Reports and Communications

The Problem of Meaning

by Mary Dykstra

The first plenary session of the ISKO Conference at Darmstadt (Aug.14, 1990) centered upon the article: *"Historical Note: Information Retrieval and the Future of an Illusion"*, by Don SWANSON (J.ASIS 39(1988)p.92-98). The session consisted of an introduction by Dr.Robert FUGMANN, followed by a panel discussion in which each panelist remarked upon a particular aspect of the Swanson article. Following is a written version of my comments in which I agreed with Don Swanson's summary Postulate PI 9, stating that the conceptual problems of IR are essentially *problems of meaning.*

It is important to understand that the problem of meaning in text is caused by the very simple fact that meaning does not reside in text in the first place. You and I will never find relevance in text, because relevance is not there!

In other words it is impossible, even with the most advanced technology in the world, for computer intelligence to understand what text means, because meaning is never actually a textual property. A clear distinction must be made between *meaning* and *messages*. The human mind transmits messages, some of which are text, but meaning itself is not transmitted in these messages. The messages are simply the *expression* of what someone meant in his or her head.

The skill of communication lies in the encoding of a message in such a way that the decoder or receiver can assimilate it within his or her own meaning structure as closely as possible to the way that the encoder intended. But the meaning itself is never encoded within sounds or letters of the alphabet, sent out, and decoded. As Colin Cherry has said, "When we speak (or write) to one another we do not transmit our thoughts"(1).

Ferdinand de Saussure, called the father of modern lingustics, has said that the linguistic sign, or the "slice of sound" which marries a concept with a sound-image, is completely arbitrary (2).

There is nothing in the sound of "dog" (in English) or in the letters D-O-G which, in and of themselves, signify one of those furry four-legged creatures that we have all come to know. The linguistic sign, then is essentially meaningless. It is only when certain of them are endowed with *values* that they can be used conventionally and understood within a given social or cultural community.

Within that black box of the human mind, meaning is determined on the basis of structuring. Each person (and in a more complicated interactive way each social community) draws his or her own boundary lines and configurations within the dynamic whole of reality and says, "Meaning is here, in this structure". A human being's first structures are physical and concrete, based on the coordination of actions. It is this coordination - whether adding, sequencing, joining, or building - which form the basis of reflective abstracting which develops later in thought. Therefore, as Piaget has said, "... the roots of logical and mathematical structures are to be found in the coordination of actions, even before the development of language" (3).

It is important to realize that language itself is all about structure and structuring. The problem of communication is essential one of access from mind to mind, which is access from meaning structure to meaning structure. The tool for communication is language, which Wallace Chafe says "provides ways for particular semantic structures to be converted into sound" (4).

The only way that thoughts are structured and expressed, then, is through language, which, to quote Cherry again, "makes a hard mistress and we are all her slaves" (1, p.77). It is only through the medium of text of some other expression that thoughts can be communicated and understood. Our only recourse, therefore, is to analyze the text itself. In the literature of linguistics and philosophy this has been called the "intractable problem of meaning", or more simply "the meaning problem".

Any efforts to make the computer understand text have first to recognize the meaning problem for what it is, and then to devise some kind of effective way to navigate around it. In other words, "the meaning problem" is like the Bermuda Triangle.

I think that Bar Hillel had something very profound to say about this avoidance of the meaning problem. He said:

> Though considerations of meaning in linguistics can be replaced, up to a point, by rigorous *structural* procedures, i.e. procedures involving solely the kinds and order of the elements of the language under investigation, they cannot be replaced by *distributional* (i.e. statistical) procedures, despite (certain claims). *Distributional* procedures may be sufficient to establish the rules by which all longer expressions can be constructed out of the elements, but they are inadequate for the establishment of certain other rules that would mirror the so-called logical properties and relations of sentences and other expressions. (6)

The information retrieval business has not yet grasped the significance of this insight. Instead, most if not all of the efforts so far to improve the effectiveness of IR systems have concentrated upon distributional or statistical procedures. What is needed instead, according to Bar Hillel, is emphasis upon the structural and logical properties of text, along with much more knowledge from the related fields of linguistics and classification.

T.S.Eliot's Prufrock was so right when he sighed, "It is impossible to say just what I mean". But it is possible to recognize the Bermuda Triangle of the meaning problem for what it is, and to learn how to avoid it. We can then figure out ways to compensate for this avoidance by paying attention to the logical structures of text, through which all meaning is encoded, restructured, and expressed.

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(4) Chafe, W.: Meaning and the structure of language. Chicago: University of Chicago Press 1970. p.28

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Indexing Quality: Predictability versus Consistency

by Robert Fugmann

The question of indexing consistency has persisted to constitute one of the most perplexing topics in information science, as has again become apparent in the latest investigation of Sievert and Andrews (1). On the one hand, Cooper's statement that consistent indexing can be but consistently bad (2, p.269) has never been refuted. On the other hand it is intuitively felt that indexing consistency should in some, but hitherto unexplored, way be related to indexing quality and search effectiveness. It has therefore continued to be used as a quality criterion for indexing.

The phenomenon of indexing consistency requires a more detailed investigation, and one step forward is a distinction between various kinds of indexing consistency (3). Another approach to clarification is provided by the Five Axiom Theory (4), especially by the Axiom of Representational Predictability.

Indexing can be considered as a twofold step (4, 5, 6) consisting of

- the *selection* of the essence of a document to be stored and

- the *description* of this essence with a sufficient degree of predictability and fidelity.

As far as the *second step* is concerned, perfect consistency could easily be attained by the mere and unchanged extraction of the natural language expressions used by the author of a paper. Different indexers or the same indexer at different times would very probably achieve high consistency. For example, the phenomenon of *conceptual transparency* in information systems may be phrased in relevant documents as

"...reducing the complexity of design making it more intelligible proved necessary to maintain the operability of the system..."

or

"...the possibility to visualize the network of relations became more and more important because the danger for the user to go lost was steadily increasing..."

or

"...the user, too, could also profit from transparent machine assisted access to other files because this rendered the search results better interpretable..."

or

"...the structure of the vocabulary was clearly displayed to the user and the phrasing of queries was thus considerably facilitated..."

or

"...these nonlinear networks often leave people with a feeling of disorientation which resulted in waste of time or even the entire enunciation of system use..."

etc.

From the first text fairly consistently "complexity" and "operability" might be extracted, from the second document, again very consistently, "network of relations" and "visualization", from the next document "transparent machine assisted access", then "vocabulary display" and "query phrasing" etc. etc...

The number of *conceivable paraphrases* for the concept of conceptual transparency is almost unlimitedly large, and each of them might have occurred in any document relevant to the search. Each of them would therefore have to be taken into consideration as an alternative search parameter.

But this kind of high indexing consistency attained by the mere extraction of text words (even after retreating to the word stems and/or to some orthographic normalization) is of little use. No searcher (and no algorithm) can foresee with which modes of expressions the relevant documents happen to have been phrased by the authors and indexed, and *which search parameters would therefore have to be compiled in the query* (cf., for example, 7, p.338). Hence, the greatest possible interindexer consistency, as attainable by the unchanged extraction of meaning conveying textwords from the documents, may well be that which is least conducive to good retrieval.

In his attempt to phrase an appropriate query the searcher must be able to reconstruct or predict, with which mode of expression the topic of his interest is in fact represented in the file.

To this end it is by no means necessary for the topic of

interest to be (consistently) expressed in the search file by one single mode of expression. For a complete search it is perfectly sufficient to know precisely which different expressions have exclusively been used in indexing. For example, it is sufficient to know that the substance effective against scurvey is represented in a file *exclusively* by "ascorbic acid", "Ascorbinsäure", "1-ascorbic acid", and "vitamin C". Hence, no *consistent concept description is required.* It is perfectly sufficient if this description is predictable.

As far as *the first step* in indexing is concerned, the *selection* of the key concepts must in fact be consistent, because only under these circumstances can the searcher rely on their representation in the file and only under these circumstances can high recall be attained. For example, if sometimes the substances and diseases are indexed, but in some other cases not, recall will inevitably be correspondingly low. Hence, in this first step (*and only in this step*) of indexing, consistency among the indexers is desirable. Here, however, it is identical with predictability of selection. Only in this particular step is consistency conducive to indexing quality.

Hence, it is *predictability* instead of consistency which should be the goal in indexing, both in the selection of the essence, and also in the *description* of this essence. The role of (good!) controlled vocabularies (cf.7, p.334), the adherence to Cutter's rule, classification schedules, authority lists, etc. can be seen as one of enhancing representational predictability, which is inherently missing in natural language expressions, in particular in expressions of *general concepts* (as opposed to *individual concepts*) and topics. Their terminological consistency (cf.7, p.336) is close to zero, which is due to the almost infinitely large number of (unpredictable) paraphrases in which they may be presented in the relevant texts. Vocabulary categorization, adherence to predetermined indexing rules, and expert knowledge, on the other hand, render the selection of the essence more predictable (and consistent).

What is needed for the effectiveness of an information system is indexer-*requester* consistency (cf.2, p.270) i.e. the indexer should agree with the requester in the representation of the concepts of interest (at least to such a degree that an algorithm can eliminate remaining, largely formal discrepancies, for example by truncation).

An *overall* interindexer consistency is neither a necessary nor a sufficient criterion of indexing quality and retrieval effectiveness. It is indeed merely a perplexing hobgoblin.

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New Deal for UDC

(from FID News Bull. 41(1991)No.11, p.194 and No.12, p.203)

FID announces that, as from the end of 1991, responsibility for its world famous Universal Decimal Classification, the UDC, will be assumed by a new organization, the UDC Consortium (UDCC), to be established as a foundation. Initially this new body will be jointly funded and managed by the Associacion Espanola de Normalizacion (AENOR) of Spain, the British Standards Institution (BSI) of the U.K., Bohn Stafley Van Loghum (BSL) of The Netherlands, Centre de Lecture Publique de la Communauté Francaise (CLPCF) of Belgium, the Information Science and Technology Association (INFOSTA) of Japan and FID; opportunities will arise for other organizations to join the Consortium later. During its meeting of Nov.12 and 13, 1991 the FID Executive Director was elected as the Executive chairman of the UDCC. Other elected officers were Mr.Alan Stevens (BSI) as treasurer and Mr.Alan Gilchrist as Executive Vice Chairman.

Establishing the UDC Consortium creates a sound base for the future of the most sophisticated and multipurpose general classification scheme. It ensures that all the recent major proposals for its further development can be quickly implemented so that it will meet the needs not only of the 1990s but also the decades beyond. These proposals include the creation of a new computerized "master reference file" (equivalent to the former authorized version in concept, not in size) to be the source of products suitable for use in manual or computer applications, and a range of customer-oriented special and multilingual versions. Continuous maintenance of the system, which will be fully computerized by early 1992, will also be assured.

FID, as a member of the Consortium, continues to be involved and the interests of all existing users and members of the Federation are being safe-guarded. Present arrangements with other publishers may also be continued - the UDC is currently published wholly or in part in over 20 languages, but will, however, be subject to

review or renegotiation. It is anticipated that some may wish to participate fully in the Consortium, others to continue publishing under licence.

For the last five years the UDC has been the responsibility of a Management Board appointed by FID. It is entirely thanks to its work that the new arrangements are possible and for the last few months the Board and the founder members of the Consortium have been working closely together to achieve a smooth hand-over. Copyright in the UDC will be surrendered by FID and vested in the UDCC.

An essential difference from the present arrangement is that the UDCC will be able to operate as a non-profit business dedicated to ensuring the viability of the UDC by constantly seeking to enhance its value to users, by maintaining and improving its quality and availability, by devising new products to meet new user needs, by promoting its use and giving help to existing users and by exploiting modern, especially computer-based, systems to the full. It will be able to contract out work whenever this is appropriate.

At present the principal users of the UDC are information professionals (especially information scientists, systems designers, documentalists, indexers, archivists and librarians). Many of these have contributed much in the past to the development of the UDC and their continued involvement in the technical developments will be essential so that the scheme can remain user-oriented.

Further information on the transition is available from The FID Secretariat, P.O.Box 90402, NL-2509 LK The Hague, Netherlands. Tel: 31-70-3140671; Fax: 31-70-3140667.

New Activities Concerning the UDC

Second Meeting of the "DACH-Conference" at Vienna, Nov.19,1991

by Fritz Schael

"This Conference understands itself as a group of users of the UDC for the purpose of a further development of this classification for the practical application in information services and for exchanging experiences and working results".

At present, all participants come from German speaking countries (D-A-CH) (*D*eutschland, *A*ustria, *C*onfoederatio *H*elvetica - Switzerland), but this does not mean a restriction. The Austrian Institute of Standards (ÖN) is managing the secretariat, Fritz Schael from VOLKSWAGEN company keeps the chair.

After the German Institute of Standards (DIN) abandoned its UDC services and liquidated its committee in charge of the UDC, an urgent need for new activities arose, especially as it was understood that the new Consortium initiated by FID has the only objective of marketing a reduced version of the UDC without taking care of its further development and without any partnership from German-speaking countries.

The first meeting of the DACH-Conference in December 1990 arranged by the ÖN assembled UDC users who made a general analysis of the situation concerning the UDC. They agreed on an efficient cooperation. Ideas should be developed and checked for realization. At the second meeting (Nov.19, 1991) progress on the targets mentioned could be achieved.

The procedures are planned in the following way:

- The ÖN acts as the DACH-secretariat and its information office.
- ETHICS of the ETH Zürich will act as the computer center for the input; updating of the schedules will be done by external institutions.
- A Group of Experts covering all subjects for correction and extension of the UDC will be established.
- A private organization for publishing printed issues on the basis of ETHICS input will be set up.

It was understood that if the UDC Consortium should decide to also implement corrections and extensions of the UDC, the participants of the DACH-Conference will agree to collaborate on this. The secretariat keeps in touch with FID by mutual information on all subjects from both sides.

The participants of the DACH-Conference will establish a "list of experts" with the objective to cover all subjects of the field. For this purpose, contributions from other users of the UDC will be needed.

Besides this, realization of the above plans will start by clarification of prerequisite questions and conditions. Problems which may arise should be solved when they do.

Some practical work on the UDC has already been done. A few proposals for revision of specific subjects were discussed and agreed upon. In the future, this work must be done by the experts of the pertinent fields as not all of the participants of the meeting are competent in special fields.

All participants highly appreciated the interest in this activity by institutions of other countries, especially from the part of Scandinavian countries.

The next meeting is planned for October 1992; interested institutions will be invited to participate, at least as observers. The address of the secretariat of the DACH-Conference: Österreichisches Normungsinstitut, attn: Herr Manu, Heinestr. 38, A-1021 Wien. The address of the Chair: Herr Fritz Schael, Volkswagen AG, D-3180 Wolfsburg 1.

INTERCOCTA

by Fred W.Riggs

COCTA (the Committee for Conceptual and Terminological Analysis) is a Standing Committee of the ISSC, the International Social Science Council, headquartered at UNESCO, Paris, and performs functions that are different from, though related to those that it also carries out as a Research Committee of two ISSC members, IPSA (International Political Science Association) and ISA (International Sociology Association). Although ISSC governing bodies and substantive committes meet from time to time, COCTA is not funded to hold separate meetings, seminars or roundtables in the ISSC context. Instead, it operates primarily on an ad hoc basis, through a project known as INTERCOCTA. This project, with modest subventions from UNESCO, has investigated the problems involved in helping any discourse community identify sets of important concepts required in its research, establishing their interrelationships and contexts in the theoretical work which generated the need for them, and producing reference works -in print and machine readable forms - that can be used by scholars who want help when searching for the most suitable terms to represent these concepts and for references to the literature in which they have been used. It is anticipated that INTERCOCTA products will have various additional uses, e.g. to help novices master the concepts, terms, and basic literature of a field, to provide a research tool of intrinsic importance, and to facilitate the translation of key social science concepts used in different languages. Two COCTA vice-chairs provide leadership and liaison to the ISSC, through the COCTA Board: Prof.Fred W. Riggs at the University of Hawaii and Prof.Eric de Grolier, resident consultant to the ISSC. The ISSC executive committee also appoints several members to the COCTA Board.

In order to establish and test a methodology for the INTERCOCTA project, pilot "conceptual glossaries" have been produced in English, French and Russian, on the basis of guidelines generated at two international meetings: the first in Bielefeld, Germany in May 1981 - the Proceedings of that conference (1982) can be purchased from INDEKS Verlag, D-6000 Frankfurt 50, Woogstr. 36a. It is a 368-page indexed book with many interesting and important papers on problems of conceptual and terminological analysis in the social sciences. A follow-up seminar in Caracas, Venezuela, in June 1983, worked out the basic guide-lines for the INTERCOCTA project. The fundamental rationale of the exercise and its applications is explained in *Help for Social Scientists: A New Kind of Reference Process,* by Fred Riggs (1986), which has been published by UNESCO as No.57 of its series of Reports and Papers in the Social Sciences. Complimentary copies can be obtained by writing to the Social Science Division at UNESCO, in Paris.

The INTERCOCTA Pilot Project chose *Ethnicity* as its focus - a problem area of interest to all the social sciences, in which a great deal of research and publication is taking place, and organized research committees on this topic can be found in IPSA, the ISA, and the International Union of Anthropological Sciences (IUAES). The strategy followed by the INTERCOCTA Working Group involves cooperation with these committees in order to establish communities of users and contributors to the venture, and linkages with the work of the leading researchers who are generating and using concepts needed to write about one of the most salient and troubling problem areas of the world today - a joint meeting was sponsored by COCTA and the IPSA RC on "Politics and Ethnicity" at the IPSA World Congress in Buenos Aires in July 1991. Currently, priority is being given to work on several related methodological problems: namely, how best to use automated information systems to help generate material for inclusion in a

British Classification Society

A joint meeting will be held together with the Royal Statistical Society and the Multivariate Study Group on 17 March 1992 at the Open University in Milton Keynes, GB. Three papers are to be presented and discussed: Roger PAYNE (AFRC Institute of Arable Crops Research, Rothamsted) will talk on *Keys and tables for identifying yeasts*; Andrew CAROTHERS (MRC Human Genetics Unit, Western General Hospital, Edinburgh) on *Automatic Classification of Human Chromosomes;* and Jeff HARRISON (University of Warwick) on *How would you have forecast*? For further information contact: Ms.E.Ostrowski, Fac.of Mathematics, The Open University, walton Hall, Milton Keynes, MK7 6AA, UK.

Call for Papers 1992 Annual Meeting, Classification Society of North America, June 11-13, 1992

The 1992 annual meeting of CSNA will be held at the Kellogg Center on the campus of Michigan State University, East Lansing, MI on June 12-13, 1992. The meeting will be preceded by an optional Short Course on Classification and Clustering, June 11. The deadline for submission of abstracts was March 15, 1992. For further information turn to Richard DUBES, Department of Computer Science, Michigan State University, East Lansing, MI 48824-1027, USA.

4th Conference of the IFCS 1993

IFCS'93 is the fourth biennial Conference to be organized by the International Federation of Classification

Societies. Previous conferences were held at Aachen, Charlottesville and Edinburgh. The 1993 conference will be located in Paris (Ecole Nationale Supérieure des Télécommunications) and will be jointly organized by INRIA-Rocquencourt and AFCET.

Abstracts of proposed papers: three copies should be addressed to INRIA by 30 Nov.1992. Address for submission of abstracts: INRIA-Rocquencourt, Bureau des Colloques, Domaine de Voluceau, B.P.105, F-78153 Le Chesnay, France.

International Symposium on Terminology Science and Terminology Planning

In commemoration of E.K.Drezen, the Terminological Commission of the Academy of Sciences of Latvia toogether with the Russian Academy of Sciences, Infoterm and the International Institute for Terminology Research (IITF) will organize a symposium on 17-19 August 1992 at Riga, Latvia. The preliminary program foresees papers on the following topics: The theory of terminology developed by Drezen in the 1930s; East-West cooperation in International Terminology Work in the 1930s: Drezen and Wüster; Modern theoretical and practical approaches to terminology in Eastern Europe; Approaches to terminology standardization; Language planning and terminology planning. Regional terminology planning activities; Terminology theory and philosophy of science; New perspectives and regional terminology standardization; Comparative terminology work. - Abstracts of 1 page should have been sent by Jan.15, 1992 in English to Dr.Budin at Infoterm, PF 130, A-1021 Vienna, Austria.

Austrian Software Donation to UNESCO worth US$250,000

The UNESCO software package MicroISIS, boasting of already more than 20,000 users world-wide, has been adapted for terminological applications by Infoterm in close cooperation with TermNet, the International Network for Terminology, and Mr. Giampaolo Del Bigio of the PGI of UNESCO.

The development of the terminological application software under MicroISIS has been financed first of all by the Austrian Federal Ministry of Science and Research and European institutions as well as by a number of TermNet member organizations.

The terminological application software donated to UNESCO together with the data recorded so far represents a development effort of several man-years equivalent to about US$ 250,000. It comprises among others:

(1) a 9-language thesaurus developmant and maintenance system;

(2) a 4-language database system for standardized terminologies;

(3) several bibliographic databases for the preparation of international bibliographies in the field of terminology, e.g. on specialized dictionaries and vocabularies or on theoretical literature on terminology;

(4) a character set software based on the Duke University Language TOOLKIT, which allows to process data in Arabic, Russian Cyrillic, Greek, Hebrew, and all European Latin-based languages (incl. the Baltic languages, Finnish, Hungarian and Turkish).

At present endeavours are being made to combine East-Asian languages (mainly Chinese and Japanese) with the regular MicroISIS release 3.0, which will be provided by UNESCO to licensees free of charge by the end of the year.

A software link between the regular MicroISIS release 2.3 and the Chinese version of it has already been accomplished so that data in European languages can be exchanged without compatibility problems between each other.

The development of this application software under MicroISIS follows an international strategy designed by Infoterm and supported by the Austrian government to enable users of MicroISIS - especially information centres struggling with multilingual data - to achieve a full-fledged information resource managment (IRM) at low cost and with high efficiency. This would considerably upgrade the performance not only of thousands of international and national specialized information centres, but also of any university institute library using MicroISIS. Therefore, information centres in developing countries, especially those cooperating with the specialized agencies of the UN system, as well as European university institutes have a particular need for this software and have expressed a keen interest in its further development. (Concerning the particulars of the *Strategy*, see below.)

(from: *Infoterm Newsletter No.62 (1991)*)

Strategy for MicroISIS-based Terminology Applications Software

Infoterm and TermNet in cooperation with TermNet Members and with the financial assistance of the Austrian Government announced their Strategy for the carrying out of the following application areas of its MicroISIS-based terminology software:

- International Bibliographies
- International Directories
- Terminology Management Systems
- Thesaurus Development and Management Systems

The special features of this software are:
- *multilinguality*: a terminology management system configurable for a bibliographical data base of up to five languages and a thesaurus and management system for up to nine languages, including Arabic, Greek, Russian;

- *universal character sets* developed for more than 40 languages with alphabetic scripts;
- *highest degree of compatibility* to other software due to strict applications of international standards.

The strategy comprises 3 phases of which *Phase 1* has already been achieved with the following items:
- 9-language thesaurus development and management system (combined with character set software and Ventura Publisher desktop publishing software;
- 4-language terminology management system (combined with character set software);
- International Bibliography for Terminological Literature (partially funded by UNESCO);
- International Bibliogroaphy for Mono- and Multilingual Specialized Dictionaries and Vocabularies (Pilot Project: Medicine and health in cooperation with WHO)

Phase 2 (1992) comprises:
- International Bibliography of Terminological Theses and Dissertations
- International Bibliography of Standardized Vocabularies
- World Guide to Terminological Activities
- implementation of Chinese versions
- LAN version
- implementation of navigation capabilities
- implementation of keyboard driver software.

Phase 3 (1993) foresees:
- further international bibliographies and directories
- further integration of all software into an information resource management system for information centers and services.

The MicroISIS software has been adapted to the needs of recording, processing, storage and exchange of multilingual complex terminological entries aiming at the establishment of a terminology database allowing for an efficient exchange of electronic data.

As a first step, the software has been tailored to the needs of standards bodies for the exchange of terminological data.

Thanks to the newly designed format implemented on the MicroISIS system, input can take place in different countries; thus data exchange is possible as well as the establishment of equivalencies of terms in different languages. The new catalogue of data categories is compatible with other terminology data bases and can serve as a model for other projects of this kind and as an indispensable tool for information and technology transfer. For further details, please contact: Infoterm, P.O.B. 130, A-1021 Vienna, Austria.

Proceedings of 3rd Infoterm Symposium

The papers of the very successful 3rd Infoterm Symposium in Vienna, Nov.12-14, 1991 which had attracted some 150 interested colleagues from many continents and countries will soon be available in print. "Terminology Work in Subject Fields" is being edited by Gerhard Budin, Magdalena Krommer-Benz, and Adrian Manu. Some 53 papers had been presented at the Symposium,- according to the program and the abstracts publication. The volume, to be published by the International Network for Terminology (TermNet) will comprise some 500 pages and the price per copy has been set to be 750 Austrian Shilling (=DM 107.14 or about US 66.13). When ordering the volume one should indicate one's membership affiliation to one of the following: the Association for Terminology and Knowledge Transfer, the Intern.Institute for Terminology (IITF), TermNet. Orders should be sent to the TermNet Secretariat, P.O.Box 130, A-1021 Wien, Austria.

Micro- and Minicomputer-based Terminology Data Bases in Europe

This is the title of a report presenting a unique comparative description of terminology management systems available on the European market, comprising not only PC-based and minicomputer software, but also electronic dictionaries and CD-ROMs. The price per copy is DM 300.- (Austrian Shilling 2,100.-), there is a reduced price for members of the Association for Terminology and Knowledge Transfer (DM 200.-). Copies of this report, prepared by K.-H.Freigang, F.Mayer, and K.-D.Schmitz (as TermNet Report 1) are available at the TermNet Secretariat, P.O.Box 130 A-1021 Wien, Austria.

Meeting of ISO/TC 37/SC1 "Principles of Terminology"

The Subcommittee 1 of ISO/TC37 met at Hull, Canada, on Oct.3, 1991. The delegates decided to set up, on the basis of recommendations given beforehand, a new Working Group 3 and Dr.Sue Ellen Wright was asked to convene this group. With regard to documents in work, the following decisions were taken: ISO/CD 704 *Principles and Methods of Terminology*. The convenor will prepare a columnar synopsis documenting the parallel relationship between the following documents: the existing WD 704, the English translation of ÖNORM 2704, the English translation of DIN 2330, and the text of the existing ISO 704. The new 704 should represent a basic structure rather than incorporating handbook-type information. It should be coordinated with WD 10 *"Concept Systems: Development and Representation"* to avoid redundancy and inconsistency. The future document should treat different kinds of definitions. It should be consonant with 1087 and other standards, and the scope should be re-examined.

Further decisions concerned WD 01: *Terminology Vocabulary* (Revision of ISO 1087:1990), WD 10: *Concept Systems and their Representation*; and WD 18: *Coding of Bibliographic References in Terminology Work and Terminography.*

Regarding the next meeting it was suggested to hold it in Tampere, Finland in August 1992 in conjunction with the Eurolex Conference.

For further information, please turn to the ISO/TC 37 Secretariat, ÖNI, Postfach 130, A-1021 Wien, Austria.

3rd IOUTN/WBIT Congress

Report by Zygmunt Stoberski

"Language of Each Nation is Your Friend" was one of the three mottos of the 3rd IOUTN/WBIT Congress held in Warsaw's House of Literature on Sept.28-29, 1991. (IOUTN = International Organization for Unification of Terminological Neologisms: WBIT = World Bank of International Terms). The Congress, mounted under the working motto *"Transfer of the Latest Specialistic Terminology to Less Developed Countries"*, was organized thanks to the cooperation of the Ministry of Industry and Trade, the Institute of Economics of Chemical Industry, the Polish Committee of UNESCO, the Adam Miskievicz University in Poznan, the Italian-Polish Chamber of Commerce, the Institute of the Polish Language of Warsaw University and the Polish Association of Translators and Interpreters.

The event was attended by delegates from seven countries: Denmark, Italy, Sweden, USA, Poland, and - for the first time ever - from Lithuania and Ukraine. China, India, Nigeria, Russia, and even Japan also showed interest in the transfer of terminology from highly to medium and less developed countries and sent high-ranking diplomats to take part in the opening of the Congress.

Concerning the papers delivered in English and French, the following ones showed a special bearing on the topic of the Congress: Bogdan Walczak spoke on *"Practical Aspects of the Transnationalization of Terminology"* and Roxana Sinielnikoff on *"Transfer of the Latest Specialistic Terminology to Less Developed Countries"*.

Other papers: Lily Pomarenko: *Translation of English Names of Diseases into Russian,* Michal Tasiemski: *Lexitools. Terminological Data and Special Field Glossaries*, Danuta Kierzkowska: *Standardization of Polish Terminologiy in Law*, K.Gebarski: *Terminology of Interlingua,* E.Gorol and W.Mlodozeniec: *Terminological Works at the Information Centre of the Institute of Non-Ferrous Metals*. In addition, a paper by Huang Zhachou, Vice-President of the Chinese Committee for Scientific Terminology, Beijing, was read.

As to the resolutions adopted and the IOUTN/WBIT plan of activity in the years 1992-1993, the most important points refer to paid and free-of-charge transfer of specialistic terminology to less developed and developing countries. It is a totally new type of activity which will be able to develop thanks to the expected assistance of international organizations and terminology banks, and also thanks to the support of industrial and trade organizations from highly developed countries. Tekniska Nomenklaturcentralen, the Swedish institution of great merit and experience, is the first terminology center to assist IOUTN/WBIT with this particular goal in mind.

In line with the provisions of the statutes, numerous IOUTN/WBIT members casted their votes by mail. Zygmunt Stoberski, Poland, was re-elected President of the International Organization for Unification of Terminological Neologisms, while Maria Rojda-Folkesson, Sweden, was elected President of the World Bank of International Terms.

(Original text slightly amended and abridged, ID)

Discussion Panel on Linguistics, Terminology and Scientific Texts

The panel convenor, Rostislav Kocourek, invited colleagues to take part in this panel which will be held as part of the 15th International Congress of Linguistics, Québec, Canada, Aug.9-14, 1992. For any further information turn to: Prof.R.Kocourek, Department of French, Dalhousie University, Halifax, NS, B3H 3J5, Canada

9th European Symposium on LSP, 1993

A first circular has been distributed informing on the dates on which, from Aug.2-6, 1993 Bergen, Norway, will host the 9th European Symposium on LSP: *"Where is LSP in 1993?"* Implications and applications of current LSP research. (LSP = Language for Special Purposes). The conference is organized under the auspices of the International Association for Applied Linguistics (AILA) jointly by the University of Bergen and The Norwegian School of Economics & Business Administration with an international group of 12 well known names serving as Advisory Committee.

The conference theme, "Where is LSP in 1993?", is formulated so as to allow for a wide charting of the areas now colonized by (once typical) LSP approaches, methodologies and principles, and for an incisive reporting of results obtained under a variety of perspectives, theoretical practical and geographical. The first circular invites to explore the implications and applications of current LSP research. In the selection of papers preference will be given to those based on scientific research or addressing issues and principles of theoretical/methodological interest.

To get on the mailing list for the Second Circular one should turn to: LSP Bergen '93 Symposium, c/o Prof.Magnar Brekke, NHH/Department of Languages, N-5035 Bergen, Norway.

TKE'93

Every three years, the Association for Terminology and Knowledge Transfer organizes the internatinal congress "Terminology and Knowledge Engineering - TKE". In order to emphacize the international character of the Association, the third congress, TKE'93, will - after two successful congresses in Trier - for the first time take place in Avignon (France).

TKE'93 will be organized together with the large international conference on expert systems, which since more than ten years has taken place once a year in.Avignon and which is accompanied by an industrial exhibition. It is intended to carry through this conference either from May 24 to 29 or from June 7 to 12, 1993, with TKE being held from Wednesday to Friday as sessions parallel to the other sections on expert systems.

For further information concerning the timing and the call for papers turn to Gesellschaft für Terminologie und Wissenstransfer e.V., FR 8.6, Universität des Saarlandes, D-6600 Saarbrücken.