

Knowledge Organization

International Journal

Devoted to Concept Theory, Classification, Indexing, and Knowledge Representation

Archiv

Vol. 30, issue 3-4, 2003

ERGON-VERLAG

ISSN 0943-7444 Knowl.Org.

KNOWLEDGE ORGANIZATION

KO

Official Quarterly Journal of the International Society for Knowledge Organization ISSN 0943 – 7444

International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

Contents

Introduction

Hjørland, Birger, and Jenna Hartel. Introduction
to a Special Issue on Domain Analysis..... 125

Articles

Ørom, Anders. Knowledge Organization in the
Domain of Art Studies – History, Transition and
Conceptual Changes 128

Abrahamsen, Knut Tore. Indexing of Musical
Genres: An Epistemological Perspective 144

Sundin, Olof. Towards an Understanding of
Symbolic Aspects of Professional Information:
An Analysis of the Nursing Knowledge Domain..... 170

Gazan, Rich. Metadata as a Realm of Translation:
Merging Knowledge Domains in the Design of an
Environmental Information System 182

Tennis, Joseph T. Two Axes of Domains for
Domain Analysis191

Zins, Chaim, and David Guttman. Domain
Analysis of Social Work: An Example of an
Integrated Methodological Approach.....196

Albrechtsen, Hanne, and Annelise Mark Pejtersen.
Cognitive Work Analysis and Work Centered Design
of Classification Schemes213

Hartel, Jenna. The Serious Leisure Frontier in Library
and Information Science: Hobby Domains.....228

Afterword

Hjørland, Birger, and Jenna Hartel. Ontological,
Epistemological and Sociological Dimensions of
Domains239

Contents page

Ørom, Anders. (2003). **Knowledge Organization in the Domain of Art Studies – History, Transition and Conceptual Changes.** *Knowledge Organization*, 30(3/4). 128-143. 38 refs.

ABSTRACT: The article is an analysis of some aspects of knowledge organization in the domain of the arts, especially visual art. The analysis indicates that different socially and historically embedded discourses on art, including pre-paradigmatic studies and scholarly paradigms, pervade knowledge organization in the art institution at three levels, respectively: 1. Art exhibitions, 2. Primary and tertiary document types (printed, audio-visual, and multimedia documents), and 3. Classification systems, bibliographies, and thesauri. The article presents three paradigms in art scholarship (iconographic, stylistic and materialistic) and analyzes in which way, and to what extent, these paradigms are integrated in the taxonomies of the LCC, DDC, UDC, and Soviet BBK classification systems. The paper also addresses the relationship among paradigms, principles for exhibiting works of art, ways of conceptualising and organizing the content in documents on art history, and LIS knowledge organization systems. It is concluded that the UDC, in particular, is well suited for representation of knowledge produced in the contexts of pre-paradigmatic, iconological, and stylistic studies. But documents by the so-called “New” art scholars drawing on interdisciplinary studies and representing “new” approaches and paradigms break with the taxonomies on art in the “classical” hierarchical, universal classification systems. A step towards a solution of problems caused by this break is a polyhierarchical thesaurus such as the Art & Architecture Thesaurus.

Abrahamsen, Knut Tore. (2003). **Indexing of Musical Genres. An Epistemological Perspective.** *Knowledge Organization*, 30(3/4). 144-169. 58 refs.

ABSTRACT: This article sets out to investigate genre as a basic criterion in subject indexing of music in libraries and bibliographical databases. The concept of genre is examined in relation to epistemology and to different values and views in both musicology and libraries. The point of departure is to regard music as a domain of actors, institutions and processes. A comprehensive definition of this domain is suggested, which includes several subdomains and dis-

courses. The classical music subdomain and the popular music subdomain are introduced and related to libraries. The article further investigates the concept of “paradigm” in relation to musicology. It demonstrates how two different paradigms influence the way music is defined, described, classified and indexed and how they are part of a historical context. The fourth part of the article focuses on the concept of genre and the analysis of music and the relation between analytical methods and values/paradigms. In addition, this part focuses on the actors that are responsible for the verbalization of genres in music. The fifth part examines indexing of musical genres with a view to their function as subject access points in databases. The unsatisfactory state of today’s practice as well as the need of a better theoretical foundation of the concept of genre is documented. The unsatisfactory differentiation in the organising of popular music is exemplified by Danish and Norwegian libraries, including the DK5 system and the *Indeksering af musik* guidelines. Finally, arguments are put forward for developing an anthropological paradigm in relation to organizing music in libraries.

Sundin, Olof. (2003). **Towards an Understanding of Symbolic Aspects of Professional Information: An Analysis of the Nursing Knowledge Domain.** *Knowledge Organization*, 30(3/4). 170-181. 50 refs.

ABSTRACT: The aim of this article is to contribute to the development of the domain analytical approach by using tools from the theory of professions. This is accomplished by showing how the symbolic values of professional information can create, sustain, and alter professional interests, power relations, and occupational identities. By taking this approach, the importance of considering the issues of power and knowledge use as a social practice is highlighted – two themes that only to a certain extent have been attended to within domain analysis. The aim is accomplished through a study of nursing literature that reveals how professional information is regarded within the Swedish nursing profession. These are analyzed in relation to changes and development within the profession’s applied knowledge domain over time. It is argued that the knowledge domain of nursing has shifted from a primarily practical orientation towards an increasingly theoretical orientation. Its previous subordination to medical expertise has been

KNOWLEDGE ORGANIZATION

KO

Official Quarterly Journal of the International Society for Knowledge Organization

ISSN 0943 – 7444

International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

replaced by an aspiration towards professional autonomy. This shift is seen as a result of a professional strategy where the specialist literature, libraries and databases of the occupational community play an important symbolic role.

Gazan, Rich. (2003). **Metadata as a Realm of Translation: Merging Knowledge Domains in the Design of an Environmental Information System.** *Knowledge Organization*, 30(3/4). 182-190. 26 refs.

ABSTRACT: Bringing together document collections in merged information resources is becoming more common, but presents the problem of integrating content and metadata that have been created in different knowledge domains, using different classification schemes. This paper describes how a multidisciplinary team attempted to integrate metadata structures from several different collections in the development of an environmental information system. The results of this qualitative study suggest that though designers and users from diverse backgrounds could conceptualize and articulate the potential new knowledge the merged system might reveal, the perceived informational value of different access points varied with disciplinary membership, and the compromises forced by this merged collection created barriers and missed opportunities for the creation of new knowledge. However, people with a variety of backgrounds were able to contribute to negotiations about metadata decisions, suggesting that this may be a key realm of translation between diverse individuals in future collaborative environments. Consequences for domain-specific knowledge organization, and for a translation and integration role for those in the field of information science, are discussed.

Tennis, Joseph T. (2003). **Two Axes of Domains for Domain Analysis.** *Knowledge Organization*, 30(3/4). 191-195. 18 refs.

ABSTRACT: This paper adds two analytical devices to domain analysis, claiming that for domain analysis to work cumulatively transferable definitions of domains must be written. To establish this definition the author provides two axes to consider: Areas of Modulation and Degrees of Specialization. These axes may serve as analytical devices for the domain analyst to delineate what is being studied and what is not being studied in a domain analysis.

Zins, Chaim and David Guttman. (2003). **Domain Analysis of Social Work: An Example of an Integrated Methodological Approach.** *Knowledge Organization*, 30(3/4). 196-212. 41 refs.

ABSTRACT: This study exemplifies an integrated methodological approach to domain analysis. The study analyzes the field of social work. It is aimed at developing a systematic, comprehensive, and scientifically valid knowledge map, and its applicability as an efficient tool to adequately represent knowledge in the field. The map is composed of seven parts: foundation (meta-knowledge), social worker, environment, organization, area of practice, method, and client. The study followed a qualitative four-phase research methodology. The first phase was a phenomenological analysis of the basic characteristics of social work as a social service. The analysis resulted in a seven-facet subject classification. In the second phase the conceptual skeleton was elaborated, and adjusted to the field of social work by a grounded-theory methodology. The data used for grounding the model were 14 social work resources. The model was tested in the third phase by classifying 200 terms randomly selected from the *Dictionary of Social Work* (Barker, 1999). Finally, in the fourth phase we classified 197 papers published in two leading journals, *Social Work* and *Social Service Review*, in three successive years, 1997, 1998, and 1999. This exemplary study has implications for domain analysis. The paper discusses these implications.

Albrechtsen, Hanne and Annelise Mark Pejtersen. (2003). **Cognitive Work Analysis and Work Centered Design of Classification Schemes.** *Knowledge Organization*, 30(3/4). 213-227. 52 refs.

ABSTRACT: Work centered design of classification schemes is an emerging area of research which poses particular challenges to domain analysis and scheme construction. A key challenge in work centered design of classification schemes is the evolving semantics of work. This article introduces a work centered approach to the design of classification schemes, based on the framework of cognitive work analysis. We launch collaborative task situations as a new unit of analysis for capturing evolving semantic structures in work domains. An example case from a cognitive work analysis of three national film research archives illustrates the application of the framework for identifying actors' needs for a classification scheme to support collabo-

rative knowledge integration. It is concluded that a main contribution of the new approach is support for empirical analysis and overall design of classification schemes that can serve as material interfaces for actors' negotiations and integration of knowledge perspectives during collaborative work.

tionships are, for example, forms of philosophical realism and social constructivism. In this paper these concepts and theories are introduced, and their implications for knowledge organization outlined, with illustrations drawn from this special issue of *Knowledge Organization*.

Hartel, Jenna. (2003). **The Serious Leisure Frontier in Library and Information Science: Hobby Domains.** *Knowledge Organization*, 30(3/4). 228-238. 45 refs.

ABSTRACT: The library and information studies (LIS) field conducts a minority of research into leisure realms while favoring scholarly and professional contexts as subjects. Such is the case despite compelling evidence of the desirability and profundity of leisure in human life. This article introduces one popular form of leisure, hobbies, as a potentially provocative topic for LIS scholarship. To facilitate research on information within hobbies, the article discusses two conceptual devices. Serious leisure (Stebbins, 1982) describes essential characteristics of leisure, establishes that some types are information-rich, and provides a framework to study leisure systematically. The collectivist theory of domain analysis (Hjørland and Albrechtsen, 1995) orients research to the hobby milieu and its objective information forms, recasting them as "hobby domains." As an example of the application of both devices, a case study is reviewed of the information resources in the hobby of cooking. The article closes with a call to action and suggested research program for the study of hobbies in LIS.

Hjørland, Birger, and Jenna Hartel. (2003). **Afterword: Ontological, Epistemological and Sociological Dimensions of Domains.** *Knowledge Organization*, 30(3/4). 239-245. 30 refs.

ABSTRACT: Domains are basically constituted of three kinds of theories and concepts: (1) ontological theories and concepts about the objects of human activity; (2) epistemological theories and concepts about knowledge and the ways to obtain knowledge, implying methodological principles about the ways objects are investigated; and (3) sociological concepts about the groups of people concerned with the objects. There are complicated relations between these elements. Basic theories about those rela-

This contents page may be reproduced without charge.

KNOWLEDGE ORGANIZATION

KO

Official Quarterly Journal of the International Society for Knowledge Organization

ISSN 0943 – 7444

International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

KNOWLEDGE ORGANIZATION

This journal is the organ of the INTERNATIONAL SOCIETY FOR KNOWLEDGE ORGANIZATION (General Secretariat: Dr. Gerhard RIESTHUIS (Literature Editor), Liendenhof 60, NL-1108 HB Amsterdam, Netherlands).

Editors

Dr. Hope A. OLSON (Editor-in-Chief), School of Information Studies, University of Wisconsin Milwaukee.
Email: olson@sois.uwm.edu

Dr. Michèle HUDON (Book Review Editor), School of Library and Information Science, University of Montréal, Québec, Canada

Prof. Dr. Jens-Erik MAI (Reports Editor), Information School, University of Washington, Mary Gates Hall, Box 352840, Seattle, WA 98195-2840, USA. Email: jemai@u.washington.edu

Dr. Gerhard RIESTHUIS (Literature Editor), Liendenhof 60, NL-1108 HB Amsterdam, Netherlands

Dr. Nancy WILLIAMSON (Classification Research News Editor), Faculty of Information Studies, University of Toronto, 140 St. George Street, Toronto, Ontario M5S 3G6 Canada

Hanne ALBRECHTSEN (Communications Editor), Risø National Laboratory, Roskilde, Denmark.
E-mail: hanne.albrechtsen@risoe.dk

Joanne MILLEMANN (Editorial Assistant), School of Information Studies, University of Wisconsin Milwaukee.

Consulting Editors

Prof. Dr. Ulf G. BARANOW, Rua Ubaldino do Amaral 580, Apto. 51, BR-80060-190, Curitiba - PR, Brazil

Prof. Clare BEGHTOL, Faculty of Information Studies, University of Toronto, 140 St. George Street, Toronto, Ontario M5S 3G6, Canada

Dr. Gerhard BUDIN, Dept. of Philosophy of Science, University of Vienna, Sensengasse 8, A-1090 Wien, Austria

Mr. Christian GALINSKI, Director: Infoterm, Simmeringer Hauptstr. 24, A-1110 Wien, Austria

Dr. Francisco Javier GARCIA MARCO, Area de Biblioteconomía y Documentación, Facultad de Filosofía y Letras, Universidad de Zaragoza, E-50.009 Zaragoza, Spain

Dr. M. A. GOPINATH, DRTC, Indian Statistical Inst., 8th Mile, Mysore Road, R.V. College P.O., Bangalore-560059, India

Dr. Rebecca GREEN, College of Information Studies, Hornbake Bldg. (So. Wing), Room 4105, University of Maryland, College Park, MD 20742-4345

Dr. Norbert HENRICH, Im Luftfeld 80, D-40489 Düsseldorf, Germany

Dr. Roland HJERPPE, Dept. of Computer and Information Science, Linköping University, S-58183 Linköping, Sweden

Dr. Barbara H. KWASNIK, School of Information Studies, Syracuse University, 4-206 Ctr. for Science & Tech., Syracuse, NY 13244-4100

Dr. Jacques MANIEZ, 61 Rue de la Corve, F-21000 Dijon, France

Dr. Ia C. MCILWAINE, Director: School of Library, Archive & Information Studies, University College London, Gower Street, London, WC1E 6BT, U.K.

Prof. Dr. Francis MIKSA, Graduate School of Library and Information Science, University of Texas at Austin, SZB 564, Austin, TX 78712-1276

Ms. Joan S. MITCHELL, Editor: Dewey Decimal Classification, Library of Congress, Washington, D.C. 20540-4330

Dr. Widad MUSTAFA el HADI, URF IDIST, Université Charles de Gaulle Lille 3, BP 149, 59653 Villeneuve D'Ascq, France

Dr. Giliola NEGRINI, Consiglio Nazionale della Ricerca, Ist. di Studi sulla Ricerca e Doc. Scientifica, Via Cesare De Lollis, 12, I-00185 Rome, Italy

Ms. Annelise Mark PEJTERSEN, Systems Analysis Dept., Risø National Laboratory, P.O. Box 49, DK-4000 Roskilde, Denmark

Dr. Stephen A. POLLITT, CeDAR Centre for Database Access Research, School of Computing & Mathematics, The University of Huddersfield, Queensgate, Huddersfield HD1 3DH, U.K.

Dr. M. P. SATIJA, Guru Nanak Dev University, School of Library and Information Science, Amritsar-143 005, India

Dr. Jos SCHREINEMAKERS, Erasmus University, Rotterdam, PO Box 1738, 3000 DR Rotterdam, Netherlands

Dr. Otto SECHSER, In der Ey 37, CH-8047 Zürich, Switzerland

Dr. Winfried SCHMITZ-ESSER, Rothenbaumchaussee 3, D – 20148 Hamburg, Germany

Dr. Dagobert SOERGEL, College of Information Studies, Hornbake Bldg. (So. Wing), Room 4105, University of Maryland, College Park, MD 20742

Dr. Eduard R. SUKIASYAN, Chief Editor of the Library-Bibliographical Classification, Russian State Library, 3 Vozdvizhenka Str., Moscow, 101000 Russia

Dr. Elaine SVENONIUS, Graduate School of Education and Information Studies, UCLA, 5380 ½ Village Green, Los Angeles, CA 90016

Dr. M.S. van der WALT, Department of Information Science, University of Stellenbosch, Private Bag X1, Stellenbosch 7602, South Africa

Prof. Dr. Harald ZIMMERMANN, Softex, Schmollerstrasse 31, D-66111 Saarbrücken, Germany

KO KNOWLEDGE ORGANIZATION

Official Quarterly Journal of the International Society for Knowledge Organization ISSN 0943 – 7444

International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

Publisher

ERGON-Verlag, Grombühlstr. 7, GER-97080 Würzburg
Phone: +49 (931) 280084; FAX +49 (931) 282872
E-mail: service@ergon-verlag.de; http://www.ergon-verlag.de

Editor-in-chief (Editorial office)

Dr. Hope A. OLSON (Editor-in-Chief), Joanne MILLEMAN (Editorial Assistant), School of Information Studies, University of Wisconsin Milwaukee, PO Box 413, Milwaukee, Wisconsin 53201, USA
Fax: +1 (414) 229-4848; Email: olson@sois.uwm.edu

Instructions for Authors

Manuscripts should be submitted electronically (in Word, Wordperfect, or RTF format) in English only to the editor-in-chief and should be accompanied by an indicative abstract of 100 or 200 words. Submissions via email are preferred; submissions will also be accepted via post provided that four copies are submitted or that submissions are accompanied by a 3.5" diskette encoded in Word, Wordperfect, or RTF format.

A separate title page should include the article title and the author's name, postal address, and E-mail address, if available. Only the title of the article should appear on the first page of the text. To protect anonymity, the author's name *should not* appear on the manuscript, and all references in the body of the text and in footnotes that might identify the author to the reviewer should be removed and cited on a separate page. Articles that do not conform to these specifications will be returned to authors.

Criteria for acceptance will be appropriateness to the field of the journal (see Scope and Aims), taking into account the merit of the contents and presentation. The manuscript should be concise and should conform as much as possible to professional standards of English usage and grammar. Manuscripts are received with the understanding that they have not been previously published, are not being submitted for publication elsewhere, and that if the work received official sponsorship, it has been duly released for publication. Submissions are refereed, and authors will usually be notified within 6 to 10 weeks. Unless specifically requested, manuscripts and illustrations will not be returned.

The text should be structured by numbered subheadings. It should contain an *Introduction*, giving an overview and stating the purpose, a *main body*, describing in sufficient detail the materials or methods used and the results or systems developed, and a *conclusion or summary*.

Reference citations within the text should have the following form: (author, year). For example, (Jones, 1990). Specific page numbers are optional, but preferred when applicable, e.g. (Jones, 1990, p.100). A citation with two authors would read (Jones & Smith, 1990); three or more authors would be: (Jones et al., 1990). When the author is mentioned in the text, only the date

and optional page number should appear in parenthesis – e.g. According to Jones (1990), ...

References should be listed alphabetically by author at the end of the article. Journal names should not be abbreviated. Multiple citations by the same author should be listed chronologically and should each spell out the author's name. Articles appearing in the same year should have the following format: Jones, T. (1990a) ... , Jones, T. (1990b) ...

Examples:

Dahlberg, I. (1978). A referent-oriented, analytical concept theory for INTERCONCEPT. *International Classification*, 5(3). 142-151.

Graesser, A., Person, N. & Huber, J. (1992). Mechanisms that generate questions. In T. W. Lauer, E. Peacock, & A. C. Graesser (Eds.). *Questions and Information Systems*. Hillsdale, NJ: Lawrence Erlbaum Associates. 167-187.

Sager, J.C. (1990). *A Practical Course in Terminology Processing*. Amsterdam: John Benjamins.

Sukiasyan, E. R. (1996). Change as a problem of classification system development. In R. Green (Ed.). *Knowledge Organization and Change: Proceedings of the 4th International ISKO Conference*. Frankfurt: Indeks Verlag. 119-122.

Footnotes should be kept to a minimum. They should be indicated in the text with numbered superscripts, and the corresponding notes should be collected at the end of the article, before the *references*, under the heading *Notes*.

Illustrations should be kept to a necessary minimum and should be submitted electronically when possible. Photographs (including color and half-tone) should be scanned with a minimum resolution of 600 dpi and saved as tif files (Tagged Image File Format preferred). Tables and figures should be embedded within the document or, alternatively, saved as separate files with clear instructions indicating their placement in the text. Tables should contain a number and title at the top, and all columns and rows should have headings. All illustrations should be cited in the text as Figure 1, Figure 2, etc. or Table 1, Table 2, etc. Illustrations submitted in hard copy only should be marked to indicate their placement in the text.

Upon acceptance of a manuscript for publication, authors must provide a wallet-size photo and a one-paragraph biographical sketch. The photograph should be scanned with a minimum resolution of 600 dpi and saved as a tif file (Tagged Image File Format).

Advertising

Responsible for advertising: Dr. H.-J. Dietrich, ERGON-Verlag, Grombühlstr. 7, 97080 Würzburg (Germany).

© 2003 by ERGON-Verlag Dr. H.-J. Dietrich.

All Rights reserved.

Printed in the Federal Republic of Germany
by Offizin Hildburghausen GmbH Druckhaus.

KO is published quarterly by ERGON-Verlag.
The price is € 98,00/ann. including airmail delivery.

KNOWLEDGE ORGANIZATION

KO

Official Quarterly Journal of the International Society for Knowledge Organization

ISSN 0943 – 7444

International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

Scope

The more scientific data is generated in the impetuous present times, the more ordering energy needs to be expended to control these data in a retrievable fashion. With the abundance of knowledge now available the questions of new solutions to the ordering problem and thus of improved classification systems, methods and procedures have acquired unforeseen significance. For many years now they have been the focus of interest of information scientists the world over.

Until recently, the special literature relevant to classification was published in piecemeal fashion, scattered over the numerous technical journals serving the experts of the various fields such as

philosophy and science of science
 science policy and science organization
 mathematics, statistics and computer science
 library and information science
 archivistics and museology
 journalism and communication science
 industrial products and commodity science
 terminology, lexicography and linguistics

Beginning in 1974, KNOWLEDGE ORGANIZATION (formerly INTERNATIONAL CLASSIFICATION) has been serving as a common platform for the discussion of both theoretical background questions and practical application problems in many areas of concern. In each issue experts from many countries comment on questions of an adequate structuring and construction of ordering systems and on the problems of their use in opening the information contents of new literature, of data collections and survey, of tabular works and of other objects of scientific interest. Their contributions have been concerned with

- (1) clarifying the theoretical foundations (general ordering theory/science, theoretical bases of classification, data analysis and reduction)
- (2) describing practical operations connected with indexing/classification, as well as applications of classification systems and thesauri, manual and machine indexing
- (3) tracing the history of classification knowledge and methodology
- (4) discussing questions of education and training in classification
- (5) concerning themselves with the problems of terminology in general and with respect to special fields.

Aims

Thus, KNOWLEDGE ORGANIZATION is meant to be a programme for the improvement of classification methods and processes, a forum for discussion for all those interested in the organization of knowledge on a universal or a subject-field scale, using concept-analytical and/or concept-synthetical approaches as well as numerical procedures and comprising also the intellectual and automatic compilation and use of classification systems and thesauri in all fields of knowledge, with special attention being given to the problems of terminology.

KNOWLEDGE ORGANIZATION publishes original articles, reports on conferences and similar communications, the Newsletters of the International Society for Knowledge Organization (ISKO News) and the Committee on Classification Research of the International Federation for Information and Documentation (FID/CR News) as well as book reviews, letters to the editor, and an extensive annotated bibliography of recent classification and indexing literature, covering some 500 items in each issue.

KNOWLEDGE ORGANIZATION should therefore be available at every university and research library of every country, at every information center, at colleges and schools of library and information science, in the hands of everybody interested in the fields mentioned above and thus also at every office for updating information on any topic related to the problems of order in our information-flooded times.

KNOWLEDGE ORGANIZATION was founded in 1973 by an international group of scholars with a consulting board of editors representing the world's regions, the special classification fields, and the subject areas involved. From 1974-1980 it was published by K.G. Saur Verlag, München. Back issues of 1978-1992 are available from ERGON-Verlag, too.

As of 1989, KNOWLEDGE ORGANIZATION has become the official organ of the INTERNATIONAL SOCIETY FOR KNOWLEDGE ORGANIZATION (ISKO) and is included for every ISKO-member, personal or institutional in the membership fee (US \$ 55/US \$ 110).

Rates: From 2001 on for 4 issues/ann. (including indexes) € 98,- (forwarding costs included). Membership rates see above.

ERGON-Verlag, Grombühlstr. 7, GER-97080 Würzburg;
 Phone: +49 (931) 280084; FAX +49 (931) 282872; E-mail: service@ergon-verlag.de; http://www.ergon-verlag.de

The contents of this journal are indexed and abstracted in *Referativnyi Zhurnal Informatika* and in the following online databases: *Information Science Abstracts*, *INSPEC*, *Library and Information Science Abstracts (LISA)*, *Library Literature*, *PASCAL*, *Sociological Abstracts*, and *Web Science & Social Sciences Citation Index*.