

Join a social revolution

Your bookmarks make your web life manageable. But we can all benefit by sharing them.

Is the big challenge in the Internet era information overload or underload? Those who complain about the former may simply be inadequately organized. Many tools now exist for taming the flow of scientific information on the web, but scientists have been slow to adopt them and are no doubt missing out on gems as a result.

Take, for example, the need to manage the results of a web search. Storing the items selected so that you can easily find them again is often critical. A new generation of 'social bookmarking' services now allow a user to post an article or web page with a single click to a personal web collection and to automatically group them under keyword tags. The 'social' element arises from the fact that these bookmarks can easily be shared over the web, either selectively or publicly.

Three leading examples of such services are del.icio.us (<http://del.icio.us>), CiteULike (www.citeulike.org) and Connotea (www.connotea.org). The last of these is an open-source service produced by *Nature's* publishers, the Nature Publishing Group, and will be used in the following examples, but CiteULike is also tailored for scientists. There is no implication here that one service is better than another. The intention is simply to highlight ways by which readers can make more efficient use of the web and spread their knowledge at the same time.

Users of Connotea say how easy it is to post and tag an article as they are looking at it on, say, Pubmed. And once a user clicks in their browser to send an article to Connotea, the software looks up the various metadata for the article, such as authors, journal volume and page numbers, and adds these to the entry.

Kevin Olbrich, a researcher at Duke University Medical Centre in

Durham, North Carolina, is one enthusiast. A key difference from personal desktop reference software is that many of Olbrich's bookmarks can be viewed by anyone (<http://www.connotea.org/user/kco>), as can those of any user.

Some researchers are reluctant to use such services because they do not want their competitors to see what they are reading. But users can opt to make a bookmark private if they wish. Or they can create a 'group' with other users, and make their bookmarks available only to members of that group.

There is added value here. Whereas a PubMed or Google search will bring back everything that matches a keyword, the fact that a researcher considers an article important enough to post to his or her collection implicitly says something about the likely value of the article. There's no greater sign that an article is important than when a colleague e-mails you to say "Hey, you should see this." Connotea takes the same principle but broadens the group who benefit. Other researchers can be alerted by an RSS feed ([http://en.wikipedia.org/wiki/RSS_\(protocol\)](http://en.wikipedia.org/wiki/RSS_(protocol))).

Such social collections share the effort that people have put into searching. Suppose you are contemplating introducing electronic laboratory notebooks (ELNs) to your laboratory. Search on Google for ELN and you may well find that a Connotea collection is the number one hit. You can thus save effort by using the collection of Connotea links on electronic laboratory notebooks (www.connotea.org/tag/ELNS) discovered by a *Nature* journalist while researching a feature article.

These are early days and suppliers of these services have plenty to learn. But readers are urged to try them out, provide feedback and join the quiet social revolution. ■

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Who owns your work?

A case in the Kansas Supreme Court reflects a lack of clarity in US copyright law.

A decade ago, US universities, infected with the internet mania of the early nineties, convinced themselves that there was a large amount of money to be made in distance education. The online course materials were not subject to patents, which the university typically owns, but to copyright, which traditionally rests with its academics. So a number of schools made attempts to wrest copyright away from the researchers under the doctrine of 'work for hire'.

Under work-for-hire, if you create something for your employer, copyright belongs to the employer. Academics have not traditionally been included in this category because although everyone agrees that they must publish or perish, and that teaching courses is part of the job, the head of a department does not typically request a specific paper or lecture on a specific subject. "Have a 20-page review of

isopod parasites on my desk by Monday" is not the order of the day.

Besides, if the university owns the scholarly output of its faculty, it is also responsible for that output, and might be tempted to shape it, for example when threats of litigation or bad PR loom.

Almost all universities who tried to claim copyright have backed off. In those cases where work-for-hire seems to be particularly applicable — when a faculty member is asked to produce a specific document, for instance — an agreement is often signed waiving the university's right to the copyright.

But an exception in Kansas (see page 1072) has highlighted the uncertainties over ownership of intellectual property in current US law. If the Kansas Supreme Court rules that work-for-hire should apply to academics, this will muddy the waters more. If it does not, it will hardly clarify matters. Tradition hands copyright to academics in most cases, but the law is unclear. The time has come to tidy it up. ■

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