Present and Future Services for the Digital Library

Searching, Linking, and Meta Tags

By Professor Greg R. Notess

Montana State University-Bozeman

Opportunities & Challenges

- New access to library material
- Reach a larger audience
- Internet access
    - World-wide audience
    - Local access at home and work
- Difficulties
    - Access and discovery
    - Changing technology

India Presentations – Greg Notess

Search Engine Showdown
The Users' Guide
to Web Searching

Search Engines

- **Primary finding tool**
  - But miss many digital collections

- **Ignore most meta tags**

- **Dependent on link patterns**

India Presentations – Greg Notess

Search Engine Showdown
The Users' Guide
to Web Searching

Digital Library Services Should Consider

- Actual current meta tag handling
- Potential future meta tag handling
- Exploring search engines limitations
- Implement alternate finding strategies

Search Engine
Showdown
The Users' Guide
to Web Searching

Searching Digital Libraries

- **Literature focus on**
  - Internal search
    - Gustman 2002
  - Specialized search of groups
    - Detlor and Arsenault 2002
    - Petinot, et. al. 2003
  - Distributed digital library
    - Nicholson and Shiri 2003
- **Very important for local users**
  - But very different from general Web search engines

Search Engine Accessible

- No password or IP limit
- Not blocked by robots.txt
- No noindex meta tag
- Linked from elsewhere

Search Engine Showdown
The Users' Guide
to Web Searching

No Robots

- robotstxt.org/wc/robots.html
- /robots.txt file (root directory)

  User-agent: *

  Disallow: /

- No robot meta tag

  ❑ In header

<META NAME="ROBOTS" CONTENT="NOINDEX, NOFOLLOW">

Search Engine
Showdown
The Users' Guide
to Web Searching

Consider two access points

1. ## Home page
   Include metadata for collection

2. ## Every page for each individual record
   Many more, so may be found more

   Each page may become the entry point to the collection

Example 1: Emma Goldman Papers

Berkeley Digital Library SunSITE · · · · · · · · · Home · · · · · · Search · · · · · · Index

The Emma Goldman Papers

About the Project | Overview of Resources | Publications | Primary Documents | Online Exhibit
Emma Goldman and the Project in the News | Supporting the Project | Feedback

EMMA GOLDMAN (1869-1940) stands as a major figure in the history of American radicalism and feminism. An influential and well-known anarchist of her day, Goldman was an early advocate of free speech, birth control, women's equality and independence, and union organization. Her criticism of mandatory conscription of young men into the military during World War I led to a two-year imprisonment, followed by her deportation in 1919. For the rest of her life until her death in 1940, she continued to participate in the social and political movements of her age, from the Russian Revolution to the Spanish Civil War.

PROJECT NEWS:

HOLIDAY LETTER. Read the 2003 holiday letter from the Emma Goldman Papers.

EMMA GOLDMAN PAPERS IN THE NEWS. Read the *New York Times* article from 14 January 2003.

Individual Record Indexed (& Linked)

Letter from Harry Weinberger to Emma Goldman

Harry Weinberger to Emma Goldman, July 12, 1919
•••

[New York] July 12th, 1919

My dear E.G.:-

What your nephew suggests can be done, but it will not gain any results or be of any avail. I h
father correct, that is, first 89, second 94, but the 94 date is the one that counts, and minors,
twenty-one are only benefitted by it. I think, however, that we can rely on Kersner. I have sp
three days this week, finishing up the law on that end, and though the thread is weak, it may h
have to take into consideration the prejudice that we will meet, though that itself may even be
snapping the thread will appear like persecution and not like law.

India Presentations — Greg Notess

Example 2: Pali-English Dictionary

DIGITAL DICTIONARIES OF SOUTH ASIA

About the Dictionary	Front Matter	Back to DDSA

Pali Text Society, London

THE PALI TEXT SOCIETY'S PALI-ENGLISH DICTIONARY

Search help	Font help

Search for entry words or parts of entry words

Find [   ] ⦿ I do not have a Unicode font installed   ○ I have a Unicode font installed

⦿ Words starting with (Example: jam)   ○ Words ending with (Example: ada)   [Search]

○ Words containing (Example: bona)   ○ Words that match (Example: jambonada)   [Clear]

Search for words or parts of words in the entire dictionary

In or Out of Search Engines?

- Home Page In

Individual Records Not

Digital Dictionaries of South Asia — THE PALI TEXT SOCIETY'S

Previous entry

Appatissa (p. 57) (& appatissa) (adj.) [a + pati + sru] not doc
agarava A II.20; III.7 sq., 14 sq., 247, 439. Appatissa--vasa an un
patissa.

Google™   Advanced Search   Preferences

Appatissa

| Web | Images | Groups | Directory | News |

Searched the web for Appatissa.   Results 1 - 5 of 5.

1. The Compilation 6s
... - As adj. in sag□rava and ag□rava full of reverence toward (with loc.)
and disrespectful; combd with appatissa and sappatissa (obedient). ...
www.buddhadust.org/sutta/dn/33_sangiti/ DN33_the_compilation_6s.htm - 64

2. Quang Duc Homepage - Vietnamese - English Buddhist library
... kính). [2] . Hán: b?t thi?n quán ? ? ?. Pali: appatissa,
không thu?n tùng, không ph?c tùng, hay gây g?. [3 ...
www.tuvienquangduc.net/Kinhdien/ Trungaham/trungah05-49.html - 29k - Su

3. Thu Vien Hoa Sen
... [2] Hán: b?t thi?n quán???. Pali: appatissa, không thu?n tùng,
không ph?c tùng, hay gây g?. [3] Hán: b?t kính tr?ng???. ...
www.thuvienhoasen.org/trungaham-05-049.htm - 26k - Supplemental Result -

4. Welcome to LotusMedia: Kinh Trung A Ham
... [02] Hán: b?t thi?n quán ???. Pali: appatissa, không thu?n tùng,
không ph?c tùng, hay gây g?. [03] Hán: b?t kính tr?ng ???. ...
www.lotusmedia.net/unicode/TrungAHamKinh/ TrungAHam049.htm - 18k - S

5. Quang Duc Homepage - Vietnamese - English Buddhist library
... kính). [2] . Hán: b?t thi?n quán ? ? ?. Pali: appatissa,
không thu?n tùng, không ph?c tùng, hay gây g?. [3 ...
www.phatviet.net/kinh/Trungaham/trungah05-49.html - 25k - Supplemental R

Linking

- Important for getting included
- Search engine optimization
  - Aims to raise relevance scores
  - Ecommerce mostly
- Some strategies can be used by digital libraries

Search Engine
Showdown
The Users' Guide
to Web Searching

For example

- Pali-English dictionary entries
- Not just search form
- Link each record separately from list

India Presentations – Greg Notess

Search Engine
Showdown
The Users' Guide
to Web Searching

Titles

- Important in linking & relevance rank
- Some collections: same title on each record
- Instead, use metadata in title
  - Derived from individual record

India Presentations – Greg Notess

Search Engine Showdown
The Users' Guide to Web Searching

Picture Australia Collection

■ Access to several picture collections

■ Some use picture title as HTML title

■ Others just have

"PICMAN Database – Full Image Display"

Metadata Importance

- Internal navigation
- Internal searching
- Resource discovery
- Different from meta tags

India Presentations – Greg Notess

Meta Tags

- Old Advice: Use to help ranking
- Now: Make no difference
- Hidden in header tag of HTML

`<meta name ="description" content="Text">`

- Dublin Core counterpart

`<meta name ="DC.Description" content="Text">`

Search Engine Showdown
The Users' Guide
to Web Searching

Key Point:

Most search engines ignore and do not index any meta tags

India Presentations – Greg Notess

Search Engine Showdown
The Users' Guide
to Web Searching

Why?

- Most use was spam
- Meta tags did not reflect content
- So . . .
  - Use metadata to create visible descriptions
  - Use meta tags for internal needs

Search Engine Showdown
The Users' Guide
to Web Searching

Searching, Linking, Meta Tags

■ Understanding these helps digital libraries

❑ Help users find resources

❑ Save the time of the searcher

❑ Avoids wasted effort

Search Engine
Showdown
The Users' Guide
to Web Searching