

## Index to Volume 46 (2019)

No. 1, pp. 1-74; No. 2, pp. 75-155; No. 3, pp. 159-240; No. 4, pp. 243-333;  
No. 5, pp. 335-400; No. 6, pp. 401-489; No. 7, pp. 491-569; No. 8, pp. 571-669.

DOI:10.5771/0943-7444-2020-1-96

### ALPHABETICAL INDEX

#### 1. Articles

- Bak, Greg, Danielle Allard, and Shawna Ferris. Knowledge Organization as Knowledge Creation: Surfacing Community Participation in Archival Arrangement and Description ..... 502
- Barité, Mario. Towards a General Conception of Warrants: First Notes ..... 647
- Bragato Barros, Thiago Henrique and Renato Tarciso Barbosa de Sousa. Archival Science and Knowledge Organization: Mapping Methodological Relationships ..... 493
- Broughton, Vanda. The Respective Roles of Intellectual Creativity and Automation in Representing Diversity: Human and Machine Generated Bias ..... 596
- Chen, Lielei and Hui Fang. An Automatic Method for Extracting Innovative Ideas Based on the Scopus® Database ..... 171
- Chen, Shu-Jiun. Semantic Enrichment of Linked Archival Materials ..... 530
- Chen, Shu-Jiun. Semantic Enrichment of Linked Personal Authority Data: A Case Study of Elites in Late Imperial China ..... 607
- Clarke, Stella G. Dextre. The Information Retrieval Thesaurus ..... 439
- Clavier, Viviane. Knowledge Organization, Data and Algorithms: The New Era of Visual Representations ..... 615
- Coen, Gerard and Richard P. Smiraglia. Toward Better Interoperability of the NARCIS Classification ..... 345
- de Mattos Souza, Rosale. The Representation of Archival Information in Controlled Vocabularies: The Context of the Archival Institutions in Rio de Janeiro ..... 548
- Dick, Steven J. Astronomy's Three Kingdom System: A Comprehensive Classification System of Celestial Objects ..... 460
- Finnemann, Niels Ole. Web Archive ..... 47
- Freeman, Graham and Robert J. Glushko. Organization, Not Inspiration: A Historical Perspective of Musical Information Architecture ..... 161
- Frické, Martin. The Knowledge Pyramid: the DIKW Hierarchy ..... 33
- Gomes, Pablo and Maria Guiomar da Cunha Frota. Knowledge Organization from a Social Perspective: Thesauri and the Commitment to Cultural Diversity ..... 639
- Hauser, Elliott and Joseph T. Tennis. Episemantics: Aboutness as Aroundness ..... 590
- Johansson, Sandra and Koraljka Golub. LibraryThing for Libraries: How Tag Moderation and Size Limitations Affect Tag Clouds ..... 245
- Koraljka Golub. Automatic Subject Indexing of Text ..... 104
- Korwin, Wendy and Haakon Lund. Alphabetization ..... 209
- Kwaśnik, Barbara H. Changing Perspectives on Classification as a Knowledge-Representation Process ..... 656
- Legendere, Ariadne. The Development of the Canadian Research and Development Classification ..... 371
- Lin, Feng-Tyan. Drawing a Knowledge Map of Smart City Knowledge in Academia ..... 419
- Lu, Wei, Xin Li, Zhifeng Liu and Qikai Cheng. How do Author-Selected Keywords Function Semantically in Scientific Manuscripts? ..... 403
- Moeller, Robin A. and Kim E. Becnel. "Why on Earth Would We Not Genrefy the Books?": A Study of Reader-Interest Classification in School Libraries ..... 199
- Naskar, Debashis and Subhashis Das. HNS Ontology Using Faceted Approach ..... 187
- Nikiforova, Aleksandra A. Soil Classification ..... 467
- Quinlan, Emma and Pauline Rafferty. Astronomy Classification: Towards a Faceted Classification Scheme ..... 260
- Rafferty, Pauline. Disrupting the Metanarrative: A Little History of Image Indexing and Retrieval ..... 4
- Saarti, Jarmo. Fictional Literature, Classification and Indexing ..... 320

Sandy, Heather Moulaison and Andrew Dillon. Mapping the KO Community.....	578
Schöpfel, Joachim, Dominic Farace, Hélène Prost and Antonella Zane. Data Papers as a New Form of Knowledge Organization in the Field of Research Data .....	622
Smiraglia, Richard P. Trajectories for Research: Fathoming the Promise of the NARCIS Classification.....	337
Smiraglia, Richard P. Work .....	308
Stuart, Emma. Flickr: Organizing and Tagging Images Online .....	223
Tognoli, Natalia and José Augusto Chaves Guimarães. Provenance as a Knowledge Organization Principle .....	558
Tognoli, Natália Bolfarini, Ana Célia Rodrigues, and José Augusto Chaves Guimarães Archival Knowledge: Conceptual Frameworks for Recent Terminology in the KO Domain .....	522
Vancouwenbergh, Sadia and Hanne Poelmans. The Flemish Research Discipline Classification Standard: A Practical Approach .....	354
Wang, Shenghui and Rob Koopman. Embed First, Then Predict.....	364
White, Howard D. Patrick Wilson.....	279
Xu, Liwei and Jiangnan Qiu. Unsupervised Multi-class Sentiment Classification Approach.....	15
Yang, Li and Yejun Wu. Creating a Taxonomy of Earthquake Disaster Response and Recovery for Online Earthquake Information Management .....	77
Zeng, Marcia Lei. Interoperability.....	122
Zhang, Chengzhi, Hua Zhao, Xuehua Chi and Shuitian Ma. Information Organization Patterns from Online Users in a Social Network.....	90

## 2. Brief Communications

Solc, Roman. Brief Communication: Some Critical Notes on the Czech System of Evaluation of Research .....	387
---	-----

Thorat, Rahul and Reinout van Brakel. Brief Communication: The Need for a National-Level Working Group for Higher Education Research Data in The Netherlands .....	380
---	-----

## 3. Features, Editorials, Etc.

Annual Progress in Thesaurus Research? .....	238
--	-----

Broughton, Vanda. Emeritus Professor Ia McIlwaine: An Appreciation .....	573
---	-----

Peer Review in 2018.....	3
--------------------------	---

Sixth Annual "Best Article in KO Award" .....	668
---	-----

Xiao, Guohua. Explainable AI: Linking Human and Machine .....	398
--	-----

Xiao, Guohua. The Brain is a Knowledge Graph .....	71
--	----

## 4. Reviews

Semantic Perception: How the Illusion of a Common Language Arises and Persists, Jody Azzouni. New York: Oxford University Press, 2013. ISBN 9780199967407. 2015. ISBN 9780190275549. Ontology Without Borders, Jody Azzouni. New York, NY: Oxford University Press. ISBN 9780190622558. Reviewed by Matthew Kelly .....	147
---	-----

5. Books Recently Published.....	72, 155, 240, 333, 400, 489, 569, 669
----------------------------------	--

## 6. Other

Erratum.....	154
--------------	-----

Index to Volume 45 .....	73
--------------------------	----

# KNOWLEDGE ORGANIZATION

KO

Official Journal of the International Society for Knowledge Organization

ISSN 0943 – 7444

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

## Publisher

Ergon – ein Verlag in der Nomos Verlagsgesellschaft mbH  
Waldseestraße 3-5  
D-76530 Baden-Baden  
Tel. +49 (0)7221-21 04-667  
Fax +49 (0)7221-21 04-27  
Sparkasse Baden-Baden Gaggenau  
IBAN: DE05 6625 0030 0005 0022 66  
BIC: SOLADES1BAD

## KNOWLEDGE ORGANIZATION

Journal of the International Society for Knowledge Organization

Richard P. Smiraglia, Editor-in-Chief

KOeditor-in-chief@knoworg.org

## Instructions for Authors

Manuscripts should be submitted electronically (in Microsoft® Word format) in English only via ScholarOne at <https://mc04.manuscriptcentral.com/jisko>. Manuscripts that do not adhere to these guidelines will be returned to the authors for resubmission in proper form.

Manuscripts should be accompanied by an indicative abstract of approximately 250 words. Manuscripts of articles should fall within the range 6,000-10,000 words. Longer manuscripts will be considered on consultation with the Editor-in-chief.

A separate title page should include the article title and the author's name, postal address, and E-mail address. Only the title of the article should appear on the first page of the text. Contact information must be present for all authors of a manuscript.

To protect anonymity, the author's name should not appear on the manuscript.

Criteria for acceptance will be appropriateness to the field of knowledge organization (see "Scope" at <https://www.isko.org/ko.html>), taking into account the merit of the contents and presentation. It is expected that all successful manuscripts will be well-situated in the domain of knowledge organization, and will cite all relevant literature from within the domain. Authors are encouraged to use the KO literature database at <http://www.isko.org/lit.html>.

The manuscript should be concise and should conform to professional standards of English usage and grammar. Authors whose native language is not English are encouraged to make use of professional academic English-language proofreading services. We recommend Vulpine Academic Services ([vulpineacademic@gmail.com](mailto:vulpineacademic@gmail.com)).

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 8 weeks.

## Manuscript Formatting

Under no circumstances should the author attempt to mimic the presentation of text as it appears in our published journal. Instead, please follow these instructions:

In Microsoft® Word please set the language preference ("Tools" "Language") to "English (US)" or "English (UK)".

The entire manuscript should be double-spaced, including notes and references.

The text should be structured with decimally-numbered subheadings (1.0, 1.1, 2.0, 2.1, 2.1.1, etc.). 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.

Author-generated keywords are not permitted.

Footnotes are not allowed but endnotes may be used. Do not use automatic footnote formatting. Instead, insert a superscript numeral (Format, Font, Superscript) and create the text of the note manually in a separate list at the end of the manuscript, before the reference list.

Paragraphs should include a topic sentence, a developed narrative and a conclusion; a typical paragraph has several sentences. Paragraphs with tweet-like characteristics (one or two sentences) are inappropriate.

Italics are permitted only for phrases from languages other than English, and for the titles of published works.

Bold type is not permitted.

Em-dashes should not be used as substitutes for commas. Dashes must be inserted manually (Insert, Advanced Symbol, Em-dash) with no spaces on either side.

Illustrations should be embedded within the document. Photographs (including color and half-tone) should be scanned with a minimum resolution of 600 dpi and saved as .jpg files. Tables should contain a number and caption at the bottom, 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.

Examples of KOS (classification, taxonomy, ontology, thesaurus, etc.) arrays should be configured as figures and set into the document as .jpgs; they should not be entered as editable text.

Remove all active hyperlinks, including those from reference formatting software (if hovering over the text with a mouse produces a gray highlight, the text is hyperlinked; remove the link "Insert," "Hyperlink," "Remove link").

Upon acceptance of a manuscript for publication, authors must provide a digital photo and a one-paragraph biographical sketch (fewer than 100 words). The photograph should be scanned with a minimum resolution of 600 dpi and saved as a .jpg file.

## References

Reference citations within the text should have the form: (Author year). For example, (Jones 1990). Specific page numbers are required for quoted material, e.g. (Jones 1990, 100). A citation with two authors would read (Jones and 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 parentheses: "According to Jones (1990), ..." or "Smith wrote (2010, 146): ..." A subsequent page reference to the same cited work (e.g., to Smith 2010) should have the form "(229)." There is never a comma before the date.

In-text citations should not be routinely placed at the end of a sentence or after a quotation, but an attempt should be made to work them into the narrative. For example:

Jones (2010, 114) reported statistically significant results.

Many authors report similar data; according to Matthews (2014, 94): "all seven studies report means within  $\pm 5\%$ ."

In-text citations should precede block quotations, and never are placed at the end of a block-quotation.

References should be listed alphabetically by author at the end of the article. Reference lists should not contain references to works not cited in the text. Websites mentioned in passing in the text should be identified parenthetically with their URLs but not with references unless a specific page of a specific website is being quoted.

Author names should be given as found in the sources (not abbreviated, but also not fuller than what is given in the source). Journal titles should not be abbreviated. Multiple citations to works by the same author should be listed chronologically and should each include the author's name. Articles appearing in the same year should have the following format: "Jones 2005a, Jones 2005b, etc."

Proceedings must be identified fully by volume title (which often differs from the name of the conference), editor(s), series (if applicable), and details of publication (place and publisher name). Papers in proceedings must be identified by their page numbers. Papers from online proceedings that lack publication details should include a DOI or URL.

Journal issue numbers are given only when a journal volume is not through-paginated. References for published electronic resources should be accompanied by either a URL or DOI but not in lieu of actual publication data; access dates are not allowed.

Unpublished electronic resources may use an access date in lieu of a date of publication. In cases of doubt, authors are encouraged to consult *The Chicago Manual of Style* 17<sup>th</sup> ed. (or online), author-date reference system (chapter 15).

## Examples:

Dahlberg, Ingetraut. 1978. "A Referent-Oriented, Analytical Concept Theory for INTER-CONCEPT." *International Classification* 5: 142-51.

Howarth, Lynne C. 2003. "Designing a Common Namespace for Searching Metadata-Enabled Knowledge Repositories: An International Perspective." *Cataloging & Classification Quarterly* 37, nos. 1/2: 173-85.

Pogorelec, Andrej and Alenka Saupel. 2006. "The Alternative Model of Classification of Belles-Lettres in Libraries." *Knowledge Organization* 33: 204-14.

Schallier, Wouter. 2004. "On the Razor's Edge: Between Local and Overall Needs in Knowledge Organization." In *Knowledge Organization and the Global Information Society: Proceedings of the Eighth International ISKO Conference 13-16 July 2004 London, UK*, edited by Ia C. McIlwaine. Advances in knowledge organization 9. Würzburg: Ergon Verlag, 269-74.

Smiraglia, Richard P. 2001. *The Nature of 'a Work': Implications for the Organization of Knowledge*. Lanham, Md.: Scarecrow.

Smiraglia, Richard P. 2005. "Instantiation: Toward a Theory." In *Data, Information, and Knowledge in a Networked World: Annual Conference of the Canadian Association for Information Science ... London, Ontario, June 2-4 2005*, ed. Liwen Vaughan. <http://www.caais-caisi.ca/2005proceedings.htm>.

© Ergon – ein Verlag in der Nomos Verlagsgesellschaft,  
Baden-Baden 2020. All Rights reserved.

KO is published by Ergon.

## Annual subscription 2020:

- Print + online (8 issues/ann.; unlimited access for your Campus via Nomos eLibrary) € 359,00/ann.
- Prices do not include postage and packing
- Cancellation policy: Termination within 3 months' notice to the end of the calendar year

## 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 a forum for all those interested in the organization of knowledge on a universal or a domain-specific scale, using concept-analytical or concept-synthetical approaches, as well as quantitative and qualitative methodologies. KNOWLEDGE ORGANIZATION also addresses 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, as well as book reviews, letters to the editor, and an extensive annotated bibliography of recent classification and indexing literature.

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.

Annual subscription 2020: Print + online (8 issues/ann.; unlimited access for your Campus via Nomos eLibrary) € 359,00/ann. Prices do not include postage and packing. Cancellation policy: Termination within 3 months' notice to the end of the calendar year

Ergon – ein Verlag in der Nomos Verlagsgesellschaft mbH, Waldseestraße 3-5, D-76530 Baden-Baden, Tel. +49 (0)7221-21 04-667, Fax +49 (0)7221-21 04-27, Sparkasse Baden-Baden Gaggenau, IBAN: DE05 6625 0030 0005 0022 66, BIC: SOLADES1BAD

Founded under the title International Classification in 1974 by Dr. Ingetraut Dahlberg, the founding president of ISKO. Dr. Dahlberg served as the journal's editor from 1974 to 1997, and as its publisher (Indeks Verlag of Frankfurt) from 1981 to 1997.

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