Indexing and Abstracting

Types of Indexes and Abstracts

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Types of Indexes

- Alphabetical Index
- Author Index
- Book Index
- Citation Index
- Classified Index
- Coordinate Index
- Cumulative Index
- Faceted Index
Types of Indexes (Continued)

- First-line Index
- Hypermedia Index
- Internet Index
- Multimedia Index
- Periodical Index
- Permutated Title Index
- String Index
- Word Index

Alphabetical Indexes

- The arrangement of an index in alphabetical order is the most common method
- The arrangement of subject heading, cross-references, and qualifying terms are also alphabetical
- The major drawbacks are
  - Problem of synonymy
  - Scattering of entries
Author Indexes

- Consist of people, organizations, corporate authors, government agencies, universities
- Authors can be used as an indirect subject approach
  - Authors are strong indicators of subject content (Cleveland 1976)
- Rules for author indexes
  - The number of names allowed for each document
  - Use of full name or initials
  - Use of common names

Book Indexes

- List of words, generally alphabetical, at the back of a book
- Giving a page location of the subject or name
- Books without index are incomplete
Citation Indexes

- A citation index consists of a list of articles, with a sublist under each article of subsequently published papers that cite the articles
  - Author index
  - Subject index
- A cited paper has an internal subject relationship with the papers that cite it

Example of Citation Indexes

- Arts & Humanities Citation Index
- Science Citation Index
- Social Science Citation Index
- CSSCI
- CSCD
- THCI
- TSSCI
中國科學引文索引

① 引文著者项：引文第一著者姓名。团体著者和匿名著者引文此项不著录。
② 引文标识符：引文每一篇被引文献。
③ 引文名称项：引文所在的期刊刊名或书名，其它类型引文此项不著录。
④ 引文类型项：引文类型注释：引文类型包括期刊文章、图书、会议文献、学位论文、报告、专利、标准和其它。引文类型为期刊文章时，此项省略。
⑤ 来源文章著者项：来源文章第一著者姓名。
⑥ 来源期刊项：来源期刊刊名，刊名超过6个汉字时，只取前6个汉字，省略部分用“…”表示。

例:
王建生
• 化学研究-63, 4 (1): 54
张一凡 催化学刊-94, 5 (2): 30

(Continued)
Classified Indexes

- Its contents arranged systematically by classes or subject headings
- It is important for scientific purpose
- Layman find classified indexes difficult to use
- The indexes are very valuable in the appropriate environment
Coordinate Indexes

- Coordinate indexes allow terms to be combined or coordinated.
- Combine two or more single terms to create a new class.
Cumulative Indexes

- A Combination or merging of a set of indexes over time
- Apply to journals and to large, important works and are published as separate volumes
- Cumulative indexes are complex and usually are done by teams of indexers
- Require a good deal of editing because of duplications, terminology changes and a need to adjust the depth of indexing

Faceted Indexes

- (activities and operations)
  - (business and management operations)
  - (communications activities)
  - (computer operations)
  - (educational and psychological activities)
  - (general activities)
  - (information and library operations)
  - (socioeconomic activities)
  - (technical and manufacturing operations)
  - (buildings and facilities)
  - (communications media)
  - (document types)
  - (by availability, access, organization)
  - (by information content, purpose)
  - (by medium, physical form)
  - (fields and disciplines)
  - (hardware, equipment, and systems)
First-line Indexes

- Applied to poems
- All the words in the first line of a poem are listed in their alphabetical order
- Another interesting example
  - First-line index for music

Miscellaneous Indexes

- Hypermedia Indexes
  - Allows users to thread their way to what they want through electronic nodes and links between those node.
  - Much more transparent to the user
  - Someone have to make indexing decisions in establishing these nodes and connections
- Internet Indexes
- Multimedia Indexes
Multimedia Indexes

- Open problem?
- New challenge

Periodical Indexes

- Individual indexes
  - Particular journal
- Broad indexes
  - A group of journals
Permuted Title Indexes

- Title index works well for highly specific searching
- Permuted title word indexes are created by systematically rotating information-conveying words in the title as subject entry points into the index

String Index

- An indexer first constructed a title-like phrase
- This string was then coded according to a set of rules, using operators and codes
- All strings would be in normal syntactic form, connected by appropriate prepositions and conjunctions
String Index (Continued)

- PRECIS system
- Each string consisted of three parts: the lead; the qualifier; display
  - Lead, Qualifier
  - Display
- Coverage of meaning: Qualifier > Lead > Display
- “A document on the evaluation of the professional education of nurses”
- Example taken from Indexing from A to Z, p.453
  - Nurse
    - Professional education, Evaluation
  - Professional education, Nurses
    - Evaluation
  - Evaluation, Professional education of nurses

NEPHIS System

- Lead term. Context
- “A document on the use of numerical data in the humanities and in the social sciences”
- @Use? of <Numerical <Data>>? in <Humanities? and <Social Sciences? and >>
  - Data, Numerical -. Use in Humanities and Social Sciences
  - Humanities and Social Sciences, Use of Numerical Data
  - Numerical Data, Use in Humanities and Social Sciences
  - Social Sciences and Humanities, Use of Numerical Data
Word Index

- Individual names and word in documents
- Bible concordance

KWOC, KWIC, KWAC

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Abstract

- Abstract
  - The ancient peoples attached content abstracts to papyrus rolls
- Summary
  - Runners returned from battle with summaries of the events

Classify Abstracts by Function

- Indicative Abstract
- Informative Abstract
- Critical Abstract
Classify Abstracts by Method

- Excerpt-based abstract
- Generation-based abstract

Classify Abstract by Use

- Discipline-oriented abstract
  - Is written for a specific area of knowledge
- Mission-oriented abstract
  - Is written to support application activities
  - Is defined in terms of an assignment rather than a subject area
- Slanted abstract
  - User-oriented
Classify Abstract by Author

- Author
- Subject area expert
  - e.g. Excerpta Medica
  - Professional abstractor

Structured Abstract

- Use predefined template to store abstract in a structured form
- Sample predefined template
  - Background
  - Aim
  - Method
  - Results
  - Conclusion
Indicative Abstracts

- Also known as descriptive abstracts
- Contain significant information and specific data
  - “The number of onions grown in California was determined and reported in this article”
- Is shorter, is written in general terms, and does not give a progressive account of the paper’s development
- Is never expected to replace the paper itself
- Shows the purposes and the results of the paper

Informative Abstracts

- Try to present as much quantitative and qualitative data as possible
- Is the most useful for documents reporting on experimental investigations
- Is the skeleton of the document itself with all the flesh missing
- Cover four essential points
  - Objective and scope of the work
  - Methods used
  - Results
  - Conclusions
Critical Abstracts

- A critical abstract makes a value judgment or editorial comment
- Editorial or abstract
- An idea in a few abstractors
  - Good abstract avoids the bias and personal viewpoint of critical comment
- Critical abstract can be powerful tool
  - Heavily quality filtering
  - Used to general papers with broad overviews

Example:
Educational Administration Abstracts

- Abstract Numbers: In bold, for handy reference
- Subject Classifications
- Descriptors: In bold; identify subject immediately
- Alphabetical-by-Author Citations: Complete bibliographic details
- Abstracts: Concise summary of contents
- Cumulative Indexes: The fourth issue each year prints the cumulative author and subject indexes for the year, along with a current "Source List."