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UDC Activities

Editor: Dr.I.C.McIlwaine (UK) has recently been appointed editor-in-chief of UDC. Dr.McIlwaine is a member of faculty in the School of Library, Archive, and Information Studies, University College London. She is an expert in the UDC system and has been closely involved in the efforts to bring this classification system into the late 20th century and to ensure that it continues to be a viable system in the computerized information environment. Congratulations and best wishes to her in this important work!

UDC in North America: The UDC Archive of schedules in English, French, and German has been transferred from the University of Maryland to the Faculty of Library and Information Science, University of Toronto. U of T has now become the depository for UDC schedules in North America. Inquiries about schedules in this collection should be addressed to: Ms. Diane HENDERSON, Chief Librarian, Faculty of Library and Information Science, University of Toronto, 140 St.George Street, Toronto M5S 1A1, Canada. Phone: (416)978-7060; Fax: (416)978-5762; e-mail: hender@flis.utoronto.ca

Restructuring Project: A feasibility study for the restructuring of UDC is being undertaken by I.C.McIlwaine and Nancy Williamson. The work began in Toronto in May and June 1993, when the two principal investigators carried out a pilot study leading to a more intensive work on the system. The work is continuing on both sides of the Atlantic and there will be another meeting on the Project in London in February 1994.

The purpose of this study is to explore the feasibility of restructuring UDC into a faceted system with the idea that it would be accompanied by a thesaurus derived from the classification itself, somewhat in the manner described in research by Jean Aitchison. To begin such restructuring from scratch without some frame of reference would be a horrendous task. However, the Bliss Bibliographic Classification, 2nd edition (BC2) is a faceted classification system with a framework which could conceivably serve as the frame of reference for such a project. The Bliss system has long been recognized as a classification system with a sound and logical organization of knowledge and its second edition has been developed on sound principles of faceted classification. The facets are clearly visible in the schedules and are supported by a detailed and clear rationale for the nature of the facets and their citation order. Thus BC2 appears to be an ideal basis for such an undertaking.

In consultation with those now responsible for administration and revision of UDC, a decision was made to carry out the initial study on class "61 Medical Sciences". This decision was based on the fact that the schedule for "Medical Sciences" is available for BC2, while the comparable schedule in UDC is hopelessly outdated at the point in time and will require major revisions if it is to become viable for future use.

The overall objective of the study is to establish the viability and feasibility of completely restructuring UDC to make it more amenable for use in online systems. At a more precise level, the investigators are also seeking to identify the problems which must be addressed and solved in any full scale conversion of UDC. Also a methodology for the restructuring process must be determined and it is essential to know whether the proposed design for a restructured UDC is a useful design to pursue in the future development of search aids for online catalogues and databases. In a broader context the research will attempt to make a beginning on a model for designing classification/thesaural systems which would be more amenable to use in online systems than the present print-based systems. Such a model might be used in the development of classification/thesaural systems for special disciplines and subject areas as well as for general knowledge systems. The primary objectives are those related specifically to UDC. However, the investigators hope that this project would lead to further research into the use of the model in systems design in a broader context.

The project is being carried out in several stages. As a beginning, the conversion of the "medical sciences" schedules in both classification systems into machine-readable form is essential for searching the topics using the same software. (This step is already partially completed.) In the first phase of the restructuring, the framework for the reorganization of the UDC topics and subtopics will be established through the identification and study of the facet structure and the definition of facets based on their use in BC2. At the second stage, the topics from the medical sciences in both systems will be retrieved, sorted and reorganized based on the facet framework previously established. In the third step, an intellectual evaluation of the structures will be carried out using carefully selected medical dictionaries and other authoritative tools, as well as consultation with the editors of the two schemes. At this stage, any "orphan" terms will need to be considered and the problems of their positions in the faceted structure resolved. In the fourth stage of the restructuring, a thesaurus will be derived from the systematic structure and a notational system will be added to the hierarchies of topics. While the exact nature of the notational system has yet to be determined, it almost certainly has to be language independent.

The final stage of the project will be the testing of the restructure schedules and thesaurus. It is anticipated that two kinds of testing will be involved. In the first test the classification system will be tested for the relationships between the thesaurus and the classification system. Also the thesaurus will be measured against the ISO 2788 standard for monolingual thesauri to ensure that it conforms to international standards, especially with respect to the quality of the terminology, including lead-in vocabula-

ry and the equivalence, hierarchical and associative relationships among terms. The results will also be given to experts for review and suggestions. In the second test, the schedules will be applied to a random selection of documents which have been previously classified according to the present UDC and the results evaluated for logical order and the hospitality of the system in accommodating documents. Other criteria for evaluation may be discovered to be important as the study progresses.

Progress to date includes the pilot study carried out in May and June 1993 in which the Medical Sciences schedules were broken down into their subdisciplines. The study then focused on a comparison of the two systems looking at the general content of medicine and its subdisciplines with particular attention to the schedule order and the location of the various subdisciplines, differences in citation order within subdisciplines and problems of notation. Also, at a more precise level an in-depth study of one subdiscipline, "Dentistry" was carried out, through restructuring it into the BC2 structure and experimenting with thesaurus construction. This pilot study enabled the investigators to ascertain that conversion of UDC into a fully-faceted system would be possible. However, further study is needed before a final decision on the future directions for the revision of UDC is made. A number of problems were identified and possible solutions posed. Based on a report to the UDC Consortium, the investigators have been urged to continue their research and to seek funds to continue it. Work is ongoing and members of FID/CR and interested users of UDC will be kept informed on progress being made.

FID Conference and Congress, Tokyo, October 1994

FID/CR is planning a one day seminar and workshop on UDC immediately preceding the main FID Conference in Tokyo, October 1994. Tentatively it is planned to have speakers at the seminar who are directly involved with the administration and development of UDC. A workshop on the practical application of UDC would follow the seminar. More precise details will be announced early in 1994.

FID/CR Membership

As a result of FID's new policy on membership in FID, FID/CR has increased its membership by several new members. We hope that this trend will continue. A new brochure is being prepared and a list of FID/CR members will be circulated to the membership shortly.

Ranganathan Award for Classification Research

Established in 1975 under the sponsorship of the Documentation Research and Training Centre (DRTC) Alumni Association, this Award is scheduled to be given every two years. The Award is made to an individual who is deemed to have made a distinguished contribution to classification research during the previous two years. Where possible, this contribution should be in form of a publication. The persons having received the Award are as follows:

1976 Derek Austin
1982 Jean Aitchison
1984 Jack Mills
1986 Pauline A.Cochrane
1992 A.Neelameghan

The 6th Ranganathan Award will be presented at the 47th FID Conference and Congress in Tokyo, in October 1994. A Selection Committee whose members are: Elaine Svenonius (USA), M.A.Gopinath (India), Ingetraut Dahlberg (Germany), I.C.McIlwaine (UK), and Nancy Williamson (Canada), Chairperson, will make the final selection of suggestions from the FID/CR membership. Nominations for the Award, accompanied by a statement as to merits of the nominee for the Award should be sent to Prof.Nancy Williamson, Chair, FID/CR, Faculty of Library and Information Science, University of Toronto, 140 St.George Street, Toronto, M5S IA1, Canada. The Chair of FID/CR may also be reached by phone: (416)978-7079, Fax: (416)971-1399, and e-mail on Internet at: william@flis.utoronto.ca. The nominations should be submitted not later than March 1, 1994.

IFLA Section on Classification and Indexing Satellite Meeting

The IFLA Section on Classification and Indexing sponsored a very successful 2-day Satellite Meeting on "*Subject Indexing in the 90s: Principles & Practices*", in Lisbon, Portugal, August 17-18, 1993, just prior to the IFLA Annual Conference in Barcelona. Chairperson of the local arrangements committee was Ines LOPES. The meetings were held at the Instituto da Biblioteca Nacional e do Livro, Portugal, attached to the National Library. There were approximately 100 participants and copies of the papers were made available to the participants at the time of the Meeting. The proceedings of the Satellite Meeting will be published in IFLA's UBCIM Series in the middle of 1994.

The first day of the Meeting was devoted to the presentation of papers on subject analysis systems in various countries throughout the world. Papers available to participants on national systems included Brazil, Canada, Croatia, France, Germany, Iran, Poland, Portugal, Spain, the United Kingdom and the United States.

A paper on "Subject Access in the Brazilian Library Network BIBLIODATA CALCO" prepared by Eugénio DECOURT, Sônia Maria GUERREIRO PACHECO, Brazil, focused on the products and services of the BIBLIODATA system. In doing so, it described the online system, the microfiche and printed bibliographic products. Indexing methods, the subject heading list and the rules for applying those headings were discussed. Ingrid PARENT, Canada, presented a paper prepared by her colleague Alina SCHWEITZER entitled "A Balancing Act Between Conformity and Divergence: Subject Access to Library Materials in Canada". In the overview this paper dealt with the provision of subject access to documents in the Canadian

context. Particular emphasis was given to the *Canadian List of Subject Headings* (CSH) designed to complement and supplement the *Library of Congress Subject Headings* (LCSH) and the *Répertoire de vedettes-matière* based on LCSH and designed for use in libraries in French speaking communities in Canada. Mirna WILLER's paper discussed "Subject Access Systems in Usein Croatia". The paper briefly described the history and background of subject access systems in Croatia up until the nineties and focused particularly on the state of subject cataloguing in the National and Univerity Library using its integrated system CROLIST. The objective is to establish subject cataloguing rules for applying the system in Croatian libraries. The library has been experimenting with a working translation of a draft of the *Guidelines for Subject Authority and Reference Entries* and the *UNIMARC/Authorities* format. Suzanne JOUGUELET, France, described the "Evolution des pratiques d'indexation par sujets en France". Her presentation focused on RAMEAU, the authority list used at the Bibliothèque Nationale and MOTBIS, the thesaurus created for the network of documentation centers in France. Problems and possible solutions were considered. Magda HEINER-FREILING spoke on "Subject Indexing in the 90s: the Situation in Germany". In doing so, she described the nature of subject catalogues in university libraries in Germany and the diverse nature of their subject access systems up to now. The paper then went on to discuss efforts toward the "unification" of subject access systems at the regional and national level. Included was a brief description of the German subject cataloguing rules *Regeln für den Schlagwortkatalog* (RSWK) and the descriptor authority file *Schlagwortnormdatei* (SWD). Subject access systems for public libraries was briefly mentioned and final remarks stressed the need for international cooperation among both German and non-German speaking countries. Poori SOLTANI spoke about "Major Subject Access in Iran" taking a historical approach to subject heading systems used in that country. Jadwiga SADOWSKA's paper on "Subject Catalogs in Poland" discussed the general situation in Poland including the rules used. - Ines LOPES focused on "Subject Indexing in Portuguese Libraries" describing the automated system SIPORbase which was launched at the National Library of Portugal in 1986. The principles and main fesatures of SIPORbase were explained and issues related to the applicaiton of the system and its impact on Portuguese libraries through the National Bibliographic Database, PORBASE, were reviewed.

In a paper entitled "L'indexation matière à la Bibliothèque Nationale Espagne", Pilar BENEDITO CASTELLOTE described the history of the system used at the Spanish National Library and applications of ILIADA, the automation programme used at the Library. "Subject Control: The British Viewpoint" was presented by Ia McILWAINE, United Kingdom. In her presentation McIlwaine looked at current trends in verbal subject control in the UK, outlining the COMPASS system, which has replaced PRECIS at the National Bibliographic Service. Among other topics dis-

cussed were the Shared Cataloguing Project of the six UK copyright libraries, subject searching on the OLIS at Oxford and the LIBERTAS system in the University of London. Lois Mai CHAN, USA, presented "Subject Access Systems in the USA" focusing on the two major American subject heading systems *Library of Congress Subject Headings* (LCSH) and *Medical Subject Headings* (MeSH). The basic principles and major structural features of each system were described and compared.

Papers presented on the second day of the Satellite Meeting focused on the broader issues involved in providing subject access to documents in library catalogues. Four papers were presented followed by a conclusion and summary by Julianne BEALL, USA. A paper by Robert FUGMANN on "The Complementarity of Natural and Controlled Languages in Indexing" was presented by Ingetraut DAHLBERG. As the title suggests this paper considered the issues in the best approach to using these two fundamental types of indexing languages in conjunction with each other. Fugmann supports the view that "Because of the inherently indeterminate nature of indexing, no variation of automatic indexing can ever constitute a satisfactory substitute for intellectual indexing if this is done carefully, based on deep subject knowledge and on an indexing language that comprises both expressive vocabulary and grammar".

In her paper on "Pre-coordination or Not" Elaine SVENONIUS, USA, focused on a fundamental concern in the development of subject access systems online. Her paper began with a historical background which surveyed such systems as Mortimer Taube's Uniterm System, the early development of thesauri, the Cranfield experiment and PRECIS and LCSH. In the second half of her discussion, Svenonius addressed her questions in the context of the online environment assuming a full-featured system "permitting keyword searches on subject strings" would be available. In this context she examined the simplicity of terminology, speed in cataloguing and indexing, rate of growth, rate of obsolescence, suitability for cumulative dissemination, universality, specificity, browsability, precision, recall, number of access points, speed in searching, suggestibility, contextuality, familiarity and adaptability to a machine environment. In her conclusion she stated that "The best summarization is ... to say there are advantages to precoordination, but these come at a certain cost" - and those costs vary with the indexing language. Svenonius indicates that there are numerous questions which must be answered, each time a decision is needed on whether to precoordinate or not.

Jacqueline REY, France, examined "La terminologie et l'indexation aujourd'hui". Rey focused on terminology as opposed to systems of indexing languages in the library context. After a brief overview of the methods and practices used in terminological activities, she discussed recent international developments in indexing and terminology. Key elements in her discussion were the increasing use of computers in terminology, new technologies for accessing online terminological information, the creation of interna-

tional and regional institutions to stimulate neologisms in various languages, and the convergence with cognitive science. Finally

Nancy WILLIAMSON addressed the problems of "Standards and Standardization in Subject Analysis Systems" focusing on their current status and the future directions for standardization. She considered the general nature of standardization, the need for standards, the problems they created, and the process of development. Major standards organizations related to subject access were discussed with reference to various types of subject access - alphabetic, systematic, pre-coordinated and post coordinate. Williamson concluded that there is still much work to be done in standardization with respect to problems of compatibility, multilingual data exchange and the use of switching languages.

In her summarization of the Satellite Meeting Julianne BEALL identified and analyzed the trends across papers which reflect the nature and development of subject indexing principles and practices in the 90s across the world.

Subject Autority Files Guidelines

Guidelines for Subject Authority Files and Reference Entries prepared by the Working Group on "Guidelines for Subject Authority Files" of the Section on Classification and Indexing of the IFLA Division of Bibliographic Control was published in 1993 by K.G.Saur (UBCIM Publications, New series, vol.12).

These guidelines are intended to be applicable to a variety of types of subject heading and subject concept systems. This volume is a companion volume to *Guidelines for Authority and Reference Entries* (GARE) published by the IFLA International Programme in 1984.

U.K.: CRG 293

The British Classification Research Group held its 293rd Meeting at University College London on Oct. 21st 1993 with 8 members present. The meeting noted "with regret and sadness" the death of Mr. J. WELLS. Mr.MILLS reported progress on the publication of the Bliss Classification, 2nd ed. as follows: *Politics* was now being proofread and *Law* was completed. The present meeting continued the discussions on the *Classification of the Arts*. Mr. LANGRIDGE circulated an *Outline Classification for Theatre* which was considered by Mr.MILLS as a model on which to base the classification of all performing arts. The literature on the topics of this area could be organized into three large "blocks": Social aspects, Theory and Practice, and The Achievement. Questions of management aspects, equipment aspects, and history were discussed, as well as of biography and criticism. Mr.MILLS concluded the meeting, stating that the outstanding problems remained *Movements, Places, Periods, and Artists* with the hope that this could be discussed at the next meeting, Dec.9, 1993, which was to be devoted to the discussion of Styles &c.

USA: 4th Classification Research Workshop

On Sunday, Oct.24, 1993 the Special Interest Group on Classification Research of the American Society for Information Science held its 4th Workshop in Columbus, Ohio, prior to the ASIS Annual Meeting. Twelve papers were listed for presentation in the Proceedings volume, available beforehand thanks to the efforts of the Editors and Workshop Co-Chairs: Philip J.SMITH, Clare BEGHTOL, Raya FIDEL, and Barbara KWASNIK. These "proceedings" were meant as a working copy of the papers in order to provide participants with a chance to review the contributions during and after the Workshop. Authors will have a chance to revise and edit their papers. Later, in 1994 a printed volume in the Series "Advances in Classification Research No.4" will be available from Learned Information, Inc.

The papers presented are as follows (in alphabetical order): ABAWAJY, J.M., SHEPHERD; M.A.: Supporting a multi-hierarchical classification in the object-oriented paradigm. - AIMEUR, E., GANASCIA, J.G.: Reasoning with classification in interactive knowledge elicitation. - BOWKER, L.: Multidimensional classification of concepts for terminological purposes. - COCHRANE, P.A.: Warrant for concepts in classification schemes. _ EUZENAT, J.: Brief overview of T-TREE: The TROPES Taxonomy Building Tool. - HEMMASI; H., ROWLEY, F., ANDERSON, J.D.: Isolating and reorganizing core vocabulary from Library of Congress Music Headings for use in the Music Thesaurus. - JACOB, E.K.: Communication and category structure: The communicative process as a constraint on the semantic representation of information. - KIM, N.-H., FRENCH, J.C., Brown, D.E.: Boolean query reformulation with the Query Tree Classifier. - KLEINBERG, I.: Programming knowledge: On indexing software for reuse and not indexing documentation at all. - LIN, X., MARCHIONINI, G., SOERGEL, D.: Category-based and association-based map displays by human subjects. - MINEAU, G.W.: The classification of structured knowledge objects. - ZENG, L., GAPEN, D.K., SCHMITT, Sh.: Developing intellectual access and control mechanisms for discipline-based virtual libraries that feature media integration.

- For further information please turn to: Prof.B.Kwasnik, School of Information Studies, 4-206 Center for Science and Technology, Syracuse University, Syracuse, NY 13244-4100. Fax (315)443 5806.

56th ASIS Annual Meeting

The topic of this year's Annual ASIS meeting in Columbus, Ohio, Oct.24-28, 1993 was "Integrating Technologies\ Converging Professions", indicating that "differences (between infrastructure, data, use of systems, responsibilities of professionals) no longer matter as much". Among the 43 Technical Sessions/Panels the following 7 were sponsored or co-sponsored by SIG/CR:
(1) *Automated Support to Indexing: Pragmatic Approaches* aiming at a demonstration of automated systems that

support indexing. Moderator: Gail HODGE (BIOSIS). Papers: MILSTEAD, J. (JELEM Co.): Database indexing: Productivity aids. - EDWARDS, Sh.J. (Natl.Agricultural Library): Investigation of a computer-assisted indexing system for its practical application in a production environment. - TODESCHINI, C. (IAEA): Computer-aided input preparation at the International Nuclear Information System.

(2) *Query Expansion in Document Retrieval Systems* meant to show recent trends in query expansion. The Moderator: Efthimis N.EFTHIMIADIS (from UCLA) introduced with a "Tutorial Introduction" into "Query Expansion". Further papers: SMITH, Ph.J. (Cognitive Systems Engineering Lab., Ohio State University): Knowledge-based approaches to query expansion. - DOSZKOCS, T. (Natl.Library of Medicine): Using neural network technology for query expansion. - ROBERTSON, St. (City University, London): Query expansion in OKAPI.

(3) *Retrofitting the Thesaurus: New Models for Old Vocabularies,* treating problems and possibilities of fitting existing thesauri to new models. Moderator: Matthew MOORE (Amer.Theological Library Assoc.), Papers: FIDEL, R. (Univ.of Washington): Subject headings, descriptors and search keys. - PETERSEN, T. (Art & Architecture Thesaurus): Bridging linguistic centuries: How to make an 'All Around Thesaurus'. - EVANS, M. (Illinois Inst.of Technol.): Lexical and semantic relations for an information retrieval thesaurus.

(4) *Domain Analysis in Information Science: Investigations into the Nature and Structure of Knowledge Domains for Classification and Retrieval.* Moderator: Hanne AL-BRECHTSEN (Royal School of Librarianship, Copenhagen). Papers: HJORLAND, B. (Royal School of Librarianship, Copenhagen): Domain Analysis: An alternative too methodological individualism. - BATES M. (UCLA): Facet analysis for online retrieval in the humanities. - LIDDY. E. (Syracuse Univ.): Bottom-up linguistic technique for domain clustering of documents. - HORNER, D.S. (Univ.of Brighton, UK): Paradigms, discourses and language games: Categorical frameworks and signs of the times.

(5) *Advances in the Design of Information Retrieval and Indexing Systems: Demonstration of Research Prototypes* intending to provide a "hands-on demonstration to experience the look and feel of advanced systems for information retrieval and indexing". No Moderator mentioned. Papers: BEHESHTI, J. (McGill Univ.): Public Access Catalog extension. - JONES, J.M. (Enterface, Philadelphia): Interactive geographical databases. - BATEMAN, J. (Univ.of North Texas): Apple library of tomorrow grant system for a public library. - ANDERSON, J. (Rutgers Univ.), ROWLEY, F. (Anderson Rowley): Information Systems - ARISView. - DENNING, B., SMITH, Ph. (Cognitive Systems Engineering Lab., Ohio State Univ.): Cooperative problem-solving systems.

(6) Thesaurus Maintenance Packages presented by D.BATTY (CDB Enterprises, Inc.) and

(7) *Medical Concept Representation: From Classification to Understanding* with the attempt to show the "Evolution of clinical classification, providing a framework for applying medical informatics tools in research, quality improvement, decision support and management". Moderator: Christopher G.CHUTE (Mayo Clinic).

(8) In *Search of Network Navigation in Medicine* providing information on "activities related to the NLM's Unified Medical Language Systems (UMLS) project". Moderator: Nancy RODERER (Yale Univ.), Reactor: Pauline COCHRANCE (Univ.of Illinois) with R.ROGERS, P.MILLER, S.FRAWLEY as panelists.

The latter two panels were sponsored by SIG/CR together with SIG/MED.

Among the almost 40 contributed papers the following should be mentioned with a bearing to classification research: - DUMAS, Th., LOGAN, E.L., FINLEY, A.M. (Florida State Univ.): In Focus: Using citation analysis and subject classification to identify and monitor trends within a discipline. - CRAVEN, T.C. (Univ.of Western Ontario, London, Ont.): A thesaurus as part of a computer-aided abstracting tool kit. - LIDDY, E.D., JORGENSEN, C.L. (Syracuse Univ.): Modeling information seeking behaviors in index use. - SPINK, A., SARACEVIC, T. (Rutgers Univ.): Dynamics of search term selection during mediated online searching. - BUCKLAND; M., BUTLER, M.H., NORGARD, B.A., PLAUNT, Ch. (Univ.of California, Berkley): Filtering and analysis of retrieved sets. - HARTER, St. (Indiana Univ.): Colinked descriptors: an application of bibliometrics to interface design. - WANG, P., SOERGEL, D. (Univ.of Maryland): Beyond topical relevance: Citation selection behavior of real users of DR systems. - RIEH HWANG, H.-Y. (Electronic Frontier Foundation): Citation analysis: a case study of Korean scientists and engineers in electrical and electronic engineering.

There were also some preconference events deserving to be mentioned in addition: the ASIS/SIG/CR Workshop on Classification Research (see the preceding note), a "Continuing education" course on Thesaurus construction and maintenance by D. Batty, a special workshop on "Relevance: What are the questions?" and one on an "Introduction to Total Quality Management" held by Laura Lazar HOLBROOK.

For further information contact: American Society for Information Science (ASIS), 8720 Georgia Ave., Suite 501, Silver Spring, MD 20910, USA.