

# Searching and Researching on the Internet

♦ By Anne M. Chémali and Jill R. Sommer

Unleash the Power of the Internet!



#### The Internet in Numbers...

- ♦ No search engine can index the entire Web!
- → 730 million searches per day worldwide (10% to 20% growth per year)
- ♦ An average American spends 1.5 hours a day searching the Web
- "More than 77% of Web users find Web searching frustrating" (SearchEngineWatch.com)
- Google has indexed 8 billion Web pages (175,000 computers dedicated to indexing)
- ♦ 51% of all users use Google
- "Even a blind squirrel finds a nut occasionally..."



#### **Key Points**

- ♦ The importance of research
- Search engines & meta-search engines
- Directories
- Google
- Terminology mining hints
- Managing information
- Evaluating information
- Virtual libraries & specialized databases
- ♦ E-mail discussion groups and Usenet



#### What We Search

- ◆ Terminology
- Company Web site
- Solutions to technical problems
- Parallel texts and client's competitor Web sites
- Agencies and clients
- ♦ E-mail addresses, addresses & phone #s
- Graphics and images



### What is a Search Engine?

Search engine is a loose term for several types of software, typically owned and operated by companies other than ISPs, that look for information and display it on your local computer.





## Search Engine Terminology

- ♦ A search engine consists of 3 major pieces: the crawl, the index, and the runtime system or query processor.
- *Crawl* (robot, spider, or metacrawler): computer program that goes out on the Internet and locates hyperlinks that are available to the public.
- ♦ Index: program that compiles information into searchable databases
- Query processor: system that processes the queries and returns the search results

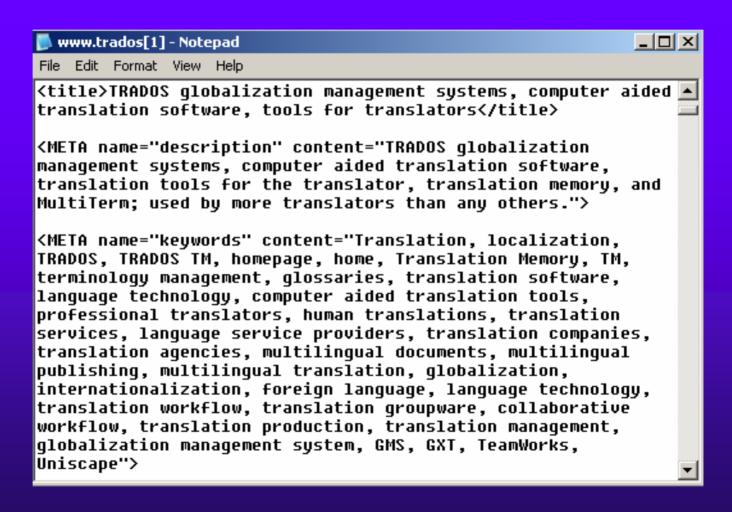


### Search Engine Terminology

- ♦ Robots only read the page URL and its embedded links. They build link trees.
- Spiders read the URL, links, title, and keyword sections of the Web page.
- ♦ Metacrawlers visit search engines' servers and list the results according to collective relevancy.



#### Title and Keywords





#### Meta-search Tools

- ♦ It is important to look in more than one search engine when trying to find relevant Web pages.
- ♦ For this purpose, meta-search tools were created
- Meta-search tools allow you to use several search engines simultaneously



#### Meta-search Tools

- All-in-One Search Page (www.albany.net/allinone)
- ◆ Dogpile (www.dogpile.com)
- Fossick.com: The Web Alliance Directory (www.fossick.com)
- MetaCrawler (www.metacrawler.com)
- SavvySearch (www.savvysearch.com)
- ◆ SEARCH.COM (www.search.com)



#### DILBERT BY SCOTT ADAMS

TOPPER VERSUS THE FEATURE CREEP

WE NEED TO ADD A THAT'S KEYWORD NOTHING! SEARCH FUNCTION.

IT SHOULD ALSO SEARCH IN DIFFERENT LANGUAGES INCLUDING FRIULIAN, KATAANG, HORPA AND WAGI. www.dilbert.com

Inc./Dist. by UFS, Inc THAT'S I LIKE NOTHING! YOUR I WANT TO STYLE. MARRY YOU IN A CIVIL UNION. 8-16-05



- Each search engine has its own method and uses its own algorithm to find its results:
  - Author-controlled
  - Editor-controlled
  - User-controlled
  - Pecuniary/sponsor-controlled



- Author-controlled search engines (Google, Altavista)
  - Operate on searcher-supplied keywords also called query words or search words.
  - Search their database for keyword matches.
  - Return Web page links in some predefined order.



- Editor-controlled search engines (a.k.a. directories)
  - Place Web page links into structured directories based on subject matter.
  - May be totally software driven OR involve some human intervention.
  - The user travels the top-down directory structure until she/he finds the topic of interest.
  - The Web page results are generally given in alphabetical order within the directories.



 User-controlled search engines (Direct Hit) depend on visitor popularity.

#### But...

 Pecuniary-controlled search engines depend on paid placement.



#### Using Directories

- You can browse directories by subject or search by keyword in search engines
- Directories are created and maintained by people
- ♦ Directories don't cover the entire Web
- ◆ Directories are very small collections of resources compared with the huge databases that search engines use



#### Using Directories

- Yahoo! (www.yahoo.com)
- Galaxy (www.galaxy.einet.net)
- Go Network (www.go.com)
- ♦ Google Directory (www.google.com/dirhp)
- HotBot Directory (www.hotbot.com)
- LookSmart (www.looksmart.com)
- Lycos (www.lycos.com)
- Magellan Web Guide (magellan.excite.com)
- Open Directory Project (dmoz.org)
- WebCrawler Channels (www.Webcrawler.com)





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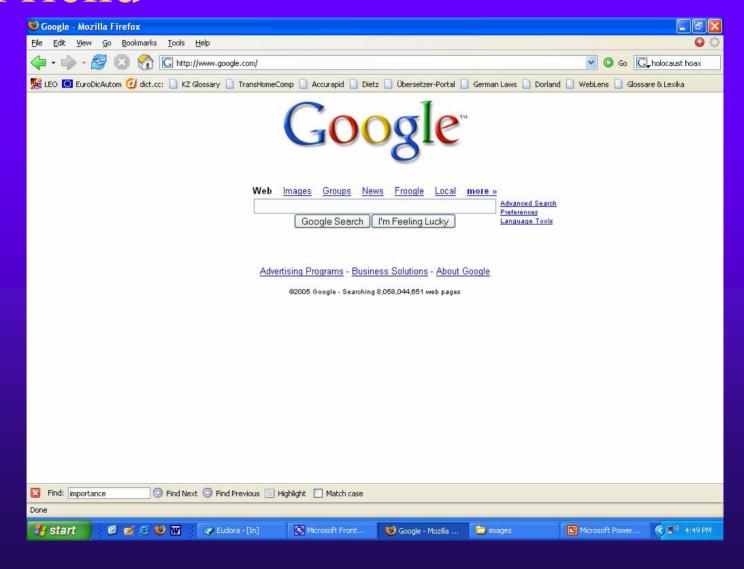


### Using Search Engines

- ♦ AltaVista (www.altavista.com)
- ◆ Excite (www.excite.com)
- ♦ Google (www.google.com)
- ♦ HotBot (www.hotbot.com)
- ◆ InfoSeek (infoseek.go.com)
- ◆ Lycos (www.lycos.com)
- ♦ Northern Light (www.northernlight.com)
- ◆ WebCrawler (www.Webcrawler.com)



# Google: The Translator's Best Friend





#### Google in Numbers

- ♦ Google is one of the 10 most popular sites on the entire Internet.
- More than 73.5 million unique users visit Google each month
- ♦ Google is used for more than 200 million searches every day
- ◆ Google's search engine indexes more than 3 billion Web pages, more than 425 million images, and more than 700 million Usenet messages
- ◆ Google provides an interface for 88 different languages and offers results in 35 languages more than half of Google's traffic is from outside the U.S.



# Google: "The World's Best Search Engine"

- Google offers basic and advanced Web searching, an editor-driven directory, and dozens of specific searches for images, news articles, Usenet newsgroup messages, street addresses and phone numbers, stock quotes and information, as well as online catalogs and Web sites for products to buy.
- You can also narrow your searches to specific government and university sites
- Google also automatically corrects your spelling.











#### A Few Google Assumptions

- ♦ Searches are NOT case sensitive
- Automatic AND queries
- ◆ Google doesn't recognize punctuation or accented characters unless the word is preceded by a + sign (+marché)
- ♦ Stemming: diet needs = dietary needs
- ◆ Google automatically disregards certain common words such as "where", "how", and "what" as well as "a", "and", "the", and digits [use + sign]

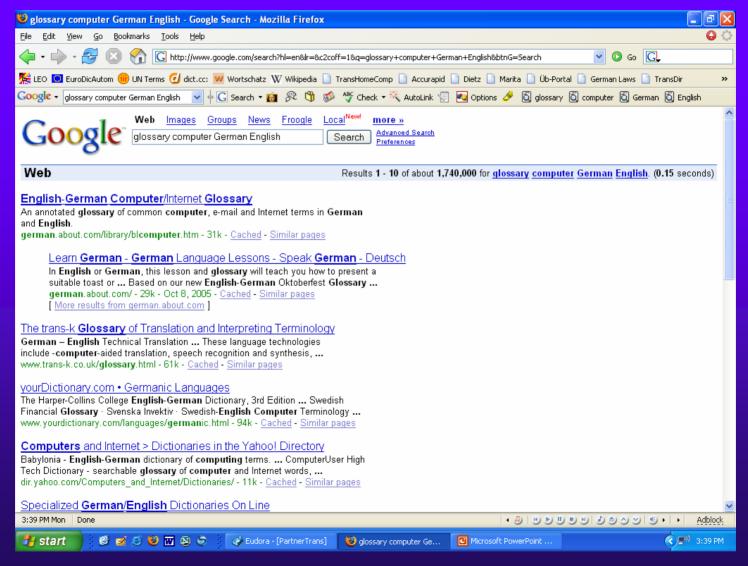


### Entering a Search Query

- ♦ These are the examples we all know...
- \* translation project (same as: translation AND project)
- \* Translation +project (same as: translation OR project)
- \* Excluding words from your results: virus -computer
- \* Exact phrases (quotation marks) "we hire translators" or "monty python and the holy grail"

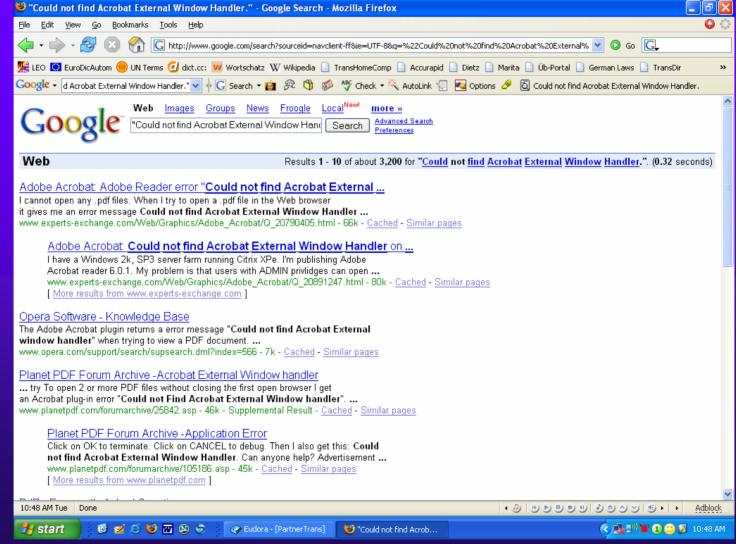


### Example of a Search Query





# Example of a Search Query Using Quotes





### Queries for Terminology Mining

#### Hints for terminology mining:

- ◆ Try to guess your source term translation and verify your assumption in target language written Web sites;
- Enter the source word you want to translate and look it up in pages that are written in the target language;
- ◆ Identify the word context in Web pages written in source language, translate the context terms and enter their translation in a query made in target language pages.



# Some Search Techniques You May Not Know

- You can use a tilde (~) to search for synonyms of a specific word translation ~agency (term + synonyms)
- Wildcard: book\* = books, bookstore, bookkeeper, etc.
  - Google also allows whole-word wildcards within a phrase search: "i \* a dream"
- Show sites with one word between terms: English
   \* German



# Some Search Techniques You May Not Know

- Narrow your search to specific file types: filetype:doc [To eliminate a file type: -filetype:pdf]
- ♦ Narrow your search to a specific domain or Web site: site:.de, site:.edu, site:www.microsoft.com, etc.
  - or to help pages on a specific domain or Web site help site:www.trados.com or help site:.gov
- "term sitesearch=.com" (or .gov, .ru, .at, .de, .fr, .es, etc.)
- ♦ Find definitions: define:computer



# Some Search Techniques You May Not Know

- ♦ List similar pages: related:www.cnn.com
- ♦ Narrow your search to words in the page's title, URL, body text, or link text: intitle:toyota, inbody:translation, inurl:, intext:
- ◆ allintitle:, allinurl:, or allintext: If your query contains multiple words. Example: allintitle: toyota camry [Note that when multiple keywords are used they are separated with spaces]
- inanchor: lets you restrict your search to words in the link (or anchor) text on a Web page
- ♦ Resurrect pages that no longer exist: cache: URL

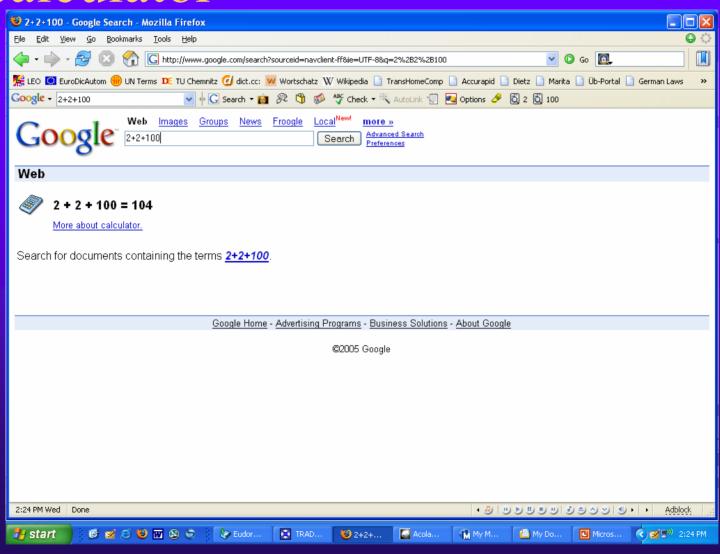


# Some More Search Techniques You May Not Know

- ♦ DVD player [\$10]...[\$50]
- ♦ List pages that link to a specific page: link:URL
- info:www.google.com (find out more about a specific page)
- ♦ safesearch: sex education
- convert: helps you convert currency and measurements

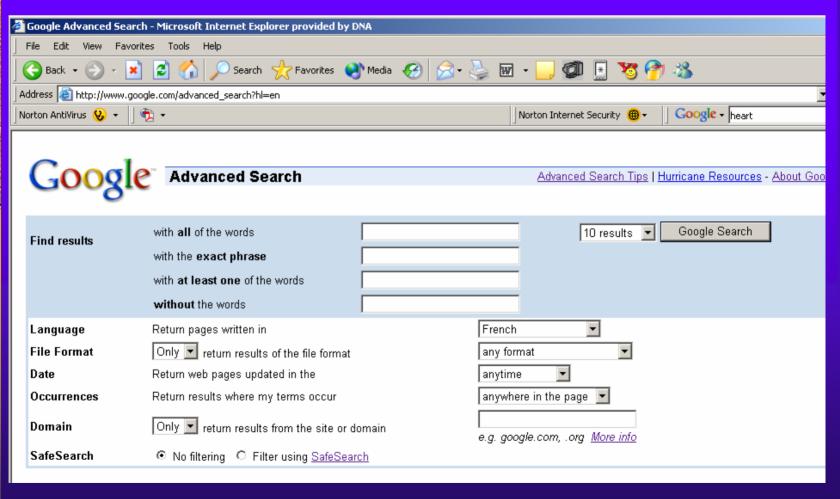


# Google can also be used as a calculator





#### The Advanced Search





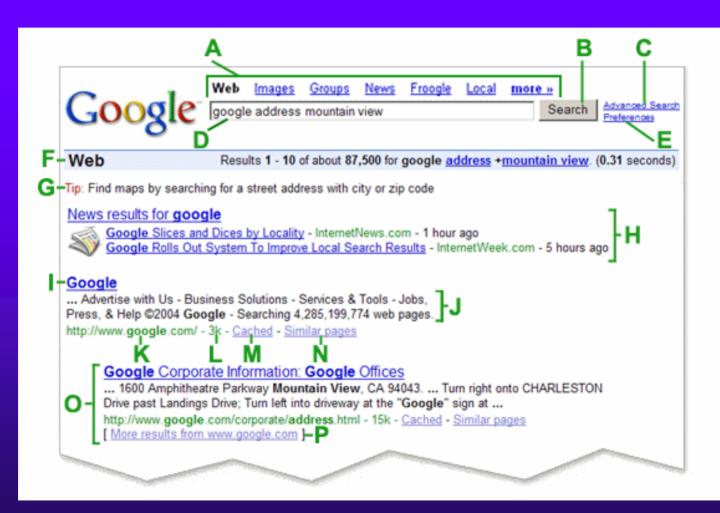
#### The Search Preferences

- ◆ Interface language
- Search language
- SafeSearch filtering (strict, moderate, no filter)
- Number of results (per page)
- ♦ Results window

All of these can be saved and reused!

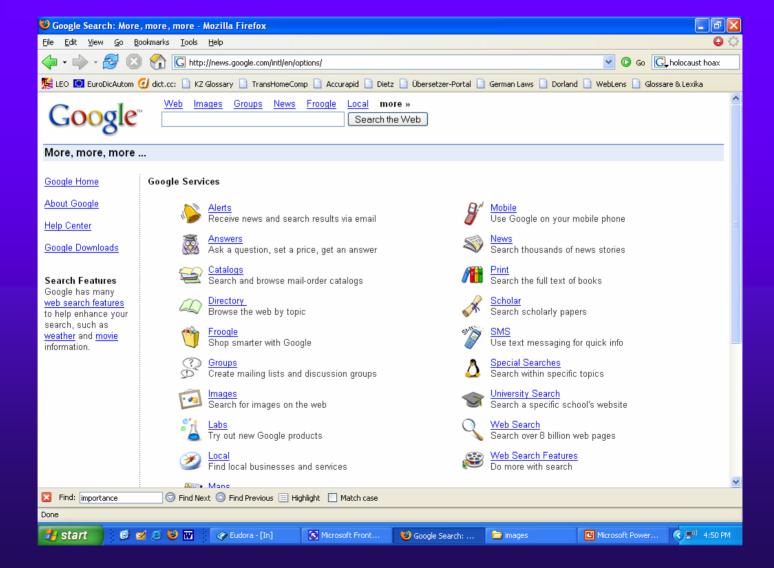


## The Search Results Page





## Google Services





## Google Print & Google Scholar

#### Page-Specific Search

Similar Find pages similar to the page
e.g. www.google.com/help.html

Links Find pages that link to the page

#### Topic-Specific Searches

Google Print - Search the full text of books Google Scholar - Search scholarly papers

#### These are very useful!!!

Search

Search

Apple Macintosh - Search for all things Mac

BSD Unix - Search web pages about the BSD operating system

Linux - Search all penguin-friendly pages

Microsoft - Search Microsoft-related pages

<u>U.S. Government</u> - Search all .gov and .mil sites <u>Universities</u> - Search a specific school's website

©2005 Google



## Example of an Image Search: heart



**Heart.**jpg 800 x 600 pixels - 82k sprott.physics.wisc.edu/. ../1999/Heart.jpg



**heart**-lad.gif 433 x 415 pixels - 7k www.stubaker.com/ heart/heart-lad.gif



echo.jpg 462 x 330 pixels - 29k sln.fi.edu/biosci2/ monitor/images/echo.jpg



heart-frame-pattern.gif 678 x 651 pixels - 9k www.runnerduck.com/ images/he: frame-pattern.gif



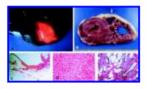
card3.jpg 600 x 375 pixels - 29k www.compufield.net/ cards/heart to heart/card3.jpg



1.jpg 544 x 465 pixels - 52k heartlab.robarts.ca/ dissection/1.jpg



no **heart**.jpg 403 x 248 pixels - 24k photos1.blogger.com/.../ 1113/1024/no% 20heart.jpg [ <u>More results from</u>



transilluminated\_arvd.jpg 900 x 511 pixels - 337k www.pathguy.com/.../ transilluminated\_arvd.jpg



## Evaluating Information Found on the Web

- Information on the World Wide Web on all sorts of topics
- ◆ Information can come from different types of sources, such as online magazines and periodicals, news agencies, government agencies, companies, nonprofit organizations, educational institutions and individuals
- Most magazines and newspapers have factcheckers – Internet sources do not



# Outlandish stories, incorrect information and hoaxes abound on the Internet





## Certain groups may have an agenda. Consider the source.



## Evaluating Information Found on the Web

- Need to decide whether the information is useful, reliable, and appropriate for your purposes
- ◆ Assess the veracity of information from other sources
- Web sites may not have been translated by professionals
- Verify terms from other sources

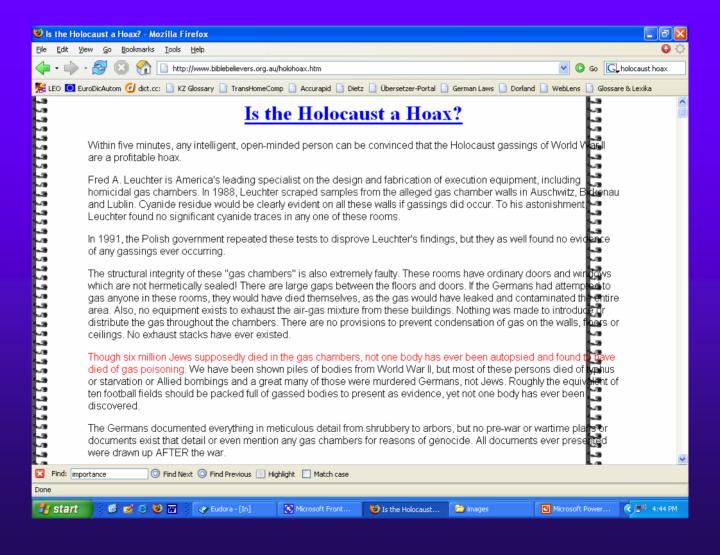


### Guidelines for Evaluation

- ◆ Who is the author or institution? (The URL will offer clues such as .edu, .gov, .com, .org, etc.)
- ♦ How current is the information?
- ♦ Who is the audience?
- ◆ Is the content accurate and objective? (Are there any political, ideological, cultural, religious, or institutional biases?)
- ◆ What is the purpose of the information?



### Guidelines for Evaluation



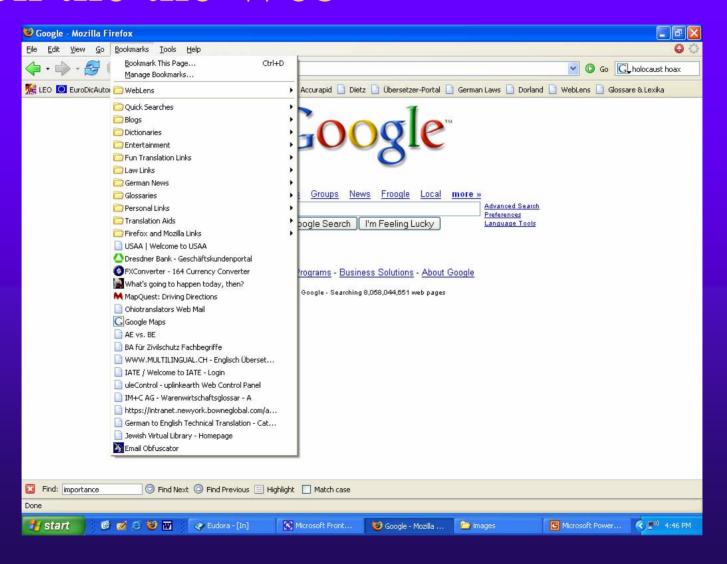


## Managing and Using Information on the Internet and the Web

- Consider copyright guidelines before sharing and copying information
- Procedures and steps for managing Internet and Web information
- Capturing and using text, images, and data from the Web and the Internet
- Bookmarking

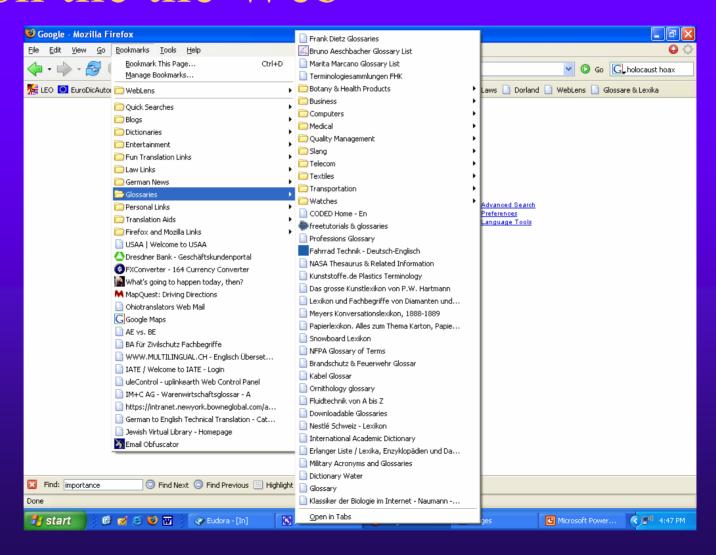


## Managing and Using Information on the the Web



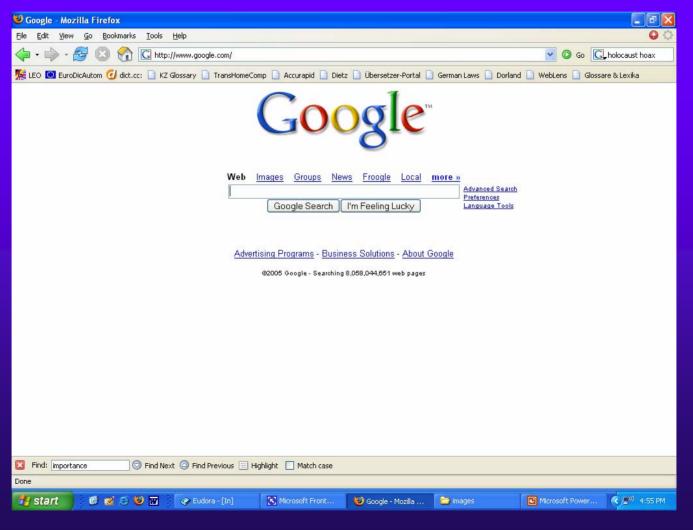


## Managing and Using Information on the the Web



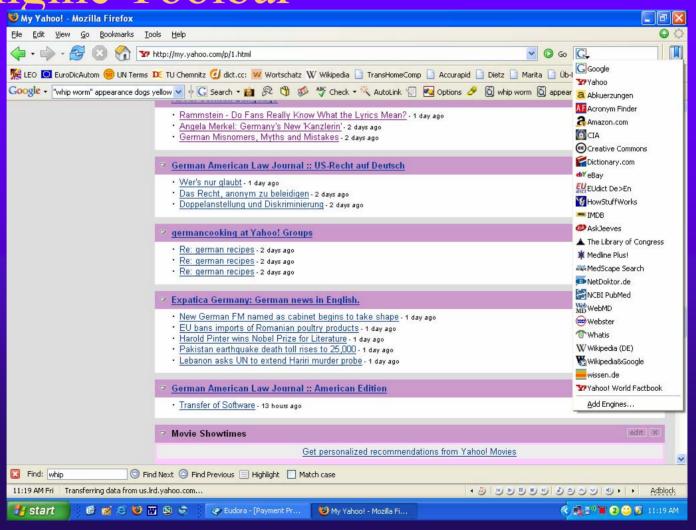


# Managing and Using Information on the the Web – Firefox Customizable Toolbar



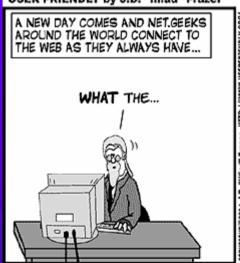


Managing and Using Information on the the Web – Firefox Search Engine Toolbar





#### USER FRIENDLY by J.D. "Illiad" Frazer



AND YET SOMETHING IS WRONG, SUBTLY, DISTURBINGLY WRONG, LIKE A MORNING SKY TINGED WITH RANCOR...







## Then There is the Invisible Web...

The "visible Web" is what you see in the results pages from general Web search engines. It's also what you see in almost all subject directories. The "invisible Web" is what you cannot retrieve ("see") in the search results and other links contained in these types of tools.



### Virtual Libraries

- ◆ Virtual libraries are directories that contain collections of resources that librarians or other information specialists have carefully chosen and organized in a logical way.
- Virtual libraries are smaller than directories
- ◆ People who organize virtual libraries are on the lookout for 3 major types of information: subject guides, reference works, and specialized databases



### Virtual Libraries

- Argus Clearinghouse (www.clearinghouse.net)
- Infomine (infomine.ucr.edu)
- ♦ Internet Public Library (<u>www.ipl.org</u>)
- ♦ Librarian's Index to the Internet (sunsite.berkeley.edu/internetindex)
- ♦ World Wide Web Virtual Library (<u>www.vlib.org</u>)
- Internet Search Tools (lcWeb.loc.gov/global/search.html)
- ♦ MWSC Library Links to Virtual Libraries (www.mwsc.edu/~libwww/ref2.html)
- AcademicInfo (<u>www.academicinfo.net/</u>)
- Internet Law Library (<u>www.lawguru.com/ilawlib/</u>)



### Specialized Databases

- Virtual libraries are useful for finding specialized databases as well
- A specialized database is an index that catalogs certain material, such as patent information, medical journal article citations, company financial data, court decisions, etc.
- Specialized databases can usually be searched by keyword
- You may need to register to use them



### Some Specialized Databases

- LexisNexis (<u>www.lexisnexis.com/</u>, <u>www.lexis.com</u>)
- MEDLINE aka PubMed (National Library of Medicine)
   (www.ncbi.nlm.nih.gov/entrez/query.fcgi)
- FindLaw (www.findlaw.com/)
- ◆ International Court of Justice (<u>www.icj-cij.org/icjwww/idecisions/ipleadingsnotavailable.htm</u>)
- ♦ U.S. Patent Database (<u>www.uspto.gov/patft/</u>)
- Intellectual Property Law Server (www.intelproplaw.com/)
- ◆ To access fee-based databases: www.facsnet.org/report\_tools/cardirec.htm



# Practice makes perfect. Experiment to find the best resources for you

You won't break it!



### Translator Portals

- ◆ Translator's Home Companion (www.lai.com/companion.html)
- AccuRapid (accurapid.com/journal/)
- Eurotexte: The Translators Portal (<u>www.eurotexte.fr/portal/</u>)
- ◆ TranslationDirectory.com
- Translatorscafe.com
- ProZ.com
- ◆ Linguabase.com and <u>www.tipsfortranslators.com</u>



### Job Portals

- Aquarius Directory of Translators (<u>www.aquarius.net</u>)
- ♦ GoTranslators (<u>www.gotranslators.com</u>)
- ♦ Linguist Finder (<u>www.linguistfinder.com</u>)
- Translatorsbase.com(www.translatorsbase.com)
- ◆ ForeignWord (www.foreignword.biz/)



## Google 2084

#### Google Search

I'm Feeling Lucky [I'm Feeling Paranoid]

- O Your Brain
- Your Home
- Family
- Friends
- O Ex-friends
- Relatives
- O Co-workers
- Ex-spouse(s)
- O Enemies

- O Satellite Photos of People You Want to Spy On
- O Satellite Photos of People Spying on You
- O Medical Records
- O Credit Reports
- O Tax Records
- O Phone Records
- O Court Documents
- O Other People's Conversations

- O Books
- Movies
- O TV Shows
- Music
- O Pornography
- O Your Past
- O Your Present
- O Your Future



## E-mail Discussion Group Archives and Usenet Newsgroups

What are they good for?

- Exchanging information
- Solving technical problems
- Figuring out error messages



## E-mail Discussion Group Archives and Usenet Newsgroups

- ◆ E-mail and Usenet news are two popular uses of the Internet that most people don't know about
- Unique features of communication on the Internet
- ♦ E-mail discussion groups are also called interest groups, mailing lists or listservs

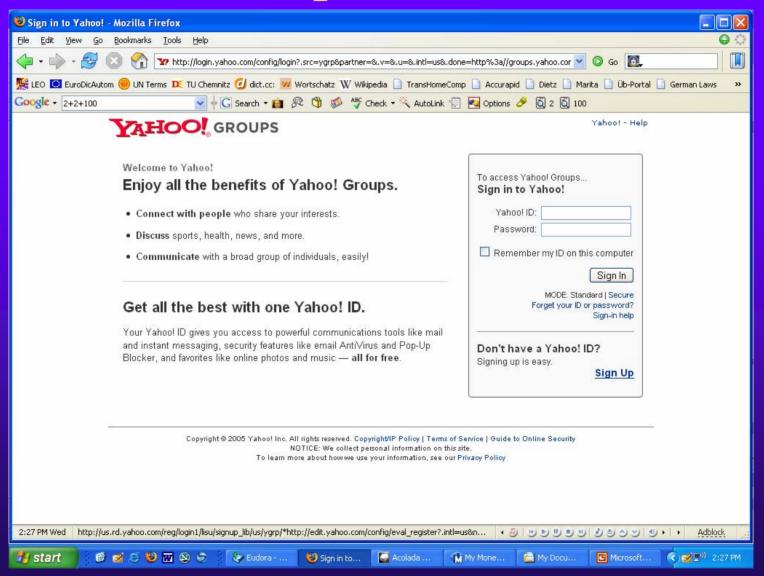


## E-mail Discussion Groups

- Discussion groups are usually closed groups
- You can usually search the archives for old messages
- ♦ Yahoo! Groups (TW\_users, GlossPost, Payment Practices, translation-tools, GLD list, PartnerTrans, etc.)

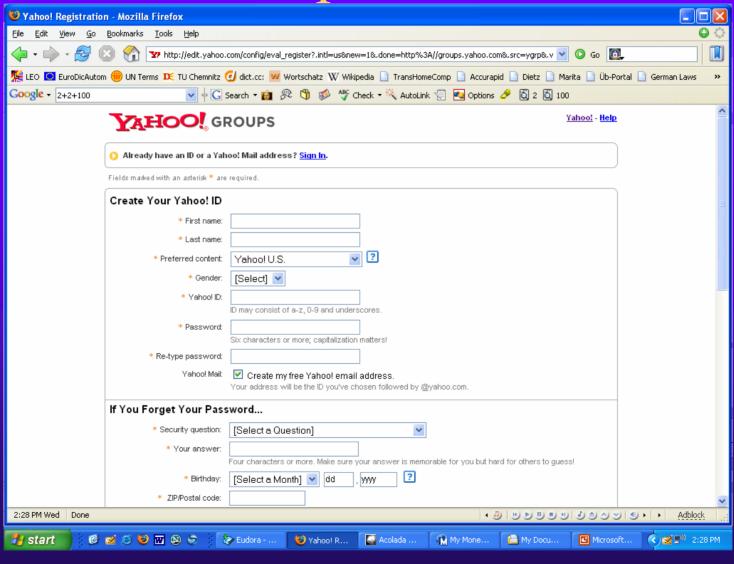


### Yahoo! Groups



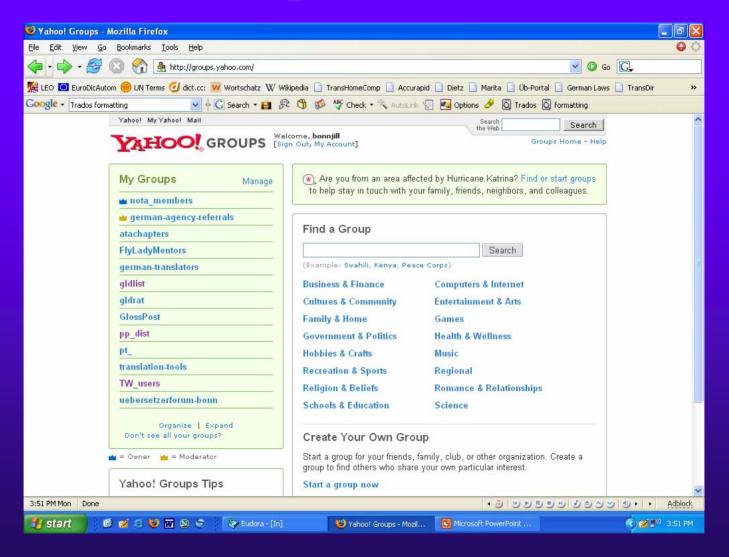


### Yahoo! Groups



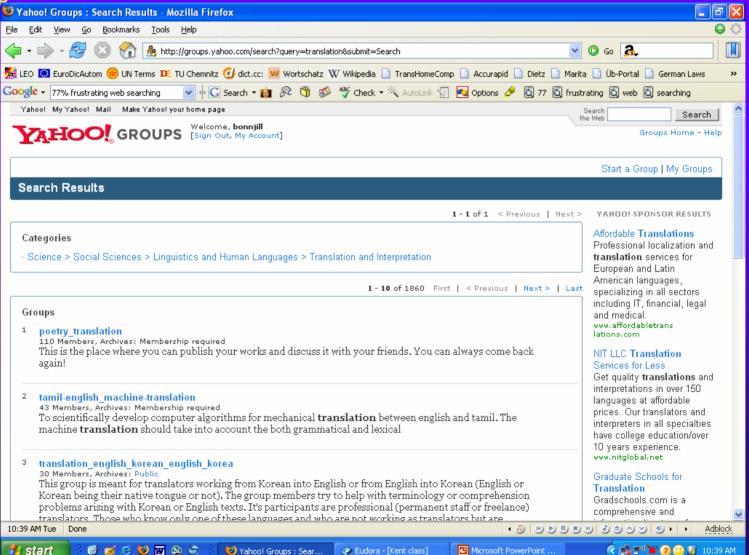


## Yahoo! Groups



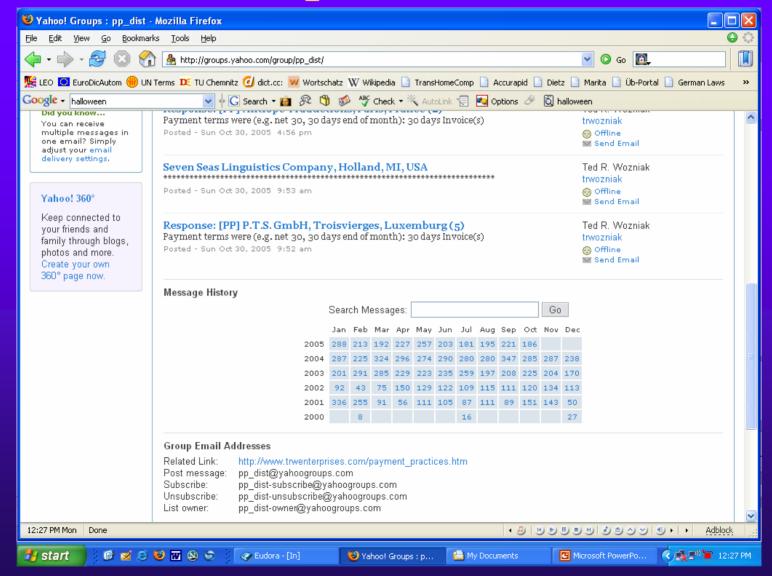


## Yahoo! Groups: Translation yields 1860 results





## Yahoo! Groups Archive Search





### Usenet Newsgroups

- ♦ You use Usenet news for the same reasons you use a discussion group to exchange or read information about specific topics
- Messages to a group aren't exchanged between individuals using e-mail. They are passed between computer systems.
- ◆ There's a Usenet news service or newsgroup for any subject you can think of, from animals and astrology to Zen and zoology.



### Usenet Newsgroups

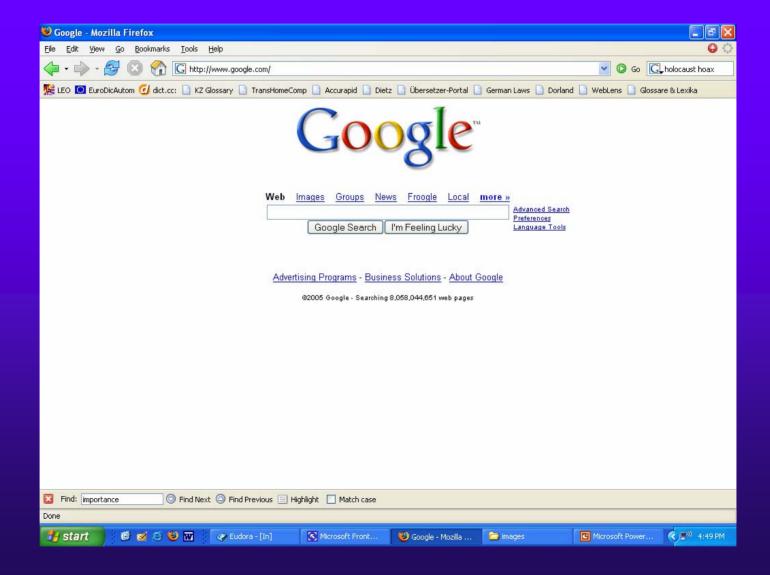
 Usenet is a community with its own generally agreed-upon code of etiquette (Netiquette)

 Usenet is rarely moderated (beware of trolls and false information).

♦ For more information on how to handle a troll visit www.angelfire.com/space/usenet

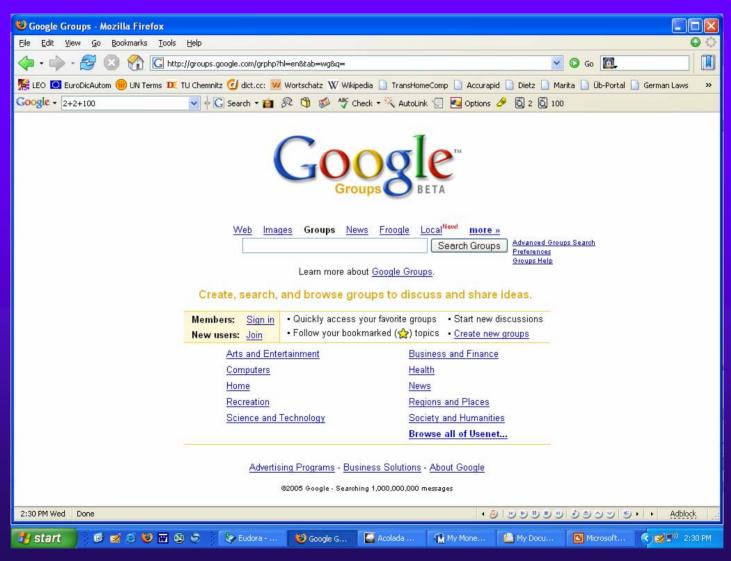


## Accessing Google Groups



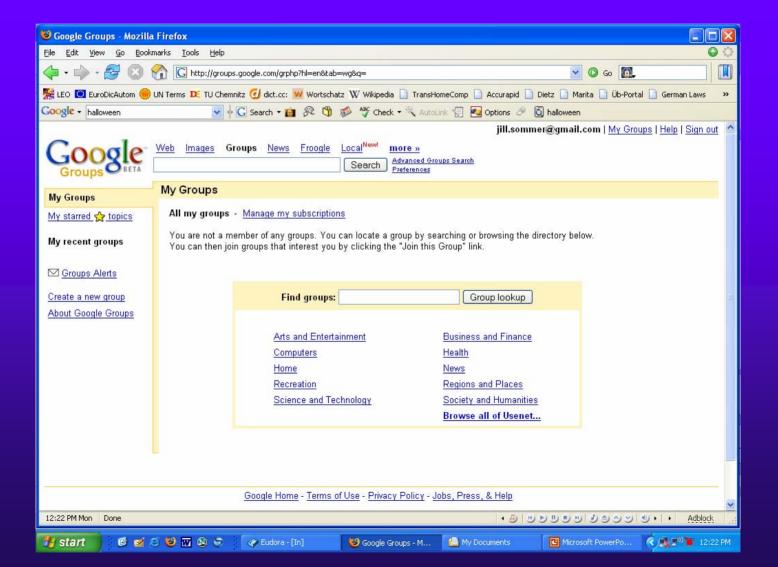


## Accessing Google Groups



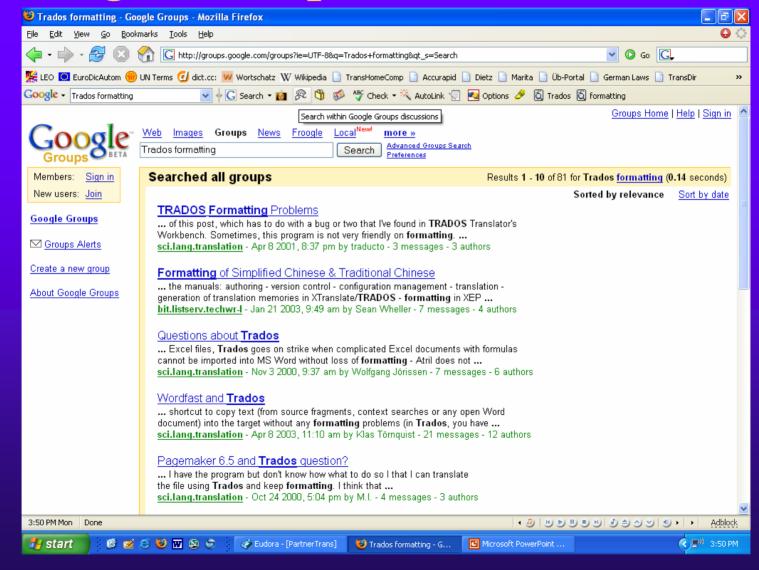


## You can search by keyword



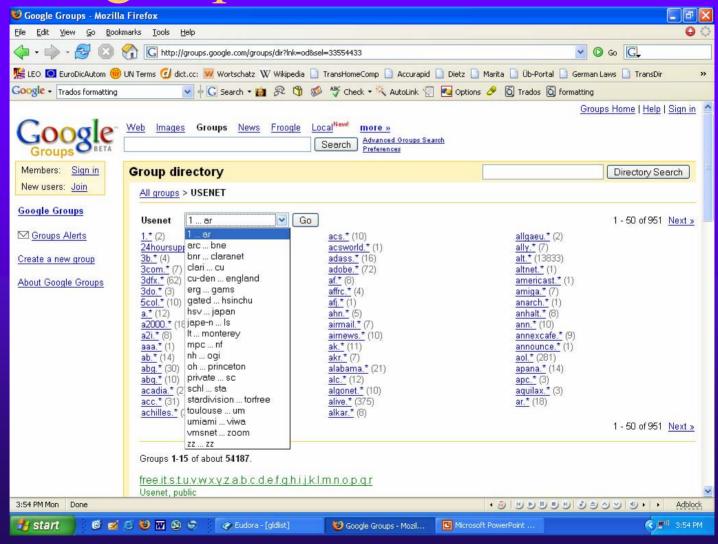


### Google Groups



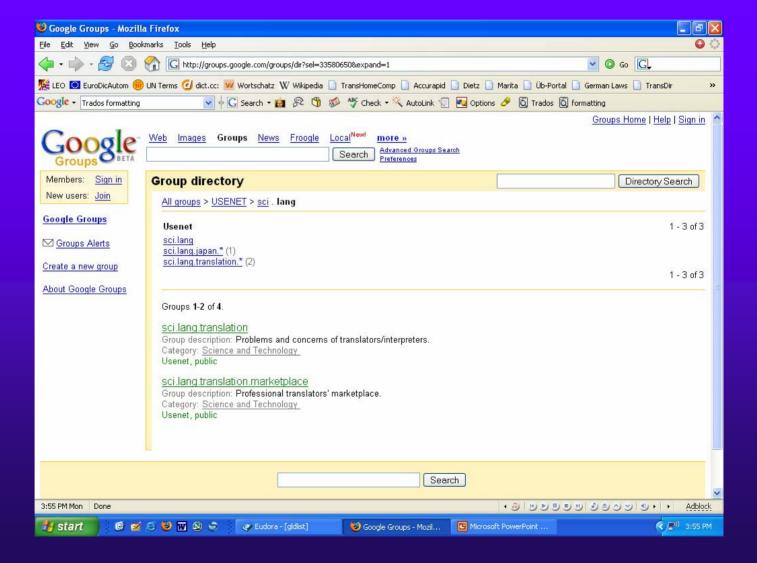


## or browse through the Usenet Newsgroups





## For example: sci.lang





### Usenet Newsgroups

- ◆ There are other dedicated Usenet news providers such as <u>Binaries.net</u>, <u>Usenet.com</u> and <u>Newsgroups.com</u> that give you full access to the over 120,000 newsgroups currently active on Usenet.
- ◆ You can also access newsgroups through your ISP using software called a newsreader that helps you read and manage the news (articles available through Usenet)



## Warning: Usenet Newsgroups can be a huge time-suck!



## THE FUTURE OF GOOGLE TALK (AND HOPE FOR THE NET)

Google Talk	
talk.  • Emio Dinkletwa: Solyon status massage tiere *	Intox i Sedings I Helo
(%, Search at contacts	
Yinuvius Ghiegm	<
Ytruvius Ghiegm	
M Crost C Col	
Ernio: OMG LOL Ytruvius: r u 4 reel?! Ernie: OMFG i am Ytruvius: LOLOL	
Ads by Google  English as a Second Language Learn English in your spare time!	
Educated Eye for the Retarded Guy Double your smarts and breach that 100 IQ barrier!	
Emie: OMG wat was that?!?!?!11 Ytruvius: LOLOLOL	
	Add friend

PYRIGHTS) 2005 J.D. "IIIIad" Frazer MTIP://WTMW.USERFRIENDLY.ORG/

## Big Brother's Watching You







## Suggested Reading

- ♦ 501 Web Site Secrets by Michael Miller
- Google: The Missing Manual by Sarah Milstein & Rael Dornfest
- Google and Other Search Engines by Diane Poremsky
- ◆ The Information Searcher's Guide to Searching and Researching on the Internet + W3 by Ernest Ackermann & Karen Hartman
- ♦ Learn Google by Michael Busby
- ♦ *The Search* by John Battelle



## This presentation is available at

www.ohiotranslators.org/research.htm

