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Sarada Ranganathan Lectures in Library Science

This year the Sarada Ranganathan Endowment Lectures will be given by *Prof. J. M. Perreault*, The library, The University of Alabama, Huntsville, Ala. on December 1–5, 1975 in Bangalore, India, Documentation Research and Training Centre. The subject: The idea of order: towards foundation for a theory of cataloging.

Seminar on Thesaurus in Information Systems

The Documentation Research and Training Centre and the Indian National Scientific Documentation Centre are organizing a seminar on this topic taking place in Bangalore, India, December 1-5, 1975. Topics for papers have been outlined as follows: Principles and methodology of design and development of thesauri with illustrative examples of the practical applications of the principles. Use of computer in compiling thesauri. Studies of the use of specific thesaurus in computer-based information systems, including systems networking and interconnection problems and solutions. Evaluation of specific thesauri based on experience of their use in manual or computer-based information systems.

REPORTS AND COMMUNICATIONS

Collaboration internationale dans le domaine de la terminologie scientifique et teclmique

Le Symposium d'Infoterm, Vienne, 9–11 avril 1975

Notre civilisation moderne nous confronte chaque jour avec und grands quantité de termes techniques et scientifiques et de mots pseudo-savants. Leur nombre ne fait que croître; cette masse grandissante et peu contrôlée fait surgir de plus en plus de problèmes, dont on peut en dégager quelques-uns.

Personne n'est capable de connaître tous les termes techniques et scientifiques dans sa propre langue; on n'est pas toujours informé de la „naissance" de nouveaux termes; la plupart des termes sont formés correctement, mais quelques-uns sont pourtant hybrides et parfois ridicules; certains répondent parfaitement à ce qu'ils doivent désigner, d'autres créent de la confusion; plus d'un fait double emploi; l'internationalisation des sciences et des techniques nécessite plus que jamais la normalisation, la traduction correcte et l'internationalisation des termes. Ce dernier problème soulève d'autres questions: les techniciens et les hommes de science des différents pays se comprennent-ils toujours, c.à.d. savent-ils par exemple de quel appareil, de quelle activité scientifique on leur parle; n'y a-t-il pas danger de double emploi, d'usage inadéquat de certains termes; où en est-on avec la translittération, la transcription et la traduction des terminologies?

Voilà la situation concrète devant laquelle se trouvent ceux qui s'intéressent à telle ou telle technique, à telle ou telle branche de la science. Pour résoudre ces problèmes et répondre à ces questions a été créé Infoterm, Centre international d'information pour la terminologie.

Infoterm, dont l'histoire a été décrite par *E. Wüster*, The Road to Infoterm, München-Pullach, 1974, a été fondé en 1971. Ce centre travaille dans le cadre d'Unisist, avec l'aide de l'Unesco et en relation étroite avec ISO/TC 37, dont le secrétariat est fixé en Autriche depuis 1952. La tâche d'Infoterm est double: en premier lieu coordonner toutes les institutions et instances qui s'occupent de la terminologie, en second lieu rassembler la documentation et l'information de tout ce qui touche les terminologies. Pour l'instant la priorité est donnée à une bibliographie de glossaires normalisés et à l'inventaire de toutes les institutions nationales, publiques ou privées qui s'occupent de terminologies.

Afin d'établir le contact entre experts et organisations et afin de discuter des mesures à prendre pour une coopération efficace, un premier „Symposium sur la coopération internationale en terminologie" fut organisé avec le concours de l'Unesco à Vienne du 9 au 11 avril 1975.

Le symposium fut présidé par *E. Weiss* (Vienne), tandis que l'organisation technique y compris le secrétariat était

dans les mains de *H. Felber*, secondé admirablement par son „état-major", e. a. Mmes *Benz Krommer* et *Dobias*. Dès les premiers moments, on sentait le haut patronnage de l'Unesco, de même que de la Chambre de commerce autrichienne, du Ministère fédéral du bâtiment et de la technique et aussi de l'administration municipale de Vienne qui s'efforçait à confirmer l'idée „Vienne ville de congrès" et qui aimait de souligner le rôle de l'Autriche et de sa capitale dans le domaine de la coopération internationale. Vienne s'est montrée d'ailleurs une hôtesse parfaite, tant par la réception au Rathaus que par les activités „néo-oenologiques" à Grinzing.

Après le mot de bienvenue de leur Président *E. Weiss*, les congressistes entendirent les allocutions d'usage du Secrétaire-général de la Chambre de commerce autrichienne, *A. Wakolbinger*, du représentant de l'Unesco, *W. Löhner*, du Ministre fédéral du bâtiment et de la technique, *J. Moser*. Accueilli comme „the great old man of Infoterm", le professeur *E. Wüster* fit le discours inaugural: il exposa la longue route parcourue pour arriver à Infoterm et il spécifia les buts du Symposium. Les conférences furent réparties en quatre groupes qui heureusement ne travaillaient pas simultanément comme il arrive souvent aux congrès, colloques ou symposia. Ainsi les participants pouvaient assister à toutes les conférences et n'étaient pas obligés de se dresser un programme et de faire la navette d'un groupe à l'autre pour satisfaire leur choix.

Donner un rapport détaillé de chaque conférence n'est pas possible à cause de la place limitée, c'est pourquoi nous citerons sous les quatre rubriques le titre de chaque exposé, plutôt que d'en donner un aperçu en deux, trois lignes, ce qui serait trop court et probablement inexact.

1re Partie: Activité terminologique dans les domaines différents, en particulier son aspect international, (Prés.: A. Lane, Rapp.: A. Tompson).
I. Dahlberg (Frankfort): The Terminology of Subject Fields; *P. Agron* (Versailles): C'est un métier de fabriquer des mots; *M. Roudný* (Prague): The Czechoslovak Experiences and the Co-ordination of Concept Formation; *O. Hoffmann-Ostendorf* (Vienne): Biochemical Terminology, an Example of Successful International Co-operation in the Natural Sciences (exposé lu par H. Ruis); *P. R. Martin* (Clamart): Présentation du Vocabulaire électronique international; *H. Spang-Hansen* (Copenhague): The Role of Linguistics in Terminological Work; *A. Lane* (Munich): La terminologie juridique et administrative dans les relations internationales.

2me Partie: Réseau international de documentation terminologique, Réseau Infoterm, (Prés.: J. A. Bachrach, Rapp.: J. M. C. Goetschalckx).
J. A. Bachrach (Luxembourg): Méthodologie et problèmes de la traduction; *J. Jesenic* (Kranj): Communication sur la situation linguistique en Yougoslavie; *K. E. Berner* (Hürth): Principes et possibilités d'une coopération entre organismes de terminologie; *S. Czerni* (Varsovie): Terminological Activities of the Scientific and Technical Publisher in Warsaw and Some Prospects of International Co-operation in the Field of Terminology and Technical Lexicography; *G. Rondeau* (Ottawa): Méthode expérimentale de dépouillement de textes bilingues; *J. M. C. Goetschalckx* (Luxembourg): La terminologie chez les Eurocrates; *F. Lang* (Vienne): Possibilities of Automation of Terminological Work; *A. Rohaert* (Luxembourg): Vers un réseau international de terminologie; *J.-D. Gendron* (Montréal): L'activité linguistique et terminologique de la Régie de la langue française; Lettre de Gosstandart (URSS) avec des propositions faites à Infoterm (lue par H. Felber); *A. Tchirikoff* (Genève): Les activités terminologiques de l'ONU; *M. Gorosch* (Copenhague): Languages for special purposes.

3me Partie: Banques de terminologie, (Prés.: F. Lang, Rapp.: J. C. Sager).
G. Wersig (Berlin): The Implementation Format MATER. The Structure and the Catalogue for Thesauri; *K. H. Brinkmann* (Munich): The TEAM Program System and International Cooperation in Terminology; *E. Sundström* (Stockholm): Word Bank Building and Terminological Policy; *M. Paré* (Montréal): Comment les banques automatisées de terminologies multilingues peuvent assister les organismes de normalisation; *J. S. F. Laurent* (Paris): Normaterm: sa conception, son exploitation et sa place dans le réseau international d'information sur les normes.

4me Partie: Enregistrement central des expressions néologiques, (Prés.: Z. Stoberski, Rapp.: H. Leclercq).
Z. Stoberski (Varsovie): To help translators and Unisist-action. Section for Neologisms within World-wide Infoterm-network of Terminology Centres; *H. Leclercq* (Louvain): Quelques problèmes concernant la terminologie scientifique d'origine grecque; *L. Guilbert* (Paris): La relation entre l'aspect terminologique et l'aspect linguistique du mot.

Comme il est impossible de rendre compte des discussions dans ce rapport, nous nous limitons aux recommandations, qui furent rédigées sous la présidence de *A. Lane* (La rapporteur était *J. C. Sager*).

(Les participants du Symposium) „recommandent qu'en vue de la création d'un réseau mondial pour faciliter la coordination des travaux terminologiques, Infoterm prenne immédiatement les mesures qui s'imposent; qu' après consultation des organismes compétents il se livre à l'étude d'une structure technique et organisationelle apte à cette réalisation; qu'il propose des méthodes pour rassembler et publier les néologismes et qu'il examine la possibilité de créer des organes consultatifs nécessaires; que le comité mentionné (c.à.d. un comité international et interdisciplinaire pour la coordination d'activités terminologiques) soit constitué dans un délai raisonnable".

Dans son discours de clôture le Président *E. Weiss* se montrait satisfait des travaux du Symposium tout en souhaitant qu'une coopération très étroite puisse être réalisée.

L'organisation du Symposium, les conférences, les discussions, les recommandations peuvent donner lieu à quelques réflexions. Tout travail concernant les terminologies, qu'il s'agisse de rassembler, de trier, de traduire, n'est possible que grâce à l'étroite et constante collaboration entre d'une part les spécialistes des différentes techniques et sciences et d'autre part les linguistes.

Les problèmes de la terminologie scientifique et de la terminologie technique ne sont pas les mêmes: pour les

premiers on peut réaliser plus facilement une internationalisation – il s'agit de mots „savants" – pour les autres se posent des problèmes de traduction.

En créant un terme on doit exclure de prime abord toute ambiguïté possible; on peut donner un sens précis au nouveau terme scientifique en se servant d'éléments d'origine grecque; se faisant on facilitera l'internationalisation.

La création de nouveaux termes ne posera pas seulement les problèmes du „quoi" et du „comment", mais aussi celui de l'autorité: quelle institution peut rendre obligatoire un terme correct, et peut défendre l'emploi d'un terme hybride, incorrect, équivoque, qui peut se dresser comme arbitre s'il y a deux termes pour le même objet?

Le matérial terminologique est devenu si nombreux et si diversifié qu'il n'est plus possible de se passer d'ordinateurs, ce qui amène évidemment des problèmes financiers.

Dans de nombreux pays un effort considérable est fait dans le domaine de la terminologie par des organismes officiels et privés, d'où résulte le danger du double emploi. On ne peut atteindre un résultat efficace que par la collaboration, la coordination et la répartition du travail: c'est ici qu'une tâche importante est réservée à Infoterm.

Ce Symposium était particulièrement enrichissant parce qu'il rassemblait des participants ayant des domaines d'intérêt différents et variés: bureaucrates qui se trouvent chaque jour devant des problèmes de normalisation et de traduction, que ce soit sur le plan national, européen ou mondial, des représentants de firmes à renomée mondiale pour qui les problèmes de terminologie et de traduction sont une réalité journalière, des personnes qui s'occupent de la normalisation des termes et de la classification des sciences et des spécialités, qui travaillent dans les sciences que l'on est habitué à appeler „exactes", des linguistes intéressés à la formation correcte des termes.

On peut dire que tous les participants qui s'efforcent à internationaliser des termes techniques et scientifiques, contribuent, dans un domaine restreint mais très important, à une meilleure compréhension entre les hommes.

Cependant il reste encore beaucoup à faire: rassembler les données, les trier, répartir le travail, éviter le double emploi, et coordonner les efforts. Le Symposium de Vienne aura été la première pierre d'un nouvel édifice. Espérons que sous l'égide d'Infoterm le comité international pour la coordination d'activités terminologiques puisse travailler activement sur le chantier.

H. Leclercq

The 1975 Classification Society Meeting, North American Branch

The meeting took place in Iowa City, Iowa, 24–26 April 1975 partly together with the meeting of the Psychometric Society. 18 papers in the areas of classification in psychiatry and in combinatorial optimization were presented. The program contained the following lectures: *J. S. Strauss:* The problems and potential of multiaxial diagnostic classification. – *S. M. Free, Jr.:* A mood scale for drug discrimination. – *J. E. Overall:* Methodological invariance on an international classification of psychatric disorders. – *H. Wainer, St. Hurt, L. Aiken:* Rorschach revisited: a new look at an old test. – *J. B. Phipps:* The generation of dendograms by computer and its value in selecting optimal classification. – *D. Sankoff:* Tree decomposition based on a cluster size threshold. – *A. Cohen:* Methods for evaluating the significance of a cluster. – *L. Hubert:* Data analysis implications of the quadratic assignment problem. – *S. Farris:* Exact solution for 3 minimum-length directed tree problems. – *S. Rosenberg:* Applications of clustering and scaling in the investigation of a person's 'implicit theory of personality' from naturalistic data: progress, problems and possibilities. – *R. N. Shepard:* Additive cluster analysis of similarity data. – *H. Yanai:* Classification of various specialized courses at the University (of Tokyo) by means of the aptitude diagnostic test battery. – *H. C. Hudson:* Taxonomical and factor analysis of the HRAF Inventory of North American Indian Traits. – *D. Khanna, K. Enslein:* The differential classification of leucocytes. – *M. A. Woodbury:* Mathematical typology: the estimation of states for individuals based on categorical data. – *R. G. Golledge, J. N. Rayner, V. Rivizzigno:* The recovery of cognitive information about a city. – *H. R. Moskowitz:* Multidimensional scaling and clustering of odorants. – *C. F. Bender:* Pattern recognition methods for studying chemical information.

At the Business Meeting new elections took place. President of the North American Branch became Prof. *F. James Rohlf,* Dept. of Ecology and Evolution, State University at Stony Brook, N. Y., the position of the Secretary went from Prof. Neidell to Mr. *Kurt Enslein,* Genesee Computer Center, Inc., Rochester, N. Y. The Treasurer, Prof. *R. Jancey,* Department of Plant Sciences, University of Western Ontario, London, Ont., Canada serves for this term also.

Meetings of The Classification Society, European Branch

The Spring Meeting of the Classification Society took place on April 10, 1975 at the Weed Research Organisation, Sandy Lane, Yarnton, Oxford and was devoted to soil-classification. The speakers and their papers: *R. Webster:* The nature of soil variation. – *C. P. Burnham:* Development of soil classification and mapping. – *E. A. Fitzpatrick:* Modern soil systematics: horizons and homology. – *P. H. T. Beckett:* Classification for indexing and data storage.

The Fall Meeting was held on 30th September 1975 at the Royal Society of Medicine, London and treated problems encountered in "Classification and the Law". The following papers were presented and discussed: *D. C. Jackson:* Legal categories: their use and misuse. – *G. B. F. Niblett:* The taxonomy of legal documents. – *R. K. Stamper:* Legal and other entities in the LEGOL formalism.

Material Data Management Today and Tomorrow – A NATO Symposium at Copenhagen

1. Background

The vast amount of parts required in modern technology to support the operation of existing equipment necessitates the development of management methods. They include data. This was soon realised by NATO and its member nations and they accepted already in 1957 two Standardization Agreements, one on a clasification system and another one on a standard identification system for supply items.

The Classification System provides a NATO uniform commodity grouping of supply items to achieve a manageable segmentation. Each group is formed by items of the same physical or performance characteristics and is indicated by a two digit code (of 99 possible codes, 80 are presently used). Within each group, items are further divided into classes. These classes are indicated by an additional two digit code – forming, together with the group code, a four digit supply classification code. Each item of supply which is identified under the NATO system will be assigned one, and only one, four digit classification.

The classification structure, developed and maintained by the United States is based on the supply needs of Government Departments (and published in Codification Handbook H2–1).

The second basic element of the NATO Codification of equipment system is the item identification, which consists of the minimum data adequate to establish clearly the essential characteristics of an item (which give the item its unique character and differentiate it from every other item of supply. Each identification must be applicable to one and only one, item of supply, and conversely each item of supply must have only one item identification.

A brief word about the item of supply: an item of supply as used in the system is reflected in an item identification as an "item of supply concept". This concept is determined in terms of technical considerations *and* logistics responsibilities of the system. Within these limits and tolerances established by the concept, an item of supply may be:

- a single item of production (with a single NATO stock number)
- one or more interchangeable items of production from one or several manufacturers (all with a single NATO stock number)
- a quality controlled precise tolerance item, selected from a normal production run (and with its own NATO stock number)
- a production line item with a special modification (and with its own NATO stock number).

To ensure uniformity the system employs rules for naming each item of supply utilising Approved Item Names and Non-Approved Item Names. Approved Item Names are published together with their necessary definitions in National Codification Handbooks (normally called H6). The United States Handbook is the most comprehensive dictionary of supply item names in existence; it contains approximately 28,000 Approved Item Names and over 11,000 colloquial names (cross-referenced to Approved Item Names).

Every one of the nations using the system actively houses a National Codification Bureau (NCB) and a supporting Data Processing Unit (being solely at the disposal of the NCB or shared with other governmental organizations).

2. Intentions

Now what can we do with NATO Codification? First of all it permits effective co-ordination in procurement by helping to eliminate concurrent buying and selling of the same item and restriction in competition between agencies for critical items; it allows effective utilization of assets by facilitating supply support interchange between linked organizations as well as countries; it reduces the record keeping, personnel, storage space and, in many cases, inventories when items are found to be identical; it allows increased standardization efforts by revealing the different varieties, types, and sizes of items in the supply system; improve the determination of material requirements and budgeting through more effective knowledge of the total items in stack; permits improvement in surplus and excess material disposal operations by having a uniform identification of each item of supply; improves government-industrial relations as contractors will be using only one identification system instead of many unrelated systems; permite storage of management information together with technical/performance data in support of other logistics functions.

3. The Copenhagen Symposium

On the basis of the above outlined considerations NATO staged in May of this year its Fifth Symposium on Codification of Equipment in Copenhagen, Denmark. More than 300 participants from all major NATO nations attended. The opening remarks by the Danish Minister of Defence, Mr. Orla Møller, stated that the availability and the efficient handling of material management data was quite vital to the military needs and the Assistant Secretary General for Defence Support, Dr. Gardiner, L. Tucker, added that the examination must include economic aspects, the inter-relation of the system with other logistics factors and, above all, the needs of the user. He underlined that the point made by the Secretary General of NATO in his message to make the best use of available resource within NATO countries and that without effective and easily accessible management data we cannot apply these resources but with it we at once double their effective application.

The Symposium had been organized in such a way that each morning was reserved for special topics to be presented while the afternoon was set aside for detailed discussion of these presentations and their ramifications.

Although the Symposium was not intended to produce any proposals all discussions were recorded and the discussion chairman, (normally a national Codification Director) had been asked to summarize the salient points that deserved or required a further discussion in the NATO Group of National Directors on Codification.

Among these points that were selected we find such topics as "Use of the NATO Classification System",

"Co-operation with Standardization", "International Exchange of Management Data", "Problems of Data Processing in Codification".

It is obvious that the use of such systems as the NATO Codification System is only cost-effective if used by organizations which have to manage very large amounts of items (in the United States more than 5 million different items of supply are in the inventory, in European nations it varies from 700,000 to 2 million).

Heinz Schürkens

Printed Subject Indexes – The Aberystwyth Institute 1975

An International Study Institute on the Design and Evaluation of Printed Subject Indexes (PSI) was held at the College of Librarianship Wales, in Aberystwyth, on July 14–18, 1975. For many reasons this was a unique and interesting conference: First, the setting – Aberystwyth, Wales – an out of the way location, hard to get to, but well worth the effort; Second, the director, planner, and guiding spirit – Mike Keen; Third, the program itself. I was fortunate to be able to attend the Institute, and what follows are some personal impressions of these meetings.

The Setting

Aberystwyth is the "capital" of Mid-Wales. It is a seaside resort located on Cardigan Bay, a five hour train ride from London. The population is about 12,000 which makes it one of the largest cities in the area. There is a pleasant sea front promenade and the ruins of an old castle. The College is located in the hills overlooking the Bay. Our accomodations were in the student dorms. Incidently, this is one of the first schools in the United Kingdom to specialize in library science and the only library school to have independent status. About 400 students attend. For excitement, we talked with each other about indexes (and other things) and many of us took a ritualistic walk to the city after dinner where we visited one of the two pubs and stayed until closing. To my knowledge, we were all able to walk back up the hill. There was a pleasant feeling of both personal and professional comraderie which prevailed throughout the conference.

The Director

Mike Keen is one of the Senior Lecturers at the College. He is well known for his work on the Cranfield Studies and for his teaching both in Wales and at the University of Maryland. He has been doing some of the most original and significant research studies on indexes, and it was these involvements, plus his many contacts, that lead to the organization of the Institute. His interest was contagious; he saw to it that we were all involved, and he helped make our stay both informative and enjoyable. He reported on the EPSILON study both during the conference and after hours. He organized a display of indexes and indexing literature, and because I expressed interest, I recently received a printout of a computer program which he has used in teaching index evaluation. In may own mind this was Mike's institute; we were his guests, and he our host.

Program and People

What makes a conference memorable? Is it mostly the program or the people? I've never been able to answer this question, for to me, the two are one. In this report only a few highlights of the program can be mentioned, and these are personal selections.

The Institute opened with an address by *Cyril Cleverdon* on the general topic evaluation testing. He cautioned that the methodology developed for evaluating information systems may not be fully applicable in evaluating printed indexes. Indexes, he pointed out, being subsystems, may need to be evaluated within the "non-real" environment of experimental systems and within the "real" environment of operational systems. The evaluation criteria would have to include both management and user oriented variables. There is reason to believe that the talk made an impression, for other speakers referred to management and user variables in their evaluation reports. *Boon,* of the Rand Afrikaans University in South Africa, described the methodology he is currently using to evaluate printed subject indexes from a users point of view. And *Conaway,* who is a Professor at SUNY-Buffalo but who spent last year at Aberystwyth, described his laboratory experiments to develop a "coefficient of index usability". However, neither he nor anyone else referred to the "unreal" experimental environment. I guess that when you work in such an environment, it seems real.

Among the other well known speakers were *Alan Wheatley,* of the College of Librarianship, Wales, and a friend to all readers of *The Indexer,* and *Eric Coates,* the editor of *British Technology Index. Wheatley* took a look at printed indexes as they are and did not like what he found. He characterized them as being pragmatic solutions without guiding principles. *Coates* characterized his paper as a „transparent box" in contrast to the usual "Black Box" as he described the interactions of the index languages with their output forms. Deserving particular attention are the constraints that topography and computer output printers have had on the display of syntactic relationships in indexes.

The paper by *Spencer,* Royal College of Art, Readability of Print Research Unit, described a very practical project in which subjects were given a list of author's names which they had to find, as quickly as possible, in typewritten bibliographies of different styles. Readability values were derived for a number of combinations of variables. *Cooper,* Computaprint, Ltd., reported on his practical experiences in automated compilation and typesetting of indexes. Also reporting on practical experiences were *Dolby,* R&D Consultants, California, who commented on the vocabulary problems encountered in preparing cumulations of back-of-the-book indexes. *Jessica Harris,* St. John's University, New York, took a somewhat different approach to a similar problem in her discussions of the terminology and syndetic structure of the cumulative index to the Annual Review of Information Science and Technology.

The papers not mentioned were not slighted because of a lack of interest but only for a lack of space. As an inveterate conference goer, I must say that I both enjoyed and got a good deal out of this Institute.

There were some disappointments too. There were some people, whom I had looked forward to seeing and hearing, that were unable to attend the Institute. *Stella Keenan,* formerly with the National Federation of Abstracting and Indexing Services and now a lecturer at Loughborough University, had been scheduled to report on the UNESCO project to develop a kit for teaching indexing in Developing Countries and on the display of printed indexes in the UNISIST network. *Pauline Atherton,* Syracuse University, had been scheduled to report on studies of index entry design. *Lyle,* of I.C.I., was to have described the development of a computerized descriptor index on COM. And Dr. *Roy,* India, would have spoken on the problems of languages and scripts for indexes in South Asia. I would have liked to have heard all of these.

Perhaps, Mr. *Keen,* you would consider arranging another Institute? *Harold Borko*

Classification at the 8th IBBD Congress, Brasilia

The 8th Brazilian Congress on Library Science and Documentation was held in the new capital, Brasilia, from July 20–26, 1975 under the auspices of the Association of Librarians of the Federal District, the Brazilian National Book Institute and the University of Brasilia with more than 1600 participants and representatives from the Unesco, IFLA and FID and countries like England, France, Switzerland, Germany, USA a.o. It was organized in such a way that the mornings were reserved for the plenary sessions (preceded by invited papers), general lectures, panels and seminars. The afternoons were devoted to courses, altogether 30 running in parallel, each one taking 10 hours, distributed over 5 days. There were also meetings of special groups.

The main theme of the 8th Congress was: "The social responsibility of libraries in the educational planning". Among others, classification was a major topic and was treated in the following courses, lectures and meetings:

Courses:

Ingetraut Dahlberg: Theory of classification. (In English, translated into Portuguese by A. L. C. Vicentini)

Jandira Batista Assunção: Classificação facetada.

João Carlos da Silva Borda: Indexação e thesauri.

Lectures:

Wilfried Lancaster: On aboutness.
On problems of indexing.

Submitted papers:

M.R.B. Dutra et al: O thesaurus experimental da Constituição.

M.C.M. Miscaia et al: Uma experiencia em indexação de artigos de periodicos.

D. Amaral: A classificação na cartografia da Companhia de Pesquisa de Recursos Minerais (CPRM).

Meetings:

1) There were two meetings of the IBBD/CDU, Brazilian Commission for the UDC, among the resolutions of which the following may be mentioned:
   - The UDC Medium Edition in Portuguese is ready and will be published by the end of the year in three volumes – auxiliary tables, classes 0/9 and the computer produced index.
   - The UDC Full edition class 8 – Philology and literature was issued in Portuguese; copies may be ordered to IBBD/CDU Secretary (Ave. General Justo 171-4° andar, Rio de Janeiro, Brasil; Cr $ 20.–, US$ 6.–)
2) At the meeting of the Brasilian Classification Research Group the following topics were discussed and presented:
   Elvia Andrade de Oliveira: The mechanized index of the Brazilian UDC Medium Edition.
   Abner L. C. Vicentini: UDC future development.
   Reform of UDC Class 1, especially 16 –Logic.

A. L. C. Vicentini

5th International Congress on Logic, Methodology and Philosophy of Science, Canada

Every four years the Division of Logic, Methodology and Philosophy of Science of the International Union of History and Philosophy of Science convenes for a major conference, this year with about 500 participants in London, Ontario, Aug. 27-Sept. 2, 1975, under the sponsorship of the National Research Council of Canada and the University of Western Ontario. 258 papers had been contributed and each given an opportunity for presentation in the following parallel running sections:

I Mathematical logic (27 papers)
II Foundations of mathematical theories (12)
III Computability theory (10)
IV Philosophy of logic and mathematics (21)
V General methodology of science (59)
VI Foundations of probability and induction (15)
VII Foundations of physical sciences (29)
VIII Foundationsof biology (20)
IX Foundations of psychology (9)
X Foundations of social sciences (12)
XI Foundations of linguistics (15)
XII History of logic, methodology and philosophy of science (29)

Besides this, some 80 invited lectures of 45 minutes presentation time were delivered, each in special symposia of which e.g. the Symposium on Theory Change with *S. Kuhn, W. Stegmüller* and *J. D. Sneed* will surely be remembered best of all. Many were, equally fascinated by *J. Wheeler's* symposium on "How did the Universe come into Being?". Excellent presentations were also delivered in the Symposium on the Status of Learning Theories, by *P. Suppes, N. Mackintosh* and *J. Mycielski.* Of a rather exciting nature was, however, the Symposium on Rationality in Social Sciences, when *J. Harsanyi, J. Watkins* and *J. J. Leach* showed, how game theory may be applied in our every day decision making. Last but not least the Intersectional Symposium on the Concept of

Matter and its Development must be mentioned, proving much to much harmony (*E. Lashchyk's* remark) between the two adverse interpretators *B. Kedrov* and *E. McMullin*. Among the contributed papers some highly relevant ones could be found regarding problems of classification, like *E. J. Crombie:* Arbitraryness in biological classification, *R. R. Roth:* The individualistic approach for analysis of hierarchic levels in biological systems; *L. S. Gagnon:* What is a scientific field; *St. Gale:* Arguments for a question-answering theory of scientific inquiry; *V. J. Kelle/E. S. Markarian:* Types and levels of social knowledge; *F. Rapp:* Technological and scientific knowledge; *A. Lange-Seidl:* Semiotics vs semiology – towards a general sign theory. The abstracts of the contributed papers (on two pages each) have been published in a huge volume and distributed to the participants in advance. The invited lectures will be published in 2 vols. by D. Reidel Publ. Co. and will appear in the University of Western Ontario Series in Philosophy of Science. *I. Dahlberg*

Seminario di Studi sulla C.D.U.

At the occasion of the Rome Meeting of the Central Classification Committee of the FID (FID/CCC) the Laboratorio di Studi sulla Ricerca e sulla Documentazione del Consiglio Nazionale delle Ricerche and the FID invited for a Study-Seminar on the UDC on Sept. 22, 1975 in the Aula Magna del Consiglio Nazionale delle Ricerche. The following lectures were given: *G. Lorphèvre:* La CDU – aperçu général. – *J. P. Sydler:* La CDU et la mécanisation. – *A. F. Schmidt:* Drastic development and modernization in UDC. – *L. Kofnovec:* UDC in relation to other index and retrieval system. – *M. P. Carosella:* Le edizioni italiane della CDU. – *A. Ferrari Toniolo:* La CDU nel campo dell'elettronica. – *M. T. Tavassi:* Per una classificazione della teologia pastorale (divisione 25). – *F. S. Chiapetti:* Tesauri della classe 1 della CDU (per la Filosofia e la Psicologia). – *S. Soriano:* Un esempio di elaborazione elettronica di reperimento dell'indice CDU. – *P. Terzi:* CDU e descrittori: un esempio di fusione.

ISO/TC 37/WG 4 Constituting Meeting

Working Group 4: "Computational aids for terminology and lexicography" of ISO/TC 37 (Secretariat in Austria) will have its (first) constituting meeting on Dec. 10–11, 1975 in Offenbach (Main), BRD. At the Vienna meeting of ISO/TC 37 in June 1974 (see the report in I.C.1 (1974) No. 2, p. 96–97) it was resolved to establish three Working Groups; WG 1 "Principles of terminology" and WG 2 "Layout of vocabularies" have not started their work as yet.

Conferences Celebrating the Dewey Centenary

On the Eve of the Dewey Centenary Year 1976 the University of Illinois Graduate School of Library Science together with Forest Press, the publishers of the Dewey Decimal Classification sponsors a *conference on major classification systems, 9–12 November 1975 at Allerton House.* One of the papers presented reports on the survey on the use of the Dewey Decimal Classification, having been carried out by the Library Research Center of the Graduate School of Library Science, University of Illinois, Urbana-Champaign, Illinois. A report on this conference will be published in the next issue of this journal.

In England the Library Association again together with Forest Press is organizing a *European Centenary on Dewey Decimal Classification* to be held at Banbury, England, 26–30 September 1976. The person to contact: M. Yelland, Assistant Secretary, Library Association, 7 Ridgmount Street, London WC1E 7AE.

A third conference is planned from the part of the FID/UDC-part of the users of Dewey Classification. FID/CCC (Central Classification Committee) will sponsor, perhaps jointly with FID/CR an *international symposium or forum on Decimal Classification* in the week from 15–20 November 1976, in Brussels.

Proposals for Standardization of Classification Terms

For the next meeting of ISO/TC 46/SC3 – Terminology of Documentation to be held in Brussels, Belgium during the week May 3–7, 1976, the following four papers regarding classification terms have been circulated for discussion:

46.3 N 30 E/F Basic elements of documentation language (46 terms)
46.3 N 31 E/F Classification (95 terms)
46.3 N 32 E/F Thesaurus (45 terms)
46.3 N 33 E/F Notation (36 terms)

The contents of these papers corresponds (is the English and French translation of) to selections of the terms of the paragraphs40–48 of „Documentation languages" (altogether 300 terms) in the German "Terminologie der Information und Dokumentation" just published as vol 4 of the DGD-Schriftenreihe (München: Verlag Dokumentation 1975). This "Terminology of I&D" was prepared by the Committee on Terminology and Language Problems of the German Documentation Society (DGD) and was edited by U. Neveling and G. Wersig. It contains not only terms and their definitions as used in the special language of information science but proposes also a great number of new terms as demanded by the systematic display of the terminology, which are, however not as yet in actual use (and perhaps never will be). The non-export reader of this terminology will not be able to distinguish between the terms in use and those proposed since the latter have not been marked accordingly.

Klassifikation und Beschreibung von Forschungsprojekten

Im Institut für Systemtechnik und Innovationsforschung (ISI) in Karlsruhe wird derzeit im Auftrag des Bundesministeriums für Forschung und Technologie (BMFT) eine Datenbank aufgebaut und erprobt, die formatierte Informationen über jedes von einem Ressort der Bundesregierung unmittelbar geförderte Forschungs- oder Entwicklungs-

vorhaben enthalten soll. Sämtliche gespeicherten Daten sind vertraulich: begrenzte Ausnahmegenehmigungen kann nur das BMFT erteilen.

Jedes Vorhaben wird nach einer Wissenschaftssystematik und nach einer Aufgabensystematik klassifiziert sowie deskribiert. Die Wissenschaftssystematik, die insbesondere mit den Fachrichtungen, Fächern und Fachgebieten, die an deutschen Hochschulen in Forschung und Lehre vertreten sind, kompatibel sein soll, baut auf einer modifizierten Fassung des sogenannten „Fächerkatalogs" auf (erstellt vom Hochschulverband im Auftrag des Bundesministeriums für Bildung und Wissenschaft im Jahre 1972); dessen Begriffe der dritten, hierarchischen Ebene (Fachgebiete) werden als Deskriptoren verwandt, wobei, sollten diese Begriffe zur Charakterisierung neuer Forschungs- und Entwicklungsvorhaben nicht ausreichen oder zu unspezifisch sein, bei der Deskribierung freie, neue Deskriptoren gewählt werden können. Die Aufgabensystematik ist eine speziell auf deutsche Belange (in der dritten hierarchischen Ebene) zugeschnittene Version der revidierten Fassung der vom Statistischen Amt der EG 1975 vorgelegten „Systematik zur Analyse und zum Vergleich der wissenschaftlichen Programme und Haushalte". In bestimmten Abständen werden nach Aufgaben wie nach Wissenschaften gegliederte Listen der vergebenen Deskriptoren einschließlich ihrer Häufigkeit erstellt; bei neu aufzunehmenden Projekten sollen dann die häufigsten Deskriptoren – falls fachlich zulässig – mit den höchsten Prioritäten vergeben werden. Es besteht so die Hoffnung, auf diese Weise empirisch die Grundlagen zu einem Thesaurus erarbeiten zu können. H. Rampacher

Curriculum in Classification

The Brasilian Association of Schools in Library Science and Documentation (ABEBD) comprising 26 library schools in Brasil with numbers of students ranging between 700 students for the largest and 30 students for the smallest school, at its second meeting in Salvador, Dec. 9–11, 1974 released the following recommendations:

1) that the library schools adopt the program for a revised curriculum in classification as given below,
2) that a Classification Research Group be established in Brasil
3) that the faculty promote better liaison between the disciplines of cultural integration and classification conforming to the recommended program.

This new program seemed to have become necessary "considering the evolution of development of classification techniques". The entire text of the program reads as follows:

I. Objectives

To teach the structure of classification systems as well as the techniques for the classing of documents.

II. Goals:

1. To develop the capability of reasoning through logical comprehension of the theory of knowledge and the theory of classification.
2. To study and analyse the existing bibliographic classification systems.
3. To apply the knowledge acquired through bibliographic classification systems mostly used in Brasil.

III. Programme

1. Introduction into classification
   - 1.1 Conceptualization and objectives
   - 1.2 Theory of knowledge
2. Bibliographic classification
   - 2.1 Conceptualization, objectives and function
   - 2.2 Foundations of philosophical classification and its relationship to bibliographical classification
   - 2.3 Characteristics of bibliographical production (physical form, intellectual form, author's point of view, etc.)
   - 2.4 Limitations of bibliographical classification
3. Subject analysis
   - 3.1 Indexing: conceptualization
   - 3.2 Indexing languages
     - 3.2.1 Natural languages: list of subject headings and thesauri
     - 3.2.2 Codified languages: classification systems
   - 3.3 Relationships between subjects
   - 3.4 Categories and facets
   - 3.5 Citation order
   - 3.6 Pre- and post-coordinated indexing, exhaustive and deep indexing
   - 3.7 Structure of bibliographic classification systems
     - 3.7.1 Identification and formation of classes
     - 3.7.2 Auxiliary tables or common subdivisions
     - 3.7.3 Notation
     - 3.7.4 Indexes
   - 3.8 Kinds of bibliographical classification systems
     - 3.8.1 Enumerative classification systems
     - 3.8.2 Analytico-synthetic classification systems
4. Systems of bibliographical classification: DDC, UDC, LCC, Bliss, Brown, Cutter, Colon, and special classification systems
   - 4.1 Historical evolution; from the origin to mechanization
   - 4.2 Critical analysis
5. Study and application of DDC and UDC.

IV: Duration

1. The classification course should be given in a minimum of 180 hours
2. The distribution of the program in the semesters will be left up to the policy of each school.

A "basic bibliography" comprising 17 monographs was given in the annex.

(The assistance in the translation of this text from Portuguese into English by A. L. C. Vicentini and A. Campos is appreciated. I. D.)

(Editors note: We would appreciate to receive comments on this Curriculum and/or curricula in classification as outlined in other countries or schools for discussion in this journal.)

BSO under Preparation for Field Testing

A revised draft of the *Broad System of Ordering* of the Fédération Internationale de Documentation, FID, Den Haag, was presented to the UNISIST Advisory Group in May 1975 (see also the article by V. Rybatchenkov in I.C. 1 (1974) No. 1 and the entries 1365 and 1366 in the part "Classification Literature" of this issue). This scheme, comprising 76 main subject-fields and some 2000 subfields had been circulated during the month of August 1975 to about 200 experts from the 17 unions and the committees and services of ICSU (International Council of Scientific Unions) and to about 100 organizations and individual experts interested in the BSO. A questionnaire (8 questions on one page) to be returned not later than Oct. 15, 1975 was attached. So far, some of the answers and comments are in agreement with the proposed systematic arrangement but many are showing severe disagreement; often it also appears that the experts' proposals for a new arrangement differ considerably.

The present task of the FID-3-man-BSO-Panel consists in evaluating the critical comments, re-editing the draft accordingly and supplying a notation to the concept-names of the fields. The revision work is due by Feb. 1976 in order that in 1976 a number of field tests may be undertaken. These latter may lead to further modifications, however, these will certainly improve the final compilation which is envisaged for 1977. I. D.

Revised Subject-Fields Scheme for German Universities

In 1973 the Hochschulverband, Bonn (Association of German University Teachers) published a systematic list of subject-fields, the *Fächerkatalog* (Verlag O. Schwartz, Göttingen, 207 p.). This scheme with about 2700 fields altogether, displayed on three hierarchical levels (88 major areas, 297 broader fields and 2268 narrower fields) was to serve educational statistics and planning and was also intended to show the areas and fields of knowledge and their subdivisions as they are taught in German universities at the present time.

About 1000 German university teachers had been consulted during the year 1972 when the scheme was compiled. However, immediately after publication heavy criticisms were brought to the attention of the Hochschulverband regarding the systematics and the contents of the scheme, leading to the decision to prepare a revised scheme as soon as possible. Consequently, in 1972, university institutes, scientific societies and major scientific institutions were asked for critical comments and helpful proposals regarding the systematics and contents of the 88 major areas. The answers have been compiled systematically in the beginning of 1975, they are now serving as the bases for a new edition of the scheme, again to be edited by the Hochschulverband and sponsored by the Federal Ministry of Education and Science. For this, the restrictions have been disbanded to display the fields on three hierarchical levels only and to exclude synonyms; the scheme is to be issued in the form of a thesaurus with its main part in systematic arrangement. Presentation of the revised scheme is due by June 1975. I. D.

Classification of Current Research Projects

Organized by the Unesco under its UNISIST Program and in collaboration with the Smithsonian Science Information Exchange (SSIE), USA (Director: *Dr. D. Hersey*) an International Symposium on Information Systems and Services in Ongoing Research in Science was held on Oct. 27–29 in Paris. Almost 200 participants from some 50 countries had registered; 43 papers were presented in the following four thematical groupings:

- perspectives (4 papers)
- existing and emerging information systems (18)
- meeting user needs: current services and future possibilities (11)
- international exchange: its value and mechanisms for accomplishment (10)

The UNISIST Secretariat had taken care that in advance of this conference a study had been prepared by *P. Wollmann* entitled "Guidelines on the Conduct of a National Inventory of Current Research and Development Projects" (SC/75/WS/13, Paris, March 1975), 49 p. with a chapter IV devoted to "classification and indexing" containing recommendations on methodology and on some systems available. It was somehow shocking for the audience to realize that almost all of the papers with descriptions of current research project documentation proved that each of the centers uses a different classification system for the broad subject ordering, for storage and announcement. In persuing the possibility of a future international exchange of information on such projects it seems to be obvious that a single universal classification system would be needed for common use. This might well be the Broad System of Ordering (BSO) – "once it becomes available" – as this was stated in the excellent paper by *A. Neelameghan* ("Data elements in a record of an ongoing research project"). The BSO has at least the advantage not to be identical with any of the national systems so far in use, it is a neutral system indeed. The Unesco-sponsored ISN (International Standard Nomenclature (from the Science Policy Div. and the Statistics on Science and Technology Div.), also recommended in the Chapter IV mentioned above, is not as yet operational and had recently been amalgamated with the SPINES Thesaurus developed by Mme *N. de Visart* and her collaborators, to be published in 1976. (SPINES-Science und Technology Policies Information Exchange System.) A short demonstration on this thesaurus was given; it consists of some 34 graphic displays and an alphabetical main part. Its translation into several languages should soon be envisaged.

The Symposium was a very first step towards the international organization of research documentation. In adding it to the overall UNISIST Program – *Dr. A. Wysocki* promised – a number of standards pertinent to its methodology will be worked out soon, thus ensuring the realization of a tool that may inform both developing and developed countries of their particular research problems and of the possibility for assistance and cooperation.

I. D.