scientific literature documentation. May we be able now to forestall a similar shock 'therapy' by an appropriate enlightenment about the dead-end we are facing today by the floods of indigestable 'information'.

Following the 1958 'sputnik shock', the physicist Alvin Weinberg prepared in 1963 in the USA an expert treatise which, as the so-called 'Weinberg Report' (1), was heatedly discussed at that time in documentation circles, but nevertheless was not, as far as its recommendations were concerned, taken as seriously as it should have been and as was necessary. For if it had, we would not be facing today the near-unsolvable problem of how to perform an adequate contents analysis of the Himalaya-high mountains of published literature. Weinberg demanded already at his time that Information Analysis Centers should be set up, hence centers which do not just document and describe the literature, but which evaluate it. This had already been intended by the late Ray Pepinsky at his Groth Institute (2), where crystallographic data were not only to be registered according to their characteristics, but also to be checked once more in the laboratory and it had also been described by Martin Scheele for biology documentation in the chapter on „Foundation Research in Data Documentation" of his book (3). There are indeed some such information analysis centers in existence. In Germany one might regard the Gmelin and Beilstein Institutions as such centers for information analysis in inorganic and organic chemistry respectively.

In his Report, Weinberg already proposed, much like Jaenecke does in his present contribution, that in the various knowledge fields and disciplines a few theoreticians should be available for a properly relating of newly acquired knowledge to the store of knowledge already available. 'Theory' comes from the Greek *theorein* which means 'to see', *to have* (and to provide) *insight* (into and therefore also understanding of the proper relationships between things).

A similar suggestion was made at the recent meeting of our Indian colleagues on 7 January 1994 in Bangalore (see the detailed report under ISKO News in this issue), where it was proposed that scholars at universities should be called upon to participate in the further development of the Colon Classification. Here the primary necessity evidently was recognied that the new concepts in research and teaching find proper consideration in the CC. It was also proposed, however, that a special institute be set up for the further development and review (in the „laboratory") of the CC. But no matter, whether we are talking of updating the CC or some other universal classification or merely of the general process of concept classification, it is essential to realize that such an activity, being absolutely necessary and even indispensable for the continued existence of science, is decidedly of general interest. At this point I would like to quote from a work, already published in 1971:

„It is our considered opinion that it is not sufficient to recognize in theory that the production of more and more new knowledge without a simultaneous and thorough systematization of the knowledge already existing must lead into a dead-end; rather, a wholly practical consequence should be drawn from this fact, the consequence namely that the systematization of knowledge deserves to be assigned the same scientific rank and status as primary research"
(D.Soergel) (4)

https://doi.org/10.5771/0943-7444-1994-1-1 - am 13.01.2026, 03:20:31. https://www.inlibra.com/de/agb - Open Access -

Now, what is to be done? The task appears to be an overwhelmingly big one which presumably could hardly be assumed by a society like ISKO, even if it had ten times more members than it has and if these members were supremely qualified both in knowledge organization and in their respective disciplines. Therefore I deem it essential that

1) first of all scientists and science-policy makers must become aware that the existing „knowledge misery" is something of their own doing, for they have not seen to it that essential new knowledge is systematically related to the essential available knowledge so that the required order and overseeability of the valid knowledge may be established or restored,

2) the necessity of the creation and maintenance of order in our scientific concepts be recognized by the scientific community and that suitable measures be taken on a national scale in all countries concerned through adequate institutionalization of centers required,

3) the agencies concerned in the fields of documentation of scientific literature, terminology and also translation be given a suitable part to play in the necessary conceptual work.

Thus we wish to advocate a proper „quality management" of our knowledge units, our concepts, and we can only hope to find an appreciative understanding with discerning scientists, among whom we hope to find 'adherents' to propagate these insights so that it will not last another 5 years until an expert opinion à la Weinberg Report is prepared whose recommendations may not even be complied with in the end.

A few bright spots are already noticeable, and here I wish to mention Prof. H.-J. Schneider's work on his „Lexikon der Informatik", to be published this year in its 4th edition by Oldenbourg Verlag (5). This dictionary has come into being with the cooperation of many hundreds of scientists, and care was taken to ensure that the concept designations in the definientia of the definitions are linked together wherever appropriate and that these related concepts are always supplied along at any relevant definition. A further „bright spot" of this nature is to be seen in the efforts at the representation of interrelationships existing among the topics of international societies, their tasks, journals, etc. in the annual yearbooks and other publications of the Union des Associations Internationales as edited for some 20 years by A.J.N. Judge, UAI, and appearing now in the K.G.Saur Verlag. Equally relevant is also his most interesting „Encyclopedia of World Problems and Human Potential" with the connection of the concepts of „world problems" in Vol.1 and their possible solutions through „human potential" in Vol.2 (6).

However, apart from such indication of interrelationships, not much else has been done in either case to bring about a systematic representation of fields of knowledge by scholars themselves, except for the work of F.W.Riggs, who should be named here too, for his Intercocta Glossaries, the definitions of which are presented in systematic arrangement of the contents of their concepts and their term(s) being given in addition and are to be found in the alphabetical index (7).

Systematic representation would require, in addition to model-theoretical investigations (cf. the contribution by HellmutLÖCKENHOFF: „Systems Modeling for Classification: The Quest for Self-Organization") and structural analyses („A Dialogic Networking Approach to Information Retrieval" by Josef ZELGER), above all an adequate knowledge of concept analysis as well as a new methodology in the contents analysis of books, as suggested by Robert FUGMANN in his contribution („Book Indexing: The Classificatory Approach").

Let me finally also mention the contribution by Vadim B. SMIRENSKY („The Power of Ignorance"), which should have appeared in the final issue of 1993 as one of the papers of the Regional ISKO Conference in Moscow, May 1993, but was lost through circumstances of some sort. Here we regret to have only a summary of his contribution available yet nevertheless his ideas should not be thought to clash with what precedes them, but rather be regarded as a further incentive to recognize the problems and tackle them with courage and confidence - confidence, that is, that on our path toward the finding of truth we will be guided by Him Who said of Himself, „I am the Way, the Truth, and the Life", for it is only with GOD that all problems of this world can be perfectly solved - also our problems of quality management in knowledge organization!

Ingetraut Dahlberg

References

(1) Science, Government and Information. The Responsibilities of the Technical Community and the Government in the Transfer of Information. A Report of the President's Science Advisory Committee. Washington, DC: The White House 1963. 52p., $ 0.25 (USGPO)

(2) Dahlberg, I.: Ergebnisdokumentation in der Kristallographie. Das Groth Institut. Nachr.Dok. 16(1965)No.3, p.150-158

(3) Scheele, M.: Wissenschaftliche Dokumentation. Schlitz/Hessen: Verl.Dr.M.Scheele 1967. 391p. (here p.336-351

(4) Soergel, D.: Dokumentation und Organisation des Wissens. Versuch einer methodischen und theoretischen Grundlegung am Beispiel der Sozialwissenschaften. Berlin: Duncker & Humblot 1971. 380 p. (here p.VI)

(5) Schneider, H.-J. (Ed.): Lexikon der Informatik. München: R. Oldenbourg Verl. 3.1991. 989p.

(6) Encyclopedia of World Problems and Human Potential. Vols. 1 and 2. München, etc.: K.G.Saur Verl. 3rd ed. 1991. 949+1187p.

(7) Riggs, F.W. (Ed.): Ethnicity. Intercocta Glossary. Concepts and Terms used in Ethnicity Research. (Pilot Edition). Honolulu, HI: Univ.of Hawaii. Dept. of Political Science 1985. 205p. = International Conceptual Encyclopedia for the Social Sciences, Vol.1

https://doi.org/10.5771/0943-7444-1994-1-1 - am 13.01.2026, 03:20:31. https://www.inlibra.com/de/agb - Open Access -