

**Outline of Outline of Knowledge Database
May 30, 2012**

Contents

DATA>Outline Of Knowledge..... 1
DATA>Outline Of Knowledge>Database 2
DATA>Outline Of Knowledge>Files 7

DATA>Outline Of Knowledge

Outline of Knowledge

Outline of Knowledge Database {Outline of Knowledge Database} (OK) (OKD).

date

2012.0714.

database purpose

Outline of Knowledge contains all important knowledge and ideas in outline format.

theme

Scientifically and humanistically educated people share important knowledge and concepts, which have a hierarchy.

organization

Database records explain facts and concepts and identify originators or contributors. For opinions and speculations, records state facts and reasoning for and against speculations, identify originators, and indicate truth probabilities.

audience

Outline of Knowledge is for the general reader.

usage

You can search database entries by category, topic, name, creative work, location, and date. After reading entries, compare with Internet, dictionary, encyclopedia, or textbook information, to see if the two sources agree.

format

Outline of Knowledge is in Microsoft Word text-only format and uses ANSI/ASCII characters. (Outline of Knowledge does not use other Unicode characters.) Outline of Knowledge is readable with any text processor that can hold eleven-megabyte documents.

Outline of Knowledge has no text formatting. It has no highlighted, bold, italic, underlined, strikethrough, or formatted characters. It has no special fonts. It has one font color and one font size. It has no superscripts or subscripts. It has no special character spacing. It has no tabs and no text indentations. It has no numbered or bulleted lists and no tables. It has no paragraph, page, or document formats. It has no graphics and no borders or shading.

schedule

Outline of Knowledge is a draft. Updates typically occur four times a year.

page number

Outline of Knowledge has approximately 3000 pages, with 57 lines per page and 80 characters per line, in Courier New 10-point type.

author

The author received his Economics B.S. degree from Massachusetts Institute of Technology [1968] and his Biochemistry Ph.D. degree from University of North Carolina, Chapel Hill [1973], with post-doctoral study at University of California, San Diego [1974 to 1976]. He taught at Damavand College in Tehran, Iran [until 1979], at College of Notre Dame in Belmont, California [until 1984], and at two high schools [1984 to 1986]. Subjects taught were mathematics, history, economics, sociology, biology, chemistry, and physics. For twenty-two years [1986 to 2005], he wrote biotechnology and bioinformatics books and articles. He was a GenBank project manager [1990 to 1992] and National Center for Biotechnology Information principal investigator [1992 to 1995]. He authored the NASITE database of structural and functional nucleic-acid regions [1992] and the Vector Sequence Database of cloning vectors [1995]. He has compiled the Consciousness Bibliography of 10,000 books and articles, with full journal and author names, available in text and PDF file formats at http://www.outline-of-knowledge.info/Consciousness_Bibliography/index.html [2006 to 2011].

history

In 1971 and 1972, the author summarized, in handwriting, 20 college textbooks and a collegiate dictionary, resulting in 1000 pages. From 1975 to 1976, author and professional typists typed all 1000 pages. From 1972 to 2011 and from web sites from 2005 to 2011, author added information from Scientific American, newspapers, histories, and science

books. Starting in 1983, author added information and ideas specifically about consciousness. From 1993 to 1994, author typed, or optically character read and edited, all pages into computer text files, totaling five megabytes and 2000 pages. In 1999, author merged all text files into one six-megabyte text file (6all.txt). In 2000, author put text file into database format, with eight record fields. In 2002, author checked field information and standardized field formats. In 2004, author put entries about consciousness into a new section. In 2004 and 2005, author added references to entries and compiled bibliography (Consciousness Bibliography.txt). In 2005, author added beginning database-description section. From 2005, author developed website, contents, glossary, and index tools (allprocedures.xls). In December 2005, author published www.outline-of-knowledge.info web site. From 2006, author wrote separate database-entry graphics (drawings.doc). In 2007, author cross-checked bibliography. In 2007, author made conversion tools to generate a Word file (OKD.doc), from which to make a PDF file (OKD.pdf). In early 2007, author checked that glossary entries have separate database entries and line headers have index entries. In summer 2007, author checked that header fields are unique. In summer 2007, author put birth and death years for people born after 1200 and before 1950 in history fields. In fall 2007, author checked all spelling and grammar using Microsoft Spelling and Grammar. In 2008, author updated the bibliography to have more than 10,000 entries, have full names and journal titles, have indices, have consistent years and names, and have foreign language titles if original language was not English.

website

Domain name is outline-of-knowledge.info. Web site does not use CGI tools, such as guestbook, hit counter, or message board. Web site does not allow FTP or have FTP tools. Web site does not have databases. Web site does not have password protection. Web site does not use encryption.

description OKD

Outline of Knowledge summarizes important facts and ideas for all subjects about which people have knowledge {description, OKD}.

sections

Outline of Knowledge has main sections about consciousness, art, mathematics, biology and medicine, physical sciences, social sciences, and technology, as well as Outline-of-Knowledge database and tool descriptions. Table of contents is a knowledge hierarchy. Outline of Knowledge has glossary, topic index, name index, works index, bibliography, references, and drawings. For subjects, Outline of Knowledge has history timeline and biographies.

files

Readers can download one text file, Word file, or PDF file containing the whole database.

disclaimer OKD

Outline of Knowledge is a draft {disclaimer, OKD}. All information, text, and format are under review and can change daily, without notice. Outline of Knowledge expresses or implies no guarantees of any kind, including accuracy and currency. You assume all risk associated with Outline-of-Knowledge use. Outline-of-Knowledge users agree to hold author harmless from all liability {liability release, OKD} {release of liability, OKD}.

notation OKD

Outline of Knowledge is in text format and has no special mathematical, scientific, or other notation {notation, OKD}. Mathematical, scientific, or other text looks different if formatted. Always compare such Outline-of-Knowledge text with formatted text.

privacy OKD

The web site collects no information from users or web sites {privacy statement, OKD}. It requires no registration or password. Web site does not set or access cookies. Web-site pages do not have web beacons.

rights OKD

Author claims no copyright and reserves no rights {rights, OKD} {copyright, OKD}. You can use Outline of Knowledge without restriction or attribution. Note: Outline of Knowledge contains no copyrighted text and no licensed material from other sources.

DATA>Outline Of Knowledge>Database

database OKD

Text-file rows have eight fields, separated by one backslash {database, OKD}.

records: fields and order

Fields are heading/contents, event start date, event end date, person or entity name, occupation or title, location, creations, and header/details.

records: history or non-history

Database entries are either History or non-History records. Non-History entries have only heading/contents and header/details. History entries have heading/contents and header/details, plus event start date, event end date, person or entity name, occupation or title, location, and creations.

records: non-history

Non-History entries are about concepts. Heading field places idea in knowledge hierarchy. Header names idea. The details define idea, give examples, and relate idea to other ideas. If detail sentence begins with "However" or "Perhaps", sentence comments or speculates.

records: history

History entries describe who, what, where, when, why, and how about event or person. Who is in person or entity name, field 4, and in occupation or title, field 5. What is in creations, field 7. Where is in location, field 6. When event happened, or when person flourished, is in start date and end date, fields 2 and 3. Dates person lived are in details, field 8. Details state Why and How and more about Who, What, Where, and When. Heading/contents indicates history category, such as mathematics or inventions.

fields: heading

All entries have heading-and-contents field 1, which has main, secondary, and higher levels, separated by greater-than signs. Headings organize all information into hierarchy.

Main headings are Database Description 0, Consciousness 1, Arts 2, Mathematical Sciences 3, Biological Sciences 4, Physical Sciences 5, Social Sciences 6, and Practical Affairs 7.

Secondary heading for Database Description is Outline Of Knowledge (OUTL).

Secondary heading for Consciousness is Consciousness (CONS).

Secondary headings for Arts are Art (ART), Dance (DANC), Literature (LITE), Movie (MOVI), Music (MUSI), Photography (PHOT), Radio (RADI), and Television (TELE).

Secondary headings for Mathematical Sciences are Algebra (ALGE), Arithmetic (ARIT), Calculus (CALC), Computer Science (COMP), Game Theory (GAME), Geometry (GEOM), Group Theory (GROU), Information Theory (INFO), Logic (LOGI), Mathematics (MATH), Number Theory (NUMB), Set Theory (SETT), Statistics (STAT), and Topology (TOPO).

Secondary headings for Biological Sciences are Biology (BIOL), Botany (BOTA), Ecology (ECOL), Medicine (MEDI), Nutrition (NUTR), and Zoology (ZOO).

Secondary headings for Physical Sciences are Astronomy (ASTR), Chemistry (CHEM), Earth Science (EART), and Physics (PHYS).

Secondary headings for Social Sciences are Economics (ECON), Education (EDUC), Geography (GEOG), History (HIST), Law (LAW), Linguistics (LING), Philosophy (PHIL), Political Science (POLI), Psychology (PSYC), Religion (RELI), and Sociology (SOCI).

Secondary headings for Practical Affairs are Food (FOOD), Game (GAME), Health (HEAL), Housing (HOUS), Legal Affairs (LEGA), Machine (MACH), Military Affairs (MILI), Financial Affairs (FINA), Personal Affairs (PERS), and Transportation (TRAN).

To replace abbreviations with full fields, use Microsoft Excel Visual Basic procedure replace1and4letterabbrwithfield1 in allprocedures.xls. To replace full fields with abbreviations, use procedure replacefieldwith4letterabbr1.

Tertiary headings name subject branches. Later headings group topics.

fields: beginning date

History entries have event date, field 2. Date number has format year.moda, such as 1000.1231 or 999.0501, so sorting dates sorts by number. Years after BCE (AD) have no sign. BCE (BC) years are negative, for example, 999 BCE = -999. Negative years never have month or day. Beginning date can be year-range first year. (People's birth and death dates are in Details field, field 8.)

fields: ending date

History entries have ending date, field 3, which has same format as beginning date. Ending date is year-range last year.

fields: person

History entries name people, groups, or events, in field 4. Forward slash separates different names. Name variants use " or ". Names have first name first. Last names first are in brackets.

fields: occupation

History entries give occupation or title, in field 5. Forward slash separates occupations.

fields: location

History entries list regions, cities, countries, continents, Earth, or Universe, in field 6. Forward slash separates locations.

fields: works

History entries list books, artworks, music, and inventions, in field 7. Semicolons separate works. Brackets after title contain date and background information. Titles do not have quotation marks or underlining.

fields: details

Entries provide details, comments, definitions, descriptions, explanations, formulas, examples, or reasons, in field 8. First part is Details header, which indicates entry subject. Web-site entry file name is Details header plus ".html". Line headers are unique. After header is blank, hyphen, and blank.

Parentheses are for mathematical expressions, discoverer names, and for translating foreign-language words into English. Brackets are for dates and references. Quotations are for direct quotes and for designating words. Curly brackets are for index entries. After right curly brackets, pipes | indicate that index entry is in glossary. Index entries are only in Details field.

fields: record number

Field is not in use. Entries have number, in field 9, to indicate optimum entry reading and browsing order. Generate record numbers and add to records using procedure generatenumforrecord1 or addlinenumbertobeginning1.

fields: reference

Field is not in use. Entries list entry-information author, title, publisher, location, date, and page numbers, or Web site URI, in field 10. Field-10 references are "none" = none, "text" = college textbook or dictionary or encyclopedia, "ScAm" = Scientific American, "dict" = collegiate dictionary, "ency" = printed or online encyclopedia, "FDOH" = Farsi dictionary or handbook, "JDOH" = Japanese dictionary or handbook, or "VDOH" = Vietnamese dictionary or handbook. Extract reference citations from Detail field using procedure generatereferencecitations1 and compare to references in Consciousness Bibliography.txt.

fields: entry date

Field is not in use. Entries have number in format year.moda, such as 2005.1231, to track data entry, revision, or deletion, in field 11.

fields: significance

Field is not in use. Entry last field indicates significance or importance, in field 12. Asterisk indicates significant information. Period indicates secondary information.

database field modification

You can modify addfieldsafterheading1 to add more fields or change fields.

database proofing

Visual-Basic procedures for proofing web site, contents, glossary, and indexes {database proofing, OKD} are in a Microsoft Excel file (allprocedures.xls).

spelling

After running checktextafterlineheader1 to extract 6all.txt field 8, check spelling using Microsoft-Word spell checking.

grammar

Check grammar using Microsoft-Word grammar checking.

text errors

Check text errors using checktextproblems1.

field number

Check if field number is correct for all lines using checknumberoffields1.

contents

Check contents and order using checkcontentsheading1. Check for non-keyboard characters using checknonkeyboardcharacters1.

line headers

Check line headers using checklineheader1. Check for non-keyboard characters using checknonkeyboardcharactersheaders1. Check that Name-field last name is first line-header word in field 8, using checknamesandlineheader1. Check that line header is in index, using checklineheaderindex1.

index check

Check index entries by checking brace, bracket, parenthesis, and double quote pairing using checkindexandothermarkers1, checkbrackets1, checkparentheses1, and checkdoublequotes1.

fields

searchform.html search-text input box calls Javascript file indices.js, which finds exact matches to glossary entries. Glossary entries, not index entries, allow indices.js to be 220,000 bytes. More than one megabyte is too large for quick browser download. Glossary entries allow array entries to be 10000. 64000 is too many for browser processing.

sitemap.html file

The sitemap.html file is only at top level and points to OKD-subdirectory subdirectories and index files.

entry date

For reference only. Do not use. Use updateentrydatefield1 procedure on 6all.txt to make 6all2.txt have current date in format "2005.1215" in eleventh record.

number

For reference only. Do not use. Use updatenumberfield1 procedure on 6all.txt to make 6all2.txt have current entry sequence. Unique 21-digit text number has format "NPPQRRSSTTUUVVWWxxxx". N is 0 to 7, from first heading field. P is 1 to 9, from second heading field. Q is 1 to 9, from third heading field. R is 0 to 9, from fourth heading field. S is 0 to 9, from fifth heading field. T is 0 to 9, from sixth heading field. U is 0 to 9, from seventh heading field. V is 0 to 9, from eighth heading field. W is 0 to 9, from ninth heading field. "0001" to "9999" reflects how many entries have same heading.

history fields to details

For reference only. Do not use. Procedure checkblankfieldsinnonhistory1 can extract information in 6all.txt History record fields and add formatted information to Details field to make the 6all2.txt file. For History records only: Extracts all History fields 2 through 7 and adds them to text field after the " - ". For non-History records only: Extracts fields 2 through 7 and ensures that they are blank.

directories

First, create HTML-file directories under OKD directory using extractdirectoriesforhtml1 on the 6all.txt file. Directory hierarchy is same as field 1 hierarchy. Windows file and directory names must be 188 characters or less and can include all letters and numbers, blank, and ` , ~ , ! , @ , # , \$, % , ^ , & , (,) , _ , - , + , = , right brace , left brace , [,] , ; , ' , ,, and . Period cannot be last character. Excluded are / , backslash , : , * , ? , " , < , > , and | . Mac file and directory names must be 255 characters or less and can include all characters, except : and / . All directory names are 60 characters or less and contain only allowed Windows and Mac characters.

links

After creating directories, use extractindexforaddlinks1 on 6all.txt to make 6indexfile.txt file, which makes about 17000 index entries and points to HTML files. Index markers go from longest 63 to shortest 4, not alphabetically. Index markers begin with uppercase or lowercase alphabet character, digit, minus sign, a acute, a grave, e acute, and mu. Internet addresses can include only spaces or special characters \$, - , _ , ! , * , ' , and . Do not use \$, _ , ! , or * . You can use - , ' , and . , without replacement. Replace blank spaces with %20 . You can replace others with symbols like %nn . Domain names are not case-sensitive, but directories and file names are case-sensitive. Then use extractindexlinks1 to make the 6alllinks.txt file, which has links based on index markers and HTML files.

HTML files

After 6alllinks.txt file, create HTML files from the 6alllinks.txt file using extracthtmlfiles1 . File names are Details field headers. Directory names are 60 characters or less and contain only allowed Windows and Mac characters.

HTML file

Do not use, for reference only. After making 6indexfile.txt file, use makeonelinkshhtml1 on 6all.txt to create 6alllinks.html, containing links.

contents

Sort the 6all.txt file to put all entry headings in sequence and all details headers in sequence. Sorting tables in Word uses only the first 65 characters. Using extractcontentshtml1 , extract path and file name from 6all.txt fields 1 and 8 , make the 6contents.html master file in OKD directory, and make 6contents.html files in subdirectories. It uses entry heading as directory path. It extracts details header to make file name. The master 6contents.html file has links from table-of-contents entries to directory 6contents.html files.

glossary

Using extractglossaryhtml1 , extract glossary entries and file names from 6all.txt and make 6glossary.html master file in OKD directory and 28 glossary HTML files in OKD/glossary directory: Symbols, Numbers, and A to Z. Glossary entries begin only with uppercase or lowercase alphabet character, digit, minus sign, a acute, a grave, e acute, or mu. Entry heading is directory path. Details header is file name. The master 6glossary.html file has links to the 28 files. The 28 files link from glossary entry to HTML files. Glossary words and phrases are inside braces (curly brackets), with right brace followed by pipe, in Details field, field 8. Records have zero or one glossary item. Glossary items match line headers and have entries in Contents.

index

Using extractindexhtml1, extract index markers and file names from 6all.txt and make 6index.html master file in OKD directory and 28 index HTML files in OKD/index directory: Symbols, Numbers, and A to Z. Index markers begin only with uppercase or lowercase alphabet character, digit, minus sign, a acute, a grave, e acute, or mu. Entry heading is directory path. Details header is file name. The master 6index.html file has links to the 28 files. The 28 files link from index markers to HTML files. Indexed words and phrases are inside braces in Details field, field 8. Index entries have commas to differentiate two different meanings or word, as in "mood, defined" and "mood, color".

name index

Using extractnamehtml1, extract names from Name field and file names from 6all.txt and make 6name.html master file in OKD directory and 28 index HTML files in OKD/name directory: Symbols, Numbers, and A to Z. Entry heading is directory path. Details header is file name. The master 6name.html file has links to the 28 files. The 28 files link from name entries to HTML files.

works index

Using extractworkhtml1, extract works from Works field and file names from 6all.txt and make 6work.html master file in OKD directory and 28 index HTML files in OKD/work directory: Symbols, Numbers, and A to Z. Entry heading is directory path. Details header is file name. The master 6work.html file has links to the 28 files. The 28 files link from work entries to HTML files.

location index

Using extractlocationhtml1, extract locations from Locations field and file names from 6all.txt and make 6location.html master file in OKD directory and 28 index HTML files in OKD/location directory: Symbols, Numbers, and A to Z. Entry heading is directory path. Details header is file name. The master 6location.html file has links to the 28 files. The 28 files link from location entries to HTML files.

date index

Using extractdatehtml1, extract dates from Date field and file names from 6all.txt and make 6date.html master file in OKD directory and 13 index HTML files in OKD/date directory: <0, 0 to 1000, 1000 to 1100, 1100 to 1200, 1200 to 1300, 1300 to 1400, 1400 to 1500, 1500 to 1600, 1600 to 1700, 1700 to 1800, 1800 to 1900, 1900 to 2000, >2000. Entry heading is directory path. Details header is file name. The master 6date.html file has links to the 13 files. The 13 files link from date entries to HTML files.

PDF files

Consciousness Bibliography.txt saves as Consciousness Bibliography.pdf. drawings.doc saves as drawings.pdf.

compressed Zip files

Compress 6all.txt to make OKD.zip. Compress Consciousness Bibliography.txt to make Consciousness Bibliography.zip. Compress drawings.doc to make drawings.zip. Compress allprocedures.xls to make allprocedures.zip.

DOC file

Use extractTXTtoDOC1 to make 6all.txt into DOC file with header hierarchy. To create indices, use createglossarytxt, createindextxt, createnamestxt, createworkstxt, createlocationstxt, and createdatestxt to insert indices at DOC-file end. To make Table of Contents, after title page, from Insert menu, select Index and Table of Contents command, select Table-of-Contents tab, use Heading 1 through Heading 9 paragraph styles, then click OK. Save DOC file.

PDF file

Save formatted and complete DOC file as PDF file. First, set Distiller settings. In General tab, select Acrobat 5.0. In Office tab, do not select Embed Thumbnails, because process makes them dynamically. Do select page numbers, so Table of Contents page numbers are links. Do not select Embed Tags, so PDF file is unstructured, because document has no images, lists, or tables.

DATA>Outline Of Knowledge>Files

6all.txt file

A Microsoft-Word text file {6all.txt file} contains the Outline of Knowledge database.

allprocedures.xls file

A Microsoft-Excel file {allprocedures.xls file} has Visual-Basic procedures for proofing the Outline of Knowledge database and for generating the web site, contents, glossary, and indexes.

Consciousness Bibliography.txt file

A text file {Consciousness Bibliography.txt file} and PDF file have standard-format references to more than 10,000 consciousness-related books and articles, with full journal and author names.

records

Record order is by author last name. The word "and" precedes last author name. Semicolons separate author names. If editor, notation is (ed.). Year is in parentheses. Title field does not use underlining or quotation marks. Title field can include information about translator, editor, volume, and pages. For books, location and publisher follow. For journals, journal name, volume, and page numbers follow. For web sites, field starts with www and URI, not with "http". Last fields are subject indexes, such as anatomy, physiology, smell, and senses.

drawings.doc file

A Microsoft-Word file {drawings.doc file} has graphics for major mathematical, physical, biological, economic, psychological, and social processes.

Important Processes.doc file

A Microsoft-Word file {Important Processes.doc file} lists major mathematical, physical, biological, economic, psychological, and social processes. File describes only concepts that require more than one sentence or image to explain. (Many important mathematical, biological, physical, and social ideas are definitions or images.) File discusses only mathematical and natural processes. (People have speculated about many things and imagined many processes. File does not discuss religious, historical, economic, philosophical, and other speculations.) File is only about science and scientific processes. World has many machines, inventions, and practical applications that involve processes. (File does not discuss technology.)

index.html files

All directories have HTML index files {index.html files}.

indices.js file

A Javascript file {indices.js file} allows Outline-of-Knowledge database searches.

OKD.doc file

A Microsoft-Word file {OKD.doc file} has Outline of Knowledge database.

OKD.pdf file

An Adobe PDF file {OKD.pdf file} has Outline of Knowledge database.

robots.txt file OKD

A text file {robots.txt file, OKD} tells search engines what to search and what to list.

searchform.html file

An HTML file {searchform.html file} allows searching Outline of Knowledge database.

sitemap.html file

An HTML file {sitemap.html file} lists web-site page hierarchy.