Information Architecture & Findability, The Future of Search

Peter Morville (Semantic Studios)

Resum

Interface stands on the shoulders of infrastructure. User experience relies on the foundation systems of information architecture. And, the biggest problem on today's web sites and intranets is findability. In this fast-paced session, Peter Morville covers information architecture best practices, explaining how search and navigation systems can be designed to support and shape user behavior, and he explores the emerging future present of ambient findability, a world at the crossroads of ubiquitous computing and the Internet, in which we can find anyone or anything from anywhere at anytime.
Information Architecture & Ambient Findability

Information that’s hard to find will remain information that’s hardly found.

Peter Morville, USID'07, Barcelona
Peter Morville

Background
• Library and Information Science
• Information Architecture Pioneer
• Adjunct Faculty, University of Michigan

Current Roles
• President, Semantic Studios
• Co-Founder, Information Architecture Institute
• Author, Ambient Findability (2005)
in•for•ma•tion ar•chi•tec•ture n.

• The structural design of shared information environments.

• The combination of organization, labeling, search, and navigation systems in web sites and intranets.

• The art and science of shaping information products and experiences to support usability and findability.

• An emerging discipline and community of practice focused on bringing principles of design and architecture to the digital landscape.
Academic Programs

Schools, Departments and Interdisciplinary Programs

Three of Stanford's seven schools offer undergraduate and graduate programs: Earth Sciences, Engineering and Humanities and Sciences. The other four schools offer graduate programs: Business, Education, Law and Medicine.

A complete list of academic departments is available both alphabetically and by school. In addition, a number of interdisciplinary programs cross the boundaries between departments and disciplines.

4.06.05
When 15 Stanford civil and environmental engineering students started their Design for a Sustainable World class March 29, they had little doubt their coursework would remain meaningful after finals. This student-run and organized class, advised by civil and environmental
FREE HIGHLIGHTS - 8/24/2004

Buying a 2004 vs. 2005 vehicle
We separate the facts from the myths.

Back to School Guide
We help you find the best gear for the new school year.

Calculator: Homeowners insurance
Find out how much coverage you really need.

Recall: Britax child car seats
Britax has recalled 356,000 car seats. Find out why and what to do.

Protect yourself online
Kenmore Elite K2 refrigerator
Suzuki lawsuit dismissed
Car-wash convenience
Best new & used car deals
HomeFront: An emergency guide

----------

CRXtra
The Elements of User Experience

A basic duality: The Web was originally conceived as a hypertextual information space; but the development of increasingly sophisticated front- and back-end technologies has fostered its use as a remote software interface. This dual nature has led to much confusion, as user experience practitioners have attempted to adapt their terminology to cases beyond the scope of its original application. The goal of this document is to define some of these terms within their appropriate contexts, and to clarify the underlying relationships among these various elements.

Web as software interface

Visual Design: graphic treatment of interface elements (the "look" in "look-and-feel")
Interface Design: as in traditional HCI, design of interface elements to facilitate user interaction with functionality
Information Design: in the Tuftean sense: designing the presentation of information to facilitate understanding
Interaction Design: development of application flows to facilitate user tasks, defining how the user interacts with site functionality
Functional Specifications: "feature set": detailed descriptions of functionality the site must include in order to meet user needs
User Needs: externally derived goals for the site; identified through user research, ethno/techno/psychographics, etc.
Site Objectives: business, creative, or other internally derived goals for the site

Web as hypertext system

Visual Design: visual treatment of text, graphic page elements and navigational components
Navigation Design: design of interface elements to facilitate the user's movement through the information architecture
Information Design: in the Tuftean sense: designing the presentation of information to facilitate understanding
Information Architecture: structural design of the information space to facilitate intuitive access to content
Content Requirements: definition of content elements required in the site in order to meet user needs
User Needs: externally derived goals for the site; identified through user research, ethno/techno/psychographics, etc.
Site Objectives: business, creative, or other internally derived goals for the site

This picture is incomplete: The model outlined here does not account for secondary considerations (such as those arising during technical or content development) that may influence decisions during user experience development. Also, this model does not describe a development process, nor does it define roles within a user experience development team. Rather, it seeks to define the key considerations that go into the development of user experience on the Web today.
useful
usable
desirable
valuable
findable
accessible
credible
Findability Facts

- For every search on cancer.gov, there are over 100 cancer-related searches on public search engines.
- Of these searches, 70% are on specific types of cancer.
find·a·bil·i·ty \( n \)

The quality of being locatable or navigable.

The degree to which an object is easy to discover or locate.

The degree to which a system or environment supports wayfinding, navigation, and retrieval.

am·bi·ent \( adj \)

Surrounding; encircling; enveloping (e.g., ambient air)

the ability to find anyone or anything from anywhere at anytime
Chained Libraries

In the Middle Ages there were few books, and those that did exist were usually kept locked in chests or cupboards, or chained to desks in a church.

“This book belongs to the monastery of St. Mary of Robert's Bridge, whosoever shall steal it, sell it or in any way alienate it from this house, or mutilate it, let him be forever cursed.”
“I love what Carnegie did, but the weakness of his model is that he only thought about one country. The need for education, and children’s love of reading, are both forces that are universal.”
A wealth of information creates a poverty of attention.

Herbert Simon, Nobel Laureate Economist
The Ambient Orb™ subtly shifts colors according to user-defined thresholds of portfolio changes, and blinks when additional thresholds are reached.

David Rose
ambientdevices.com

The Ambient Pinwheel™ spins to show when users have received emails from people on their buddy list, and spins faster for each additional email.

The problem:
Ira, 54, an investor, typically spends a few minutes every hour checking the status of his portfolio, either going online or watching a stock ticker on TV.

the solution:

The Ambient Healthwatch™ slowly lights prescription-related icons in accordance with doctor recommended medication times.

the problem:
Ruth, 75, a retiree, has had her medication needs increase as she has gotten older. She often has to refer to a schedule or get a daily reminder from her doctor in order to take the correct pill at the correct time. This dependence makes her feel a little bit anxious.

the solution:

The Ambient Pen™ changes color when user-defined associates voicemail to the user.

the problem:
Mike, 35, a manager, often entertains business development candidates out of the office while waiting for important communications from current clients.

the solution:

With the Healthwatch™, Ruth is reminded when to take her medications without having to check anything or be nagged by anyone, reinforcing her sense of independence.

With the Ambient Pinwheel™, Maureen is confident that important emails await her prior to logging on and checking her email.
1. Head southeast from Harbor Drive - go 0.2 mi
2. Turn left into the entry ramp to I-90 West (I-93) - go 0.2 mi
3. Merge onto I-90 W - go 5.9 mi
4. Take exit 20 to Brighton/Cambridge - go 0.2 mi
5. Bear right onto the ramp to Cambridge/Somerville - go 0.2 mi
6. Bear right at Cambridge St - go 203 ft
7. Turn left at Soldiers Field Rd - go 0.2 mi
8. Take the Soldiers Field Rd ramp - go 0.1 mi
9. Continue on Soldiers Field Rd - go 0.8 mi
10. Continue on Elliot Brg toward Arlington (US-3)/Fresh Pond Pkwy. (RT-2) - go 0.3 mi
11. Turn left at Greengough Blvd and head toward Watertown - go 0.1 mi
12. Turn left and head toward Greengough Blvd - go 103 ft
13. Turn left at Greengough Blvd - go 193 ft
14. Bear right and head toward Elliot Brg - go 0.1 mi
15. Bear right at Elliot Brg - go 0.2 mi
16. Continue on Soldiers Field Rd - go 0.2 mi
Automatic Locates
Schedule an "automatic locate" to see where your child is at a given time.

Breadcrumbs Feature
This feature is great for identifying a specific route or series of destinations.
Cisco Wireless Location Appliance

“A quick glance at the screen shows exactly where the tagged wheelchairs are located...Patients wait no more than a few minutes for a wheelchair, and we save $28,000 a month by eliminating searches.”
Jennifer Tomblin and Amal Graafstra have implanted RFID chips that would allow them unfettered access to each other’s lives. The couple have implanted RFID chip under their skin so that they can access each other’s computers and front doors. The system functions like a key card, a simple swipe of the wrist across an electronic sensor and they are in. The couple believes that their decision is a modern declaration of love. http://amal.net/RFID.html
Reciprocal Transparency

“In the information age to come, cameras and databases will sprout like poppies – or weeds – whether we like it or not. Over the long haul, we as a people must decide the following questions:

Can we stand living exposed to scrutiny, our secrets laid open, if in return we get flashlights of our own that we can shine on anyone who might do us harm – even the arrogant and strong?

Or is an illusion of privacy worth any price, even the cost of surrendering our own right to pierce the schemes of the powerful?”
Metadata
morville@semanticstudios.com
The old way creates a tree.
The new rakes leaves together.

David Weinberger
(Not) Everything is Miscellaneous
May 2, 2007

To the librarians. So begins Everything is Miscellaneous, David Weinberger’s mesmerizing new book about organization, authority, and knowledge. I received my advance copy last week and read it in a single day. I found it interesting and inspiring, and I recommend it highly.

But, I don’t agree that everything is or will be or should be miscellaneous, and I don’t believe David is entirely fair to librarians, information architects, and other professional organizers.

The troubles begin with David’s taxonomy which divides the history of organization into a first, second, and third order of order. Implicit in this taxonomy lies the assertion of linear progress, a lossless swap of old for new, similar to the

Most Recent Comments

Peter Morville said:
“David, thanks for responding so quickly during what must be a very busy, exciting time. I do think we…”
May 3, 2007

David Weinberger said:
“In terms of emphasis, I’m sure you’re right. (I’m not sure I like your implied activity of “lumping hairs…”
May 4, 2007

Edward Vielmetti said:
“I wonder what the crossover between information architects and professional organizers (the sort of folks…”
May 8, 2007
HOW BUILDINGS LEARN
What happens after they’re built

New Orleans, 1857

The same two buildings, 1993

STEWART BRAND
Learns, Proposes, Innovates, Gets All The Attention

Remembers, Disposes, Integrates, Has All The Power
Description

These adorable little maryjane booties are crocheted with 100% cotton yarn, and button on the side to keep them on wiggly feet. The gingham bow and buttons are sewn down firmly for safety. These should fit babies approximately 0-6 months. Machine wash delicate in cold water, air dry.

Materials: buttons, ribbon, yarn, cotton

Tags: shower, gingham, shoes, slippers, maryjanes, jane, mary, booties, baby, black, pink
“Search has become the new interface of commerce.”

John Battelle
Search 'psycholinguistic': Psycholinguistics 🔴 : Children 🔴
We found 47 matching items. Limit results to currently available items.

Narrow By Call Number Range:
- D - Philosophy, Psychology, Religion (10)
- L - Education (6)
- P - Language and Literature (26)
- Q - Science (2)
- R - Medicine (2)
- Z - Bibliography, Library Science, Information resources (ge .. (1)

Narrow Results By:
Subject: Topic
- Language (46)
- Language and languages (9)
- Language acquisition (6)
- Cognition in children (4)
- Speech disorders (4)

Subject: Genre
- Congresses (4)
- Bibliography (1)
- Case studies (1)
- Cross-cultural studies (1)
- Video recordings for the hearing impaired (1)

Format
- Book (46)
- Online (2)
- Videos and DVDs (1)

Library
- Online Resources (2)
- D.H. Hill (31)
- Satellite Shelving (19)

Brief View | Full View
1. **Genie: a psycholinguistic study of a modern-day "wild child"**
   - **Author:** Curtiss, Susan R.
   - **Published:** 1977.
   - **Format:** Book
   - **D.H. Hill Library**
   - P118 .C8 1976
   - Stacks (8th floor)
   - Available

2. **Children's speech and literacy difficulties [electronic resource]: a psycholinguistic framework**
   - **Author:** Stackhouse, Joy.
   - **Published:** 1997.
   - **Format:** eBook
   - **Online:** View resource online

3. **Children's explanations: a psycholinguistic study**
   - **Author:** Donaldson, Morag L.
   - **Published:** 1985.
   - **Format:** Book
   - **D.H. Hill Library**
   - BF463 .M4 D66 1985
   - Stacks (3rd floor)
   - Available

4. **Developmental reading, K-8: teaching from a psycholinguistic perspective**
   - **Author:** Hillemann, Daniel R.
   - **Published:** c1983.
   - **Format:** Book
   - **Satellite Shelving Facility**
The Garden of Forking Paths was the chaotic novel itself. The phrase ‘to various future times, but not to all’ suggested the image of bifurcating in time, not in space. Reading the whole work confirmed this theory. In all fiction, when a man is faced with alternatives he chooses one at the expense of the others. In the almost unfathomable Ts’ui Pên, he chooses—simultaneously—all of them. He thus creates various futures, various times which start others that will in their turn branch out and bifurcate in other times. This is the cause of the contradictions in the novel.

“Fang, let us say, has a secret. A stranger knocks at his door. Fang makes up his mind to kill him. Naturally there are various possible outcomes. Fang can kill the intruder, the intruder can kill Fang, both can be saved, both can die and so on and so on. In Ts’ui Pên’s work, all the possible solutions occur, each one being the point of departure for other bifurcations. Sometimes the pathways of this labyrinth

Buy this Book
Series: CNN News Update
Episode: CNN News Update (1-16-2006 11 AM EST) - The latest news happenings in the U.S. and around the world.

0:02:42 ... the pakistani border turkey confirms a girl – died from the flu tested positive for bird flu that brings the country’s death toll from the virus to four. The golden globe awards are tonight brokeback mountain is the leading contender with seven nominations. This is CNN radio. Bad news for doctors and for anyone catching the garden variety -- with the government -- to two anti viral drugs used with success in recent years against the flu not can be prescribed. Why because the dominant flu strain now circulating in the US has developed -- resistance to the -- the two drugs are lamented in an -- ...

0:03:45 ... at least a billion dollars from a variety of countries to fight bird -- the world bank estimates it'll take about a billion and a half dollars over the next three years to -- bird -- from becoming a pandemic -- jim -- mrs. CNN radio Yeah ...
Personal, Social, Profiles, Relationships, Tags, Bookmarks, Behavior, Social Search
50
morville@semanticstudios.com

Google

“55 million blogs... some of them have to be good.”
- Matt
Jorge Luis Borges

Jorge Luis Borges (IPA: /ˈxoɾxe ˈbɔrxe/, börˈxez) (August 24, 1899 – June 14, 1986) was an Argentine writer who is considered to be one of the foremost writers of the 20th century. Best-known in the English speaking world for his short stories and fictive essays, Borges was also a poet, critic, and man of letters.

Life

Youth

Borges was born in Buenos Aires. His father, Jorge Guillermo Borges, was a lawyer and a psychology teacher, who also had literary aspirations ("he tried to become a writer and failed in the attempt", Borges once said, "He composed some very good sonnets"). Borges's mother, Leonor Acevedo Suárez, learned English from her husband and worked professionally as a translator. His father's family was part Spanish, Portuguese, and British; his mother's Spanish, and possibly Portuguese. At his home, both Spanish and English were spoken, so from earliest childhood Borges was effectively bilingual, and learned to read in English before Spanish. He grew up in the suburban neighborhood of Palermo in a large house with an extensive library.

Borges's full name was Jorge Francisco Isidoro Luis Borges Acevedo but, following Argentine custom, he never
Julian Bleecker

**A Manifesto for Networked Objects**
– Cohabiting with Pigeons, Arphids and Aibos in the Internet of Things

Blogjects:
Objects That Blog
See Also: Ubiquitous Findable Objects by Peter Morville
The Story of the 3 Stone Cutters

1. I am making a living.

2. I am doing the best job of stone cutting in the county.

3. I am building a cathedral.
The Future of Libraries and Collections, Reg Carr
http://www.bodley.ox.ac.uk/librarian/fiesole/fiesole.htm
IA Therefore I Am

Peter Morville
morville@semanticstudios.com

Semantic Studios
http://semanticstudios.com/

Ambient Findability
http://findability.org/

IA Institute
http://iainstitute.org/

This Presentation
http://semanticstudios.com/usid1.pdf