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Digg.com and Socially-Driven Authority

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For years, librarians have been able to distill the notion of authority, in its purest form, to two simple questions: "Who said it?" and "Under whose auspices?" The answer to either, or preferably both, of these questions could tell a researcher whether to rely on the information retrieved. Thus, if the person making a statement was an expert, then you could probably trust what he or she said. If something was written in a respected, reputable journal, then it was probably trustworthy.

The Dictionary for Library and Information Science defines "authority" as:

The knowledge and experience qualifying a person to write or speak as an expert on a given subject. In the academic community, authority is based on credentials, previously published works on the subject, institutional affiliation, awards, imprint, reviews, patterns of citations, etc. (Reitz 53)

This model, a vast oversimplification of a rather complex process, was successful because a certain degree of knowledge (knowledge of the source or knowledge of the speaker) could be used to extrapolate the authority of the work. A researcher did not necessarily have to know the theory behind particle physics to determine if someone was considered an expert in the field, nor did familiarity with the core physics journals require mastery of the field itself.

Today, however, in the world of online information, the notion of authority is shifting and librarians working in an instructional capacity must understand the shift and determine ways to help students cope with the changes. Searching in today's socially-driven information era requires a different skill set for researchers looking for authoritative information. Formal gatekeepers, like the journal editors upon whom researchers once depended, can now be bypassed rather easily. Online community participants as a whole now often serve as de facto editors. When a publication comes out of a traditional peer-review/editorial process, researchers can make assumptions about the quality of the article based on the authority of the journal or author. But

for items found on sites lacking a traditional editorial process, such as social news sites, that authority context is often missing. In these sites, establishing quality and authority requires more sophisticated evaluation skills. In addition to determining just who the online writer is, researchers must also determine if what that writer is saying is accurate and original.

On social news sites, links to other sites are posted, usually with a brief description of the link, and then voted on. Participants often link to sites and news items they created themselves, such as personal web log (blog) postings. Reader interaction gives social news sites their social element, as compared to traditional news sites, which feature stories written by professionals and selected by editors (Ryan). These social news sites, such as Digg.com, Slashdot.org, and Netscape.com, are changing the nature of authority and how we understand it. Social news sites provide more varied access to information than traditional news sources, but also provide less of a filter. Authority in traditional news is primarily based on editorial control and author reputation, and then confirmed by the quantity and quality of citations and responses. The power structure has shifted in social news sites, where authority is primarily based on votes for and links to posted items—social websites' versions of a traditional citation. Authority can also derive from posters' reputations—but generally not from editorial or publishing control. In social news, the power to confer authority has shifted from gatekeepers (editors and the power to publish; the academy and the power to recognize expertise) to the end-user. In these cases, a socially-derived authority is created, based not on power but popularity.

Nowhere is this more evident than in the Digg model. Digg is a news site that lets readers submit links to other blogs and news sites (along with a short description of the link), and vote on articles. If a reader registered with the site likes a story, he or she clicks a button that says "digg it," thereby casting a vote for the article. If the reader does not like a story, he or she clicks a "bury" link, voting against it. Articles with the most votes (or "diggs") show up on the front page of the site. Articles may come from respected journals and newspapers but are just as likely to come from blogs or personal websites. The people writing these articles may be experts in their field but may just as easily be lay people with an interesting perspective that has captured the fancy of Digg users. In the Digg model, authority does not necessarily derive from who wrote something or where it was published. Instead, authority comes from whether readers like a work enough to vote for it. Hence, socially-driven authority.

Digg continues to grow in popularity. Its founder, Kevin Rose, was featured on the cover of the August 14, 2006 Business Week (Lacy and Hempel). As of April 2006, the site had 180,000 registered users (registered users can suggest and vote on stories, but anyone can read the selected articles) and served 6 million pages a day (Heilemann). According to Nielsen/NetRatings, Digg saw 1.14 million unique visitors in March 2006 (Kopytoff). Interestingly, that figure was roughly comparable to the 1.36 million unique visitors to Digg's competitor, Slashdot.org. To put those numbers in perspective, CNN.com gets around 22.4 million unique users a month (Fabrikant).

Slashdot.org is a social news site similar to Digg. On Slashdot, readers create accounts and submit stories found on other sites that they find interesting (usually of a technological nature). However, the sites differ in that Slashdot stories must be approved by Slashdot editors. Slashdot has a more traditional authority structure, with editors providing the authority—and often the content (Weber). If the editors allow an article space on the front page, it is because the article met internal standards. Because Slashdot is a community-driven site, with registered users commenting on stories and then rating the comments, one can assume that the editors post articles in line with community standards, but since the article posting process is not itself community driven, as it is on Digg, there is really no way to know for sure. Thus, the editors of Slashdot could decide to post only articles about, say, personal productivity, and the front page content would change accordingly. For this to happen on Digg, a majority of the registered users would have to vote consistently for personal productivity articles.

According to the controversial web-metric Alexa.com, as of November 2006, Digg.com is the 21st most popular American site, while Slashdot is the 61st most popular. (Alexa ratings are often considered controversial because they rely on data from Alexa toolbar users, who may not be a population representative of all Internet users [Bogatin].) CNN.com was ranked 10th and the NYTimes.com was ranked 19th. Factor in AOL's launch of Goo, a comparable product at Netscape.com, and the concept of social news, voted on by the masses, seems to be moving from niche to mainstream.

The search engine Google has long been a practitioner of a type of results ranking similar to Digg's socially-derived authority. While Google protects the details of the algorithm it uses to rank search results, we know that it factors in how many people link to a certain page. More links to a page improve the page's position on the Google results list. Hence, Google results are based on a combination of relevancy and popularity, while results from a traditional database are only based on relevancy (Google). This distinction becomes obvious when a site changes URLs, but people do not update their links. A search for the site will then return the old address ahead of the more recent one. In such a case, popularity trumps accuracy.

For librarians, the challenge is not so much helping patrons to find materials, because products like Digg and Google making finding materials relatively straightforward, but teaching patrons to evaluate what they are finding and how they were found. This challenge becomes even more important in light of what is known about student searching behavior. Heinström reported that insecure searchers tend to be quick researchers, "resulting in descisions based on early-received information. They are less prone to change their views and accept new information" (Heinström). For the inexperienced researcher, it can be seductively reassuring to find a page like Digg and see that 300 people have agreed with an article. Those votes can lend authority to the page that is being linked to. With so many endorsements behind a link, individual, independent evaluation of the page can easily become an afterthought.

For instructional librarians engaged in inquiry-based learning, social news sites like Digg can present intriguing learning opportunities. Because they are vibrant, dynamic environments that shift and evolve as quickly as headlines change, social news sites can present students with information and viewpoints not available to them through mainstream channels. But of course, any inquiry must be tempered with scaffolding to help students build an understanding of what they are looking at and how it got there (Lim 637). There is also a social element to the learning taking place, in that students interact with the thoughts and comments of others. According to Paavola, Lipponen, and Hakkarainen:

> In a shared problem-solving process, agents who have partial but different information about the problem in question appear to improve their understanding collectively through social interaction. Accordingly, new ideas and innovations emerge between rather than within people. (emphasis original; 564)

This raises the question of if it is possible for the knowledge creation to take place between the sites being studied and the students studying them. Greeno argues this is possible, writing that while a student can study a textbook or computer program alone, the activity is "shaped by the social arrangements that produced the textbook or the computer program, led the student's being enrolled in the class where the text or program was assigned, and provided the setting in which the student's learning will make a difference in how the student participates in some social activity, such as a class discussion or a test" (9-10).

So it seems that at the very least student learning is impacted by interactions with resources found via Digg, with the comments from the Digg site perhaps providing a degree of social interaction beyond what would be offered by a textbook or traditional news site. This system of links and comments found in social news environments is reminiscent of what Ziman called the "Invisible College" in 1968. Ziman argued that socially constructed knowledge does deserve a seat at the academic table:

> Far from being the sum of independent, individual researches, the continuous compilation of innumerable disconnected facts, observations and theories, scientific knowledge is the joint social product of the members of these 'Invisible Colleges', whose intercourse is through the citations that they award one another, however seldom they meet face to face. (61)

Librarians must respond to the challenge of the Invisible College of social news not necessarily by endorsing one approach to information over another but by presenting patrons with the tools required to decide which approach is better for their information needs. Traditional evaluation exercises remain valuable—patrons still need to be taught what constitutes a reliable website. However, librarians might

consider teaching more specific skills to help patrons deconstruct the authority of a site.

For instance, while a major organization such as the American Cancer Society or the World Bank is likely to have a comprehensive "About Us" page, a personal blog discovered through Digg may not have the same type of information. Librarians can teach patrons to conduct background research to discover the name and credentials of a blog or site author. Background-checking strategies could range from a search for an author's name in Lexis-Nexis Academic (a librarian favorite) to a search in Google (a researcher favorite but perhaps best performed by those with more advanced evaluation skills).

For example, John Scoble's blog, http://scobleizer.wordpress.com, is often mentioned on Digg. A researcher finding Scoble's blog via Digg might read the blog's brief biography mentioning Scoble's current employment at a start-up. However, a simple Lexis-Nexis Academic search for Scoble's name reveals that he previously worked at Microsoft, where his blogging on behalf of the company was considered ground-breaking (Reuters). Obviously, his commentary and notes on Microsoft come from a position of authority, but it would be difficult to establish that authority without the additional background and context. That said, Scoble's comments on Microsoft might contain some bias, and a researcher who knows his background can better evaluate Scoble's postings for bias.

This type of evaluation is necessary both because of the nature of web content and because of the nature of human learning. As Weinberg points out:

> If we were traditional knowers or information processors, we would gather evidence, listen to arguments and their justifications, and arrive at knowledge in that order. But the Web is messier and more looping than that. We read backwards and forwards in time, remembering what else we've seen from this person and from others, and anticipating how the story she's telling will unfold. We are not out to grab another handful from a preexisting container of knowledge. Rather, we are using conversation to develop ideas and truths and grand fictions. We are showing one another how the world looks from our perspective—at truth of the body. (141-2)

Librarians should also consider helping patrons to see social news sites as places to begin the research process, but not necessarily as end points. Traditional library instruction tends to begin with patrons being directed to start their research in a subscription database or recommended website. But if students are comfortable in the world of social news, then it might be more helpful to show them how to make the most of their time in those communities. For instance, due to the conversational nature of blogging, blog posts are often responses to something posted on a blog or traditional news site. If a student is interested in a particular post, he or she should be taught how to go back and find the article or statement spurring the comments.

This way, students are being taught to pursue more conventional authority, with the idea that the primary source holds more authority than the commentary on the source, even if the commentary is more popular than the original. In addition to being taught evaluation, students are also being taught how to navigate the online conversation.

For librarians, there is an advantage to teaching students to use social news sites: by learning to deconstruct the news and construct an authority structure, students learn not just to respect authority, as those trained in the world of print indices learned, but also to create their own authority concept. By understanding authority, rather than just recognizing it, students are better prepared to evaluate information from the worlds of print, subscription databases, and the general Internet.

Another advantage to teaching students to create their own authority is that they learn to evaluate content and not just author names and journal titles. The value of this skill can be seen in light of publishing hoaxes, such as Alan D. Sokal's parody of postmodern studies, which was accepted undetected by the journal Social Text (Sokal), and the fictional poet Araki Yasusada's publications in major poetry journals (Nussbaum). If students are taught to depend only on the authority of author names and journal titles, they are at greater risk of accepting content as authoritative, without evaluating the quality of individual works.

The job of the librarian is to help patrons understand the socially-driven authority that is present on services such as Digg, but perhaps absent from the pages to which items on these services link. The days of more conventional authority, from the print index to the microfilm to the article, are long gone for many researchers, especially those just beginning their academic careers. Rather than condemn these popular, growing, online services, it is in the best interests of these communities and their users that librarians help patrons to understand what they are looking at and just how it arrived on their monitors.

Works Cited

Bogatin, Donna. "Digg 3.0, Who Needs The New York Times?" ZDNet 30 June 2006. 21 Sept. 2006 <http://blogs.zdnet.com/micro-markets/?p=187>.

Fabrikant, Geraldine. "CNN Will Add Free Video To Its Web Site." New York Times 16 May 2006. Lexis-Nexis Academic. LaGuardia Community Coll. Lib. Long Island City, NY. 9 Nov. 2006 <http://web.lexis-nexis.com/universe>.

Goo, Sara Kehaulani. "An Eye for Cool, and Cash." Washington Post 26 Aug. 2006. 28 Aug. 2006 <http://www.washingtonpost.com/wp-dyn/content/article/2006/08/25/AR2006082501308_pf.html>.

"Google Technology." Google 31 Aug. 2006. <http://www.google.com/technology/>.

Greeno, James G. "Response: On Claims That Answer the Wrong Questions." *Educational Researcher* (1997). JSTOR. LaGuardia Community Coll. Lib. Long Island City, NY. 12 Mar. 2007 <http://www.jstor.org>.

Heilemann, John. "Digging up the News." *Business 2.0* Apr. 2006: 42-44. Business Source Premier. EBSCOHost. LaGuardia Community Coll. Lib. Long Island City, NY. 28 Aug. 2006 <http://search.ebscohost.com>.

Heinström, Jannica. "The Impact of Personality and Approaches to Learning on Information Behavior." *Information Research* 5.3 (2000). 31 Aug. 2006 <http://www.informationr.net/ir/5-3/paper78.html>.

Kopytoff, Verne. "Populist News Sites Give Readers What They Want; New Tools Measure Buzz, Helping Online Editors Decide If a Story Deserves Better Play." *San Francisco Chronicle* 17 Apr. 2006, sec. Business: E1. Lexis-Nexis Academic. LaGuardia Community Coll. Lib. Long Island City, NY. 28 Aug. 2006 <http://web.lexis-nexis.com/universe>.

Lim, Byung-Ro. "Challenges and Issues in Designing Inquiry on the Web." *British Journal of Educational Technology* 35.5 (2004): 627-43. Professional Development Collection. EBSCOHost. LaGuardia Community Coll. Lib. Long Island City, NY. 28 Aug. 2006 <http://search.ebscohost.com>.

"Microsoft Blogger Headed for Start-Up." Reuters 12 July 2006 . Lexis-Nexis Academic. LaGuardia Community Coll. Lib. Long Island City, NY. 28 Aug. 2006 <http://web.lexis-nexis.com/universe>.

Nussbaum, Emily. "Turning Japanese: The Hiroshima Poetry Hoax." *Lingua Franca: The Review of Academic Life* (1996): 82-84.

Paavola, Sami, Lasse Lipponen, and Kai Hakkarainen. "Models of Innovative Knowledge Communities and Three Metaphors of Learning." *Review of Educational Research* 74.4 (2004). Education Full Text. WilsonWeb. LaGuardia Community Coll. Lib. Long Island City, NY. 19 Feb. 2007 <http://vnweb.hwwilsonweb.com>.

Reitz, Joan M. *Dictionary for Library and Information Science*. Westport, CT: Libraries Unlimited, 2004.

Ryan, Oliver. "The Web's New News Thing." *Fortune* 154.3 (2006): 24-24. Academic Search Premier. 16 October 2006. EBSCOHost. LaGuardia Community Coll. Lib. Long Island City, NY. 28 Aug. 2006 <http://search.ebscohost.com>.

Sokal, Alan D. "A Physicist Experiments with Cultural Studies." *Lingua Franca: The Review of Academic Life* (1996): 62-64.

Weber, Thomas E. "For an Early Glimpse of Web Hot Buttons, Click onto Slashdot."
Wall Street Journal 17 Apr. 2000, Eastern ed.: B1. ProQuest Newspapers. ProQuest.
LaGuardia Community Coll. Lib. Long Island City, NY. 28 Aug. 2006
<http://proquest.umi.com>.

Weinberg, David. *Small Pieces Loosely Joined*. Cambridge, MA: Perseus Publishing,
2002.

Ziman, J.M. *Public Knowledge: An Essay Concerning the Social Dimension of Science*.
Cambridge, England: Cambridge University Press, 1968.