REPORTS
AND COMMUNICATIONS

Theory of Knowledge and **Science Policy: CC 79**
A symposium organised by Communication & Cognition, University of Gent, Belgium, Blandijnberg 2, Gent, 13–16 December 1979.

At this symposium specialists of different disciplines: logic, linguistics, economics, psychology, anthropology, sociology, history, physics, chemistry, philosophy, ecology, bibliometrics, etc. came together to consider the problem of the present development of theory of knowledge and its relevance for the theoretisation and the practical realisation of science policy.

The papers and their presentations were arranged in the following sessions.

I. Observation and science policy
II. Language and science policy
III. Formal systems and science policy
IV. Science institutions and development
V. Model building and science policy
VI. Values in science and science policy
VII. Communicational structures of science and science policy
VIII. Economical aspects of science policy.

On some of these sessions we want to comment more extensively: In the first session, the papers of Apostel et alii, Campbell, Naess and Nowakowska attracted much attention. The central problem of the importance of cognitivism under its several forms for knowledge and the relevance of it for science policy was extensively discussed.

In the section of language and science policy between others the papers of Peeters and Vandamme, Nowkowska, Vandenbrande, Young, Knorr and Laurian had a stimulating effect. Here attention was given to the several ways language determines the development of knowledge and consequently what use can be made of language and language policy for the policy of science.

In the third section, we found a lot of attention of the authors and the audience for the problem of the dynamism of knowledge and the problem of describing and explaining this dynamism by a formal theory. The papers of Hintikka (who made use of question logic), Dacey, Lorenz and Nowakowska were certainly very important here.

Other papers in the other sections which stimulated discussion very much were — among others — Whitley, R. (The fragmentation of the sciences), De Hemptinne, A. (Cybernetic analyses of governmental polices), as well as Kambartel, Krohn, Mittelstrass, Laudan, Dubarle, Kochen, Nowotny, Tisdell, Hafkamp.

Besides these sessions some plenary sessions should be mentioned. In these sessions the keynote address of Apostel and the conclusion of the Noble price winner Prigogine were most central. Pinxten, De Mey, Vandamme and Stengers also made some attempts to synthesise the several sessions. Pentlists made some comments and complementary remarks on the attempts.

In the final session the panel and the audience were asked to comment on the following essential questions:
1. Is it possible to change the planning of change in science?
2. Is research usefull for changing the planning of change in science?
3. What information of a crude empirical nature should be gathered for changing the planning of change in science? We are not asked here the question about what has been done, or what one is doing but the question about what has or can be done.
4. In the service of what fundamental aims measured by which system of indicators has the changing of the planning of change in science to occur. How should we or could we fight against the major pressure groups if they are planning a change in science which is not guided by the fundamental human aims.

The proceedings (Part I: 585 pp (600 BF) and part II: 200 pp (300 BF)) can be ordered by your local book dealer or directly to Communication and Cognition, Blandijnberg 2, 9000 Gent, Belgium (with the mention of proceedings CC 79).

F. Vandamme

Round Table on Classification, Copenhagen, Aug. 1979

The round Table on Classification, which had its first meeting in 1978 at the IFLA Strbske Pleso conference, continued its policy of presenting papers dealing with the major classification systems already in existence, and in this meeting in Copenhagen, received a report on the Broad System of Ordering (BSO) which has been developed as an FID/Unesco project to serve as an international switching mechanism. This was followed by a paper from Ben Custer, editor of the Dewey Decimal Classification, describing his long connection with DDC and his experiences in producing four editions. In the past twenty years, under his guidance, the use of DDC has spread to one hundred and thirty countries, and the number of copies has increased more than two hundred percent. The Round Table, in re-electing its officers, Joel Downing, Chairman, and Frances Hinton, Secretary, also agreed to support a proposal that it be transferred from a Round Table to an IFLA Section.

(From: Intern. Cataloguing 8 (1979) No. 4, p. 38)

Recommendations of the International Symposium "Theoretical and Methodological Problems of Terminology", Moscow, 27–30 Nov. 1979

The participants of the International symposium "Theoretical and Methodological Problems of Terminology" having listened to and discussed the reports presented should like
— to note the considerable benefit of this symposium for the exchange of experience concerning the present state and perspectives of the development of terminology work, the standardization and harmonization of terminology, the use of computers, linking of terminology with other sciences and training of specialists in terminology;
— to state that the discussions have contributed to the solution of a great number of scientific problems concerning the languages of science and technology;

Intern. Classificat. 7 (1980) No. 1 Reports and Communications

25

— to express their awareness that the exchange of opinions and experience assists in solving theoretical and methodological problems of terminology on the national and international level, in particular within ISO/TC 37 and also the practical activities of creating terminological standards, recommendations, dictionaries and other documents which contain terminology;

— to state that the discussion of problems of automatization in terminology practice will promote cooperation between existing national terminological data banks and the development of the TERMNET system within Infoterm;

— to express their awareness of the necessity to develop a model of a term bank for limited fields;

— to note the desirability of working out a job description for terminologists, of compiling and evaluating the existing and planned university courses on the subject taking into consideration the needs of developing countries;

— to emphasize the necessity of studying the question concerning the exchange of terminologists having in view the activization of terminological work in different countries;

— to request the organizers in the symposium (Gosstandart, the Academy of Sciences of the USSR, Infoterm, AILA) to consider the possibility of editing the proceedings of the symposium in Russian, English and French;

— to inform the scientists, specialists and experts of the countries they represent and international organizations such as ISO, IEC, CMEA, EOQC, UN FAO, UN ECE and others of the results of this symposium;

— to thank Gosstandart, the Academy of Sciences of the USSR for the excellent organization of this symposium and

— to note the desirability of a regular repetition of such international meetings.

USSR State Committee for Standards

(Ed. note: see also the report of this conference in the Section INFOTERM NEWS)

NFAIS/ASIDIC Joint Conference

"New Technology in the 1980s" was the theme of a joint conference by the National Federation of Abstracting and Indexing Services (NFAIS) and the Association of Information and Dissemination Centers (ASIDIC), held at Sheraton National Hotel, Arlington, Va., March 4–6, 1980. Some papers of direct interest to our readers are: R. Wigington: Computer assisted editing and indexing, experience at CAS. – W. M. Thompson: Implementation of computer-aided subject indexing at the Defence Technical Information Center. – Vance, D.: Indexing museum collections. Conference Chairman was Dr. Lois Granick from the American Psychological Association. For further information write to NFAIS, Suite 1130, 112 S. 16th Street, Philadelphia, Pa. 19102, USA.

4th Annual Conference: Knowledge Structures and Order Patterns

The Gesellschaft für Klassifikation (Society for Classification) holds its 4th Annual Conference from 16–19 April 1980 at the Bildungshaus St. Virgil in Salzburg, Austria. The four-component theme "Knowledge Structures and Order Patterns" has been related to a strata model of the universe of knowledge forming six major levels,

(1) the mathematical-physical
(2) the morphological-biological
(3) the physiological-psychological
(4) the scientologic-linguistical
(6) the historic-classificatory

and the six plenary lectures will each be related to one of these levels and be supplemented by contributed papers concerning additional topics. This arrangement marks a twelvefold approach to the question regarding the function of order in the process of knowledge finding.

Thus the conference will bear out on the one hand the value of classification as the *science of order* (based on the structures and patterns of reality and cognition), while, on the other hand the derivation of basic insights for the practical classificatory and descriptive work will be focussed.

The following program-listing separates the main papers from the contributed ones:

1. W. Oberschelp: Structures of order and order of structures in the dimensions of physical reality.
2. C. Bresch: Structure patterns of evolution – evolution of pattern structures.
3. R. Haase: Patterns of order and order of pattern in displaying a harmonic picture of the world.
4. W. Totok: Knowledge of organization and organization of knowledge in the developmental history of the sciences (Renaissance until beginning of Enlightenment)
5. J. S. Petöfi: Knowledge of structure in natural languages, structures of knowledge in natural language communication.
6. I. Dahlberg: Patterns of knowledge and knowledge of patterns in comprehending classificatory totality.

Contributed papers:

Session 1:
H. G. Körner: Optimal class-size, the mathematical constant e and questions of notation.
W. Zwirner: Knowledge patterns in physics.
P. O. Degens: Hierarchic classification.
F. Jochum: On the determination of distances between semantic representation languages.
M. Koch: Natural measures of distance and similarity. Examples from economics and the social sciences.

Session 2:
S. Rösch: Natura è scritta in lingua mathematica – Numbers in nature and in art.
Ch. Weinberger: Homology and analogy as a basis for hypothesizing in biology.

Session 3:
F. Seitelberger: The space-time structure of human world experience as a problem of brain research.
St. Jaki: The mind classifying and unclassifiable.

Session 4:

A. Müller: Holton's methodological principles and their significance for structural changes of scientific concepts.

O. Sechser: Information and truth: false information and untruth?

J. Hölzl: System theory and classification.

Session 5:

Th. Ballmer: Feature-less classifying in linguistics as exemplified by the verb vocabulary.

H. Mönke: Definitions as knowledge structures of conceptual statements.

J. Panyr: Automatic thematic text classification and its interpretation in rough information retrieval.

Session 6:

O. Weinberger: Concept structures and classification.

L. Giertz: Categories of concepts for building classification.

B. Maaßen: Subject cataloging between theory and practice. Experiences at the Deutsche Bibliothek (German Library).

A summarizing session is scheduled at the end including reports on the results of the sessions and on the work of the Special Interest Groups of the Society. Except for the papers by Prof. Stanley Jaki, Princeton and Prof. Lasse Giertz, Cairo, all papers will be in German. For a copy of the German program please write to: Gesellschaft für Klassifikation e.V., Woogstr. 36a, D-6000 Frankfurt 50.

Methodological Foundations for Systems Studies

From April 13–19, 1980 a Second Spring School is scheduled on the theme "Methodological Foundations for Systems Studies on Science and Technology" in Warschau. For further information please contact: Prof. Dr. W. W. Gasparski, Science Secretary, Polish Academy of Sciences, ul. Nowy Swiat 72, 00-330 Warszawa, Poland.

The Use of the International Patent Classification (IPC)

will be discussed among others at the International Symposium on the Role of Patent Information in the Transfer of Technology, Varna, Bulgaria, May 27–30, 1980, according to an announcement made by the Deputy Director General of the World Intellectual Property Organization (WIPO), Dr. F. A. Sviridov. The program listing some 25 papers from 19 countries is available from WIPO, 34, chemin des Colombettes, CH-1211 Genf. Working languages are English, French, Russian, German. The registration fee is US $ 210,–

The Classification Society NAB, 1980 Annual Conference

A first conference announcement and call for papers has been mailed by the North American Branch of the Classification Society for the 11th Annual Conference to be held at Hilton Hotel, Boulder, Colo, June 1–3, 1980. Papers are solicited on any topic related to classification. Program Chairman is Dr. T. Brennan, Behavioral Research Institute, 2305 Canyon Avenue, Boulder, Colo. 80302, USA.

Indexers in a World of Change

This is the topic of the weekend conference on 11–13 July 1980 of The Society of Indexers to be held at Newnham College, Cambridge, England. Invited speakers and workshop leaders include: N. McWhirter, T. R. Walker, L. Urdang, K. Mellanby, R. Collison, G. Moore, Ch. Lavell, A. Hoffmann and C. Gordon. Workshop topics will include computer indexing, periodical abstracting, archives, medicine & science, archaeology & history, law & crime, biographies and general indexing. For information please contact: Mrs. H. Pearson, 79 Highsett, Cambridge CB2 1NZ, England.

First Annual National Artificial Intelligence Conference

The recently founded American Association for Artificial Intelligence (AAAI) announces its first conference for Aug. 19–21, 1980 in Stanford University, Palo Alto, Calif. and calls for papers on the following topics:

Knowledge representation, Knowledge acquisition, Problem solving and search, Natural language, Program synthesis and understanding, A.I. languages and software, Mathematical and theoretical foundations, Psychological aspects, Vision, Robotics, Theorem proving, Applications, Specialized systems, Game playing.

To submit a paper send four copies of a short paper (1000–2000 words) by May 1, 1980 to Robert Balzer, AAAI Program Chairman, USC/Information Sciences Institute, 4676 Admiralty Way, Marina del Rey, Calif. 90291, USA.

Announcement and Call:

Conceptual and Terminological Analysis in the Social Sciences: Conference No. 1, Bielefeld, Fed. Rep. Germany, May 25–27, 1981

1. *Background.* After two years work, the UNESCO pilot project named "INTERCONCEPT" and its implications for follow-up activities will be presented to the scientific community for evaluation and possible utilization. INTERCONCEPT was designed by UNESCO as a programme and project that could be used to establish an international framework for cooperation among social scientists and interested specialists of various kinds, utilizing such mechanisms as term banks in machine-readable form, and computer conferencing, in order to prepare frequently up-dated glossaries of new and special concepts employed in selected subject fields. Such glossaries will be prepared by specialists in each subject field concerned, and will report their new concepts and the various terms used to represent them, as found in the different languages, cultures, and schools of thought, throughout the world, in which the concepts have come to be used. Citations to the literature in which these concepts are defined will provide an important supplementary retrieval tool.

2. *Conference.* A meeting scheduled to be held in Bielefeld, FRG, during May 1981, will have the following purposes:

a) bring together members of the international community of persons interested in problems of conceptual and terminological analysis in the social sciences.

Intern. Classificat. 7 (1980) No. 1 Reports and Communications

27

b) discuss the results of the UNESCO/INTERCONCEPT pilot projects; and

c) evaluate these projects' findings, and consider their possible utilization in a variety of contexts.

3. *Topics*. To promote the exchange of views among scholars interested in this subject, papers are called for on the following topics, or in answer to the following questions:

a) What criteria can appropriately be used to determine the social science subject fields in which conceptual and terminological analysis can most fruitfully be pursued?

b) What are "concepts", "terms", and "metaconcepts", etc. as these words are understood by social scientists?

c) What use can be made of existing social science thesauri, dictionaries, and classification schemes in the construction of glossaries — and vice versa?

d) What methods and models for glossary construction are appropriate to the needs of social scientists?

e) What are the appropriate criteria for evaluating work done in conceptual and terminological analysis for the social sciences?

4. *Audience*. This call is addressed to all interested persons in the associations belonging to the International Social Science Council, as well as to other institutions, societies, and groups concerned with problems of social science information, with classification research, the philosophy of science, linguistics and semantics, and other fields relevant to conceptual and terminological analysis. It is also addressed to specialists in the terminology banks linked with the TermNet system.

5. *Sponsorship*. The conference will be co-sponsored by the German UNESCO Commission; the Committee on Conceptual and Terminological Analysis (COCTA) of the International Social Science Council (ISSC); the Society for Classification (Gesellschaft für Klassifikation e.V., Frankfurt); the Informationszentrum Sozialwissenschaften, Bonn; and other organizations to be announced later.

6. *Abstracts*. Abstracts of papers, in 300 to 500 words (or a letter of intent), should be sent by June 1, 1980, to the following addresses:

a) *Fred W. Riggs,* COCTA secretary, Political Science Department, Porteus Hall 640, University of Hawaii, Honolulu, Hawaii 96822, U.S.A.

b) *Ingetraut Dahlberg, International Classification,* D-6 Frankfurt-50, Woogstraße 36a, Federal Republic of Germany

Riggs is also chairman of UNESCO's Ad Hoc Committee for INTERCONCEPT, and Dahlberg, a member of the Ad Hoc Committee, is chairing the local arrangements committee.

7. *Procedure*. The organizing committee will select the papers considered most likely to serve the purposes of the conference. These papers will later be published in a volume of collected essays. The authors of the accepted papers will receive reports and documents of INTERCONCEPT prior to the start of the conference.

Current University Programs in Artificial Intelligence

A large sampling of current university programs in AI is presented in the SIGART Newsletter (1979), No. 68, a bimonthly publication of the ACM (Assoc. Comput. Machinery) Special Interest Group on Artificial Intelligence. It lists the titles (and optionally, a brief description) of current and pending research in areas of AI interest, lists of courses in AI or AI-related areas and brief descriptions of computing facilities available for AI research of 69 universities, most from the USA, but also from England, France, Germany, Canada. The compilation was done by Dr. Bonnie Lynn Webber, Department of Computer & Information Science, University of Pennsylvania, Philadelphia, Pa.

ADBS Courses for "Continuing Education"

The Association française des documentalistes et des bibliothécaires spécialisés (5, ave. Franco-Russe, F-75700 Paris) offers courses in several French cities (Paris, Bordeaux, Montpellier, Tours, Grenoble) on a number of topics among which also "Introduction aux langages documentaires" (23–25 April 1980, Paris) and "Conception, organisation et gestion d'un thesaurus" (22–24 Oct. 1980, Bordeaux).

Free-Alphabetical Subject Guide to the INSPEC Classification

This free booklet lists terms in alphabetical order rather than in hierarchical structures as used in the INSPEC Classification Scheme. Users searching in unfamiliar subject areas will find this listing particularly useful. For free copies please contact INSPEC, Marketing Department, Station House, Nightingale Road, Hitchin, Herts. SG5 1RJ, England.

(From INSPEC Matters (1979) No. 21)

28

Intern. Classificat. 7 (1980) No. 1   Reports and Communications