

Lecture 3

Thomas Krichel

2002-05-16

Reading

"Information Architecture" by Louis Rosenfeld and Peter Morville,
O'Reilly 1998

Sensitivity Exercise

What do you hate about a web site?

What do you like about a web site?

All issues to do with that fall into three categories

- Technical
- Look and Feel
- Architecture

Reasons to hate a web site

- Can't find it.
- Page crowded
- Loud colors
- Gratuitous use of technology
- Inappropriate tone
- Designer centred
- Lack of attention to detail

Reasons to like a web site

- useful
- attractive to look at
- thought provoking
- findability
- personalisation

Why is it so difficult

- technical expertise
- graphical design expertise
- overall structure

Information Architecture

determines

- organization
- content
- functionality
 - navigation
 - labeling
 - searching

good architecture is important for the producer

- web site an important point of first contact
- needs to determine overall design before the site is built
- reorganizing a site is costly and difficult

Challenges of Classification

- ambiguity: "a tomato is a red or yellowish fruit with a juicy pulp, used as a vegetable, botanically it is a berry."
- heterogeneity
 - in a library
 - on a web site
 - * granularity
 - * format
- difference in perspective
- internal politics

organizational schemes

- exact schemes
 - alphabetical
 - chronological
 - geographical
- ambiguous schemes
 - topical: should be there, but not the only scheme
 - task-oriented
 - audience-specific: open or closed
 - metaphor-driven: not as overall organization
- hybrid schemes: confusion guaranteed.

the mixed up library

adult

arts and humanities

community center

get a library card

learn about our library

science

teen

youth

organizational forms: designing hierarchies

- keep balance between breath and depth
- obey 7 ± 2 rule horizontally, no more than 5 levels vertically
- cross-link ambiguous items if really necessary
- keep new sites shallow

organizational forms: designing hypertext

- great flexibility
- great potential for confusion
- not good as a prime organizational structure

organizational forms: database approach

- powerful for searching
- useful if there is controlled vocabulary
- easy reorganization
- on the fly or static generation of pages
- not for heterogenous data

Navigation aids

- provide context
- allow for flexibility of movement
- support associative learning
- danger of overwhelming the user

browser navigation aids

- open
- back
- forward
- history
- bookmarks
- prospective view
- visited url color

sites should not corrupt the browser.

context building

the “you are here” mark

- pages should indicate site name
- navigation should be consistent
- navigation not to refer to current pages
- highlight current page in a different way

allow for lateral navigation

types of navigation systems

- global hierarchical navigation systems
 - text
 - icon
- local navigation systems: integration with global system can be challenging
- ad hoc navigation: clear labels are required

frames

problematic

- real estate
- speed of display
- page model
- complex design

remote navigation system I

- table of contents
 - good in a hierarchical web site
 - reinforce the hierarchy
 - facilitate known-item access
 - resist temptation to overwhelm user
- indexes
 - presents key term without hierarchy
 - key terms found from search behavior
 - links terms to final destination pages
 - use term rotation

remote navigation systems II

- site maps
 - is a graphical representation of the site's contents
 - new because no equivalent in print
 - there are automated tools to generate site maps
 - seldomly well-done
 - to be kept simple
- guided tours
 - important for sites with restricted access
 - should feature linear navigation

labelling

a label is short expression that represents a larger set of information.

example: "contact us"

labelling is an outgrowth of site organization, that we have discussed previously. labelling communicates the organization.

why bother

- we need to guess at how users respond to a label
- users will not spend much time interpreting the label
- appropriate tone, no "hot", "cool", "stuff"
- danger of designer-centered thinking: should reflect thinking of the user, not of the owner
- it is easy to have unplanned labelling

sticking with the familiar

- main, main page, home, home page
- search, find
- browse
- contact, contact us, feedback
- Help, FAQ, Frequently Asked Questions
- About, About Us, About *name*

Labels may be augmented with scope notes

grammatical consistency

- contact us, search our site, browse our content
- contact, search, browse
- contact information, search page, table of contents

labels as indexing terms

- use in `<meta>` tags, or in `<title>` tag
- use as controlled vocabulary in the database

some search engines do not use metadata

textual label

born in *Vöklingen, (Saarland)* in 1965, I studied Economics and Social Sciences at the universities of *Toulouse, Paris, Exeter* and *Leicester*. Between February 1993 and April 2001 I lectured in the *Department of Economics* at the *University of Surrey*. In 1993 I founded *NetEc*, a consortium of Internet projects for academic economists. In 1997, I founded the *RePEc* dataset to document Economics. Between October and December 2000, I held a visiting professorship at *Hitotsubashi University*.

labels as headings

good practice:

- consistency in terminology: wording on labels is uniform and cohesive
- consistency in granularity
 - chunks covered by labels at the same level is roughly equal
 - chunks covered do not vary by their depth

iconic labels

- a limited “vocabulary” of commonly understood labels
- fine for some key concepts
- need to be very consistently placed
- can communicate a graphic identity for the page
- are easy to find on a page (provided that page is not long)

setting up a good labeling system I

- start from existing one
 - put in table or tree (on paper)
 - make small changes towards consistency
- “benevolent plagiarism” from competitors and academic sites
- use controlled vocabularies, example yellow pages

setting up a good labeling system II

- use a thesaurus, example legislative indexing vocabulary
 - “see” link
 - “see also” links
 - broader terms
 - narrower terms
- labels from contents: best judged by an outsider
- labels from query logs
- labels from user interviews
- labels from modeling user needs

fine tuning a labelling system

- remove duplicates
- sort alphabetically
- homogenize case and punctuation and grammar
- remove synonyms according to audience
- make labels as different from one another as possible
- search for gaps
- look into the future
- keep scope focussed
- consider granularity

why not make a site searchable

- not a tool to satisfy all user's needs
- not good on poor contents
- not a cure for bad browsing!
- needs good planning

why make a site searchable

- cope with bad organization (Foyle's)
- dynamic contents
- large contents

user needs

- some want overview, others want detail
- some need accuracy, others don' care much
- some can wait, others need it now
- some need some info, others need a comprehensive answer

user's searching expectation

- known item searching
- existence searching
- exploratory searching
- comprehensive searching

integrated searching and browsing

- literature deals with single systems
- browsing and searching in a single system
- multiple iteration
- associative learning

things to consider when designing search interfaces I

- level of expertise
 - boolean?
 - concept search?
- amount returned
 - comprehensive?
 - verbose?
- how much to search

all this makes for a lot of problems

things to consider when designing search interfaces II

- search target
 - navigation pages?
 - HTML only?
- are there specific types of data that users will want
- multi-lingual?
- audience difference

features of sophisticated search engines

- fielded searches
- query languages
- reusable results set
- customizable relevance

deal with problems

- getting too much: suggest boolean AND
- getting nothing: suggest boolean OR or truncation
- bad answers: suggest to contact an expert

engines

- swish-e, swish++
- excite
- ht/dig
- roads