Reports and Communications

Organization of Knowledge and Information:
Its Place in the Emerging Information Professions

"Intellectual Foundations for Information Professionals" was the topic of a two-and-a-half day conference held in Emporia, Kansas 16—18 November 1984. The conference was co-sponsored by Emporia State University's School of Library & Information Management and the Information Institute, International Academy at Santa Barbara. This conference built on the May 1982 Santa Barbara conference on "Education for Information Management," co-sponsored by the Information Institute and the Association for Library and Information Science Education.[1] Both conferences were concerned with the analysis of educational programs for the information professions.

As a result of extensively revising the curriculum at Emporia State's School of Library & Information Management questions arose on the nature of an academic discipline for information science. This dilemma focused our attention on the apparent lack of a consensus in defining the underlying discipline for the various information professions. We also found there is no consensus on how the information systems relate to each other. This situation, in turn, explains the absence of a coherent paradigmatic and consensual discipline for the information professions.

Thus, leading authorities were invited to examine the theoretical foundations for three streams of information education and determine their relationship to the broad field of information science.[2] The three streams are derived from:

- Information Systems (including MIS taught in Business Schools)
- Information Science and Library science (taught in Library/ Information Schools)
- Information Resources Management (including Records & Archives Management)

Representatives of these three streams were asked to develop criteria for an integrated educational program as well as explore the relationship of these streams to such areas of expertise as telecommunications and video technology. Invited speakers were asked to focus on:

- Commonalities and differences of the three educational and conceptual streams
- Skills and values common to the three fields
- Relationship between theory base and professional core practice within each of the identified streams

The purpose of this conference report is to share the product — new knowledge — that came about through the interaction of authors, commentators, rapporteurs, and audience. There are two elements that need to be mentioned in order to understand the ideas that the group developed. The process of conferencing (interaction of participants) was used as a means of information creation and dissemination. The content that we are presenting here is the result of the participants' slowly refining their thoughts.

Participants identified the following research challenges in the organization of knowledge and information: (1) Meeting the greatest challenge in the design of information systems: organizing material for the presently unknown potential user; (2) Broadening the base of classification design to incorporate findings in cognitive psychology concerning the ways and patterns in which people process and use information; (3) Organizing "messy" or informally-exchanged data that assumes much importance in research and decision making processes; (4) Designing classification systems explicitly for organizing information in a dynamic, online format in the paperless system; (5) Studying further the use of automatic subject analysis including cluster analysis in the classification process; (6) Organizing pictures and visual data through videodisc and laser technology; (7) Incorporating the organization of material more directly into the retrieval function; (8) Exploring the paradigms of various disciplines to further reduce artificiality of constructs in classification schemes; (9) Developing linkages between classification numbers and subject headings to enhance the browsing process at the computer terminal, as well as linkages to individual records to display hierarchial and other types of arrangements; (10) Incorporating the archivists' technique of group description of large masses of material; and (11) Repackaging information to meet particular user needs. (12) Integrating the organization of knowledge and information in the management of organization.

The conference participants agree that further development of theory is needed relative to information science in its broadest terms and specifically to the organization of knowledge and information and that theory and application must converge. Attention must be paid not only to the design of classification systems and the creation of databases, but also to the management of retrieval systems. The organization of knowledge and information does not take place in a vacuum. Rather, it must be incorporated into an overall systems design appropriate to meeting the needs of actual and potential users.

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Notes

1 Eric H. Boehm and Michael K. Buckland (eds.), Education For Information Management: Directions for the Future (Santa Barbara: International Academy at Santa Barbara, 1983).

2 The following were invited presenters of papers: Michael K. Buckland, "Library Systems, Records Management: Emerging Commonalities;" Gordon B. Davis, "Information Systems as an Academic Discipline;" Joseph C. Donohue, "A Discipline for the Information Profession;" Rena L. Fugate, "Records Management; A Global Perspective to Information;" Roger C. Greer, "A Model for the Discipline of Information Science;" Forest Woody Horton, Jr., "Education for Information Resource Management in the Federal Government;" Richard O. Mason, "The Value of Information;" E. Burton Swanson, "Information Systems: Necessary Foundations;" Robert Warner, "Archives and the New Information Era: A Reluctant Partnership," (Plans are being made for publication of manuscripts)

Society for Conceptual and Content Analysis by Computer

SCCAC is a loosely organized group of scholars in the humanities and social sciences interested in the special area of computerized content and conceptual analysis. This area is very generally defined as including methods of lexicography, indexing, and text analysis using conceptual systems such as Roget's "Thesaurus" rather than alphabetical systems of order. It also includes studies following earlier models like the GENERAL INQUIRER or Iker's WORDS system. Furthermore it includes automatic retrieval systems and thesaurus building as well as studies searching for motifs and themes in larger text corpora. Artificial Intelligence is of general interest to SCCAC but does not lie within its main focus.

The function of SCCAC is to provide a medium of communication and information to scholars working in the various fields within the general area of interest with the least amount of bureaucratic red tape and financial burden. SCCAC will provide addresses of participating scholars, disseminate project descriptions and plans via newsletter, and organize meetings on a regular basis, sometimes in conjunction with ACH (Association for Computers in the Humanities) and ALLC (Association for Literary and Linguistic Computing) conferences. SCCAC is also a recognized special interest group of ACH. ACH membership is recommended but not required for SCCAC members.

Report on Previous Activities

SCCAC had its first constitutional meeting in connection with the ACCH/83 meeting at Raleigh, North Carolina in June of 1983. *Klaus Schmidt* and *Roy Boggs* presented their plans for this organization to an interested audience, and according to a general consensus, it was decided to keep the society as loosely organized and as open as possible to any interested person. There was a long discussion about the trends and goals of conceptual analysis in regard to the needs of the various different disciplines. Whereas in the social sciences and in psychology the application of the "traditional" content analysis systems are quite common for general text analysis, similar methods are used in humanities quite rarely. *Colin Martindale* has been leading the way towards an introduction of these methods to literary analyses building on experiences made in the field of psychology. *Renate Dephendahl* has become engaged in applying Colin Martindale's methods to the field of German literature. She gave a report on her project of a content analysis of Faust 1 and II by Johann Wolfgang von Goethe by using PIAF10, a German dictionary based on Stone's Harvard III Psychological Dictionary, and using a computer program called COUNT, which has similar features but less capabilities than the GENERAL INQUIRER.

Klaus M. Schmidt reported on the Conceptual Dictionary Project of Medieval German Epics using a conceptual system like Roget's *Thesaurus* as a basis for text analysis. It was suggested to start similar projects for major text corpora and specific literary or historical periods in as many other language areas, since with addition of conceptually organized dictionaries and thesauri a big step beyond the traditional computer

generated research tools could be made. The demands of many scholars for a handy research tool aiding them in their search for motifs and themes cannot be met well with "traditional" indices and concordances.

The first two regular SCCAC sessions took place in conjunction with the XI ALLC Conference in Louvain-LaNeuve/Belgium in April 1984. The following papers and projects reports were given:

Jan Brustkern (Universitat Bonn/West Germany): Aufbau einer kumulierten Wortdatenbank des Deutschen.
Nancy M. Ide (Vassar College/USA): Patterns of Imagery in William Blake's The Four Zoas.
Dietmar Najock (Freie Universität Berlin/West Germany): Experiments of Word Classification in a Latin Text, According to the Conceptual Systems of Dornseiff and Hallig/Wartburg.
Burghard B. Rieger (Technische Universität Aachen/West Germany): Lexical Relevance and Semantic Dispositions in a Given Subject Domain. On Stereotype Word Meaning Analysis and Representation in Procedural Semantics.
Walter Koppe (University of Stellenbosch/South Africa): The Conceptual Approach in Foreign Language Teaching and the Role of the Computer.
Nicoletta Calzolari (Istituto di Linquistica Coinputazionale, Pisa/Italy): A Dictionary Data Base: Towards a Thesaurus Organization.
Klaus Schmidt (Bowling Green/U.S.A.): An Algorithmic Approach to a Parser for Automatic Disambiguation of Homographs in Middle High German on the Basis of the Conceptual Dictionary Project.

Future Activities

There will be at least one SCCAC session at both the ICCH/85 at Provo, Utah June 26–28, 1985, and the XII International ALLC Conference at Nice, France, June 5–8, 1985.

The sessions at the ACCH in Provo will be organized by Roy Boggs and the sessions at the ALLC Conference in Nice by Klaus M. Schmidt.

Please send proposals for project reports or papers (20 minutes maximum) directly to one of the organizers (the proposal should not exceed 500 words.) Deadline for submission to both conferences is February 28, 1985. You will receive notification by March 29, 1985.

Submissions for the Nice conference should be sent directly to Klaus Schmidt: Universität Salzburg, Akademiestraße 24, A-5020 Salzburg.

Submissions for the Provo conference should be sent directly to Roy A. Boggs, Department of Information Systems, University of Toledo, Toledo, OH 43606.

Arabic Editions of the DDC

Forest Press, a division of the Lake Placid Education Foundation, is pleased to announce the publication of the first authorized Arabic translation of the 11th Abridged Edition of the DEWEY Decimal Classification (DDC). The project was jointly funded by the Arab League Educational, Cultural, and Scientific Organization (ALECSO) in Tunis, and Forest Press, the publisher of the DEWEY Decimal Classification, in Albany, New York. Funding was also provided by the Council on Library Resources, for which Forest Press and ALECSO are most grateful.

Some years ago, Arab librarians realized the need for an authorized and comprehensive edition of the DDC in Arabic to replace the several unauthorized and partial translations that had appeared over the years. In 1980, the decision was made to translate and adapt into Arabic the 11th Abridged Edition of the DDC in English, and to include sections from the 19th unabridged

English-language edition in those areas which affect Islam, Arabic culture, philosophy, and history. In addition, when necessary, sections of the English-language editions have been revised and adapted to reflect specific cultural needs of the Arab world.

Fifteen Arab librarians, scholars and experts associated with various Arab universities, national and public libraries, library associations, schools of library and information science, and other cultural institutions have professionally and ably adapted the Arabic edition from the English-language editions. Moreover, a Technical Committee on Infrastructure of Documentation and Information Centers representing several Arab countries served in a consulting capacity to the Editor of the Arabic DDC, Mr. Mahmud El-Akhras, expert in the Documentation and Information Department at ALECSO. The translation was completed by Mr. Fouad Ismael Fahmi and Dr. Helmi Mohammad Foudeh. Revisions were made by the consultant to Forest Press, Dr. Mohammed M. Aman, and by Dr. Shawky Salem, consultant to the Arab publisher, the Kuwait Book Shop. These revisions were approved by the Editor of the Dewey Decimal Classification, Dr. John P. Comaromi.

The Arabic edition is in two volumes: Volume 1 includes the Publisher's Foreword, written by Mr. John A. Humphry, Executive Director of Forest Press; the Introduction, written by Dr. John P. Comaromi, Mr. Mahmud El-Akhras, and Dr. Muhyi el-Din Sabir, Director General of ALECSO; and the schedules and auxiliary tables in 640 pages. Volume 2 includes an analytical index of 322 pages, which consists of 14,000 subjects arranged alphabetically according to key words to facilitate accessibility to classification numbers in the schedules. The Arabic edition uses Arabic numbers instead of Indian numbers.

Users of the Arabic DEWEY Decimal Classification are invited to send their comments either to: Forest Press (85 Watervliet Avenue, Albany, New York 12206 U.S.A) or ALECSO (P.O. Box 1120 Alqubada Al-Asliya, Tunis, Tunesia) so that future editions can become more useful, accurate, and responsive to the information and library needs of the Arab World.

The cost of the Arabic editions (2 volumes) is approximately $ 60 (U.S. dollars), not including shipping and handling charges. Orders should be sent to: The Kuwait Book Shops (P.O. 2942 Al-Safit, Kuwait), or distributing bookstores in the Arab World.

Change in the Administration of Forest Press

Walter W.Curley, Chairman of the Forest Press Committee of the Lake Placid Education Foundation, is pleased to announce that Peter J.Paulson, Director of the New York State Library, has been appointed Executive Director of Forest Press, publisher of the Dewey Decimal Classification. Mr.Paulson will succeed John A.Humphry who is retiring in the spring of 1985. The appointment is effective May 1, 1985.

Mr.Paulson has been Director of the New York State Library since 1972, and a member of the library staff since 1952. He has served as President of the New York Library Association, Chairperson of the ALA Committee on Legislation and is currently a member of the Decimal Classification Editorial Policy Committee.

The Editors of International Classification want to thank Mr.John A.Humphry for his very good cooperation and wish him all the best for the time of his retirement!

UDC and the Future

At its recent meeting the Council of the International Federation for Documentation welcomed the Report on the Organisation and Management of the Universal Decimal Classification (UDC) which FID commissioned from the Information Systems Design and Implementation Consultancy firm, Alan Gilchrist and Partners. Council sees the report as a breakthrough in that it identifies the issues, both intellectual and administrative, which need to be resolved and the organizational systems which need to be implemented to ensure the continuing development of the UDC as the premier classification scheme for the information age.

FID commissioned this wide ranging survey of the management, administrative and organizational aspects of the UDC. The nature of the UDC, the articulation and simplification of revision procedures, computerization, finance, marketing, assessment of user needs, the introduction of cost centre management and staffing matters have all received attention. In all, the report contains some 36 recommendations, some purely domestic to the FID Secretariat and some of far reaching significance.

FID is now actively evaluating the report, assessing the impact the proposals would have on FID activities as a whole, the priorities which should be attached to the various recommendations and the feasibility of attracting new resources — human, financial and technological — which implementation will require. Council has immediately accepted the recommendation that an interim management planning team be set up and FID is seeking appropriate people able and willing to provide the necessary leadership, planning financial and marketing skills.

It is anticipated that there will be a need for research and development, for the production of teaching aids, for the consideration of terminology and linguistic aspects which may lead to greater collaboration with other FID Committees. If such interaction occurs, Council will see it as yet another benefit from this study.

Finally it perhaps needs to be emphasized that while FID is looking forward to a developing UDC, it is mindful of the needs of existing users. Indeed, the great strength of the UDC is that it can embrace both traditional library needs and future information systems and that it can bridge the language barriers and thus assist international communication. Channels of communication with members of the information community feature in the report and will receive priority attention. UDC News Release No.1, FID General Secretariat, Jan.85