



Folk Taxonomies

Early in the 1990s, Tim Berners-Lee had a powerful idea—the concept of the World Wide Web. He describes its origins in *Weaving the Web*, observing that “What was difficult for people to understand was that there was nothing else beyond URLs and HTML. There was no central computer controlling the Web ... not even an organization that ran the Web.” The Web simply consisted of, in the felicitous title of David Weinberger's latest book, *Small Pieces Loosely Joined*.

The success of this vision produced an unparalleled explosion of information. This resulted in a parallel problem that everyone has encountered—how to locate the right piece of information. A 2005 study by Hanson and Carlson, published by the Educational Development Center identified the time required to locate resources as the number one factor affecting teachers' use of the Web. (*Editor's note:* For this and other URLs, see Resources on p. 23.)

There are several strategies for identifying useful information. One of the more interesting approaches is based on the ability of the Web to aggregate patterns of information contributed by many individuals. A number of Web-based tools currently under development rely on this approach.

The social bookmarking tool del.icio.us and the image site Flickr are two examples of this emergent technology. These tools allow users to assign their own descriptors to links (in the case of del.icio.us) and images (in the case of Flickr). The patterns that emerge can be described as a *folk taxonomy* or collective categories created by the lay populace. Thomas Vander

Wal employed the term *folksonomy* to describe the type of collaborative categorization that becomes possible under these conditions.

A Taxonomy through Social Bookmarks

Del.icio.us allows users to store their bookmarks on a central site. This allows them to access their bookmarks from multiple computers at different locations. A number of past bookmarking services have offered this capability.

However, the del.icio.us bookmarking tool goes a step further. It allows users to assign labels known as tags to stored bookmarks. Rather than creating a hierarchy of folders in the manner of the local Favorites folder in Internet Explorer, users can recall bookmarks through searches on sets of tags. This is a significantly different way of organizing and accessing bookmarks.

The del.icio.us site employs choices that users themselves create rather than attempting to establish uniformity through an official list of descriptors that professional catalogers assign. The Web site aggregates the user-generated choices. Users can view popular Web pages for any given topic or area on the site.

The distinction between the top-down hierarchical view in the Internet Explorer Favorites bookmarks and the flat view of bookmarks accessed through tag searches in del.icio.us parallels the top-down Yahoo hierarchy and the Google search mechanism, but at a personal level.

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By Glen Bull

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Joshua Schachter, creator of the del.icio.us tool, decided to allow other users access to the data generated in this manner. As a result, dozens of user-generated tools are being developed, with names like populicio.us and trendalicio.us. Many of these are listed on the Absolutely Delicious Tools site and are well worth exploration.

A Taxonomy of Tagging Images

The Flickr photosharing site applies the same concept of collaborative tagging to images that del.icio.us employs for collaborative bookmarks. Like del.icio.us, it also provides third-party access to the tags. A similar industry of user-generated tools that make use of the Flickr tags is flourishing. For instance, a word tool developed for Flickr allows students to enter words that are spelled out using letters drawn from the image collection.



Teachers in all classes now can have access to countless instances of signs for any letter. Another tool, Mappr, allows users to search on a tag and see a geographic distribution of images that have been taken by Flickr users. For example, students in a botany class could click on the name of a plant such as “oak” and see an array of images of oaks taken in sites across the country. Many of these Flickr tools are listed on The Great Flickr Tool Collection site. They also merit exploration.

Transcending the Card Catalog

In the case of both Flickr and del.icio.us, the combination of user-assigned tags and third-party tools makes it possible to transcend the limits of a physical catalog. By aggregating the cataloging decisions of many individual users, useful patterns of information can emerge.

Clay Shirky, a professor at New York University, has written extensively about the implications. An exemplary podcast captures his perspective on the transition of the card catalog from physical atoms to electronic bits.

The most popular search engine, Google, was based on a precedent-breaking approach. Rather than hiring expert catalogers to organize an exponentially growing mass of online information, the developers created a search engine based on the way that documents are linked to one another. Google used the structure of the Web itself as a mechanism for accessing information within it.

Google, Flickr, del.icio.us, and the very Web itself are fundamentally about implications of loose connections among information. The Web offers the capability for aggregating independent decisions made by diverse groups of individuals. Dozens of experiments are now taking place that capitalize on this capability. It takes time to adjust to the implications of removing the physical catalog. However, the promise of the Web will be realized as we begin to make this transition.

Resources

- Absolutely Delicious Tools: <http://pchere.blogspot.com/2005/02/absolutely-delicious-complete-tool.html>
- Clay Shirky Podcast—Ontology is Overrated: <http://www.itconversations.com/shows/detail470.html>
- Delicious Bookmarking Tool: <http://del.icio.us>
- Effective Access: Teachers' Use of Digital Resources* by K. Hanson & B. Carlson. (2005). Educational Development Center, Inc. Available: <http://www2.edc.org/GDI/>
- Flickr Photosharing Site: <http://www.flickr.com>
- The Great Flickr Tool Collection: <http://pchere.blogspot.com/2005/03/great-flickr-tools-collection.html>
- Mappr: <http://www.mappr.com>
- Spell with Flickr: <http://metaatem.net/words.php>
- Thomas Vander Wal: <http://www.vanderwal.net/>

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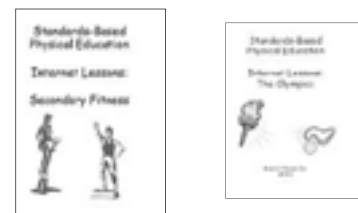


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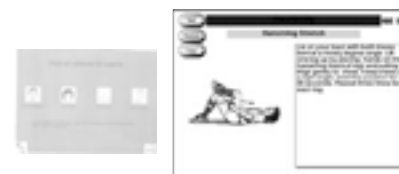
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