

## Online E-phemera

RECENTLY, an academic colleague showed me a letter of complaint from an undergraduate student who demanded to know why faculty continued to set expensive textbooks for students to purchase when the material needed “is all available for free on the internet”. At one level, the student has a point. The internet is a rich and growing source of text, images, videos, interactive freeware and more of great value to teaching and research. For example, many government reports and statistical databases are available online rather than in print and online historical documents are now accessible to anyone rather than just those few with the opportunity to access physical archives (e.g., my personal favourites <http://showcase.netins.net/web/creative/lincoln.html> and <http://www.oldbaileyonline.org/>). Furthermore, increasing numbers of peer-reviewed research papers are available via open access, whereby authors, their institutions, or their granting bodies pay or provide a repository through which papers are available online for free to readers. Some granting bodies insist on open access for all published work arising from their support and some professional societies have gone to great lengths to place journal back issues online, in some cases back to the 19th century (e.g., the Searchable Ornithological Research Archive, <http://elibrary.unm.edu/sora/>). Despite these advances, there can be worms in this apple of knowledge.

To begin with, much of the fruit is ephemeral and one need look no further than the editorial in *Pacific Conservation Biology* 16(1) for evidence. Visitors to the internet site referred to there (<http://www.youtube.com/watch?v=-VRBWLpYCPY>) will now find a note that the material has been removed on copyright grounds. This is not an isolated incident. Recently I was given the task of updating the ancillary materials, including references to internet links, for the fourth edition of a major textbook. In the few short years since the third edition many of the internet links had vanished. In another instance, my co-authors and I cited some conference proceedings available on the internet in one of our papers. The proceedings were subsequently moved to another address without a forwarding link at the original address, no doubt leaving readers of our paper unable to trace these sources.

There can also be problems in judging the authoritativeness of internet sources and this is

especially relevant to inexperienced students. In a conventional university library, sources have passed at least some rudimentary quality control with most entering the collection on faculty recommendation and most having been through some form of peer review. While students can still read narrowly or uncritically, they are less likely to encounter blatant bias than they are on the internet, where the onus is always on the reader to judge the legitimacy of all material. Almost any instructor can tell tales of students coming to grief. My favourite concerns the student who drew uncritically on an online article for his essay on human evolution, not realizing that the David Duke who had authored the piece was *the* David Duke, one-time leader of the Ku Klux Klan.

Online sources can also change the ways researchers read the literature. If Evans (2008) is right, the rise of internet searching has led to contemporary researchers citing fewer articles from fewer journals and far more recent articles than older ones. This surprising result may arise because of tendencies to follow hyperlinks rather than browse independently and not to follow up any reference unavailable online. The penalty may be wasted effort in repeating published work, or failing to ground new projects in past knowledge.

To return to the student's original question, textbooks are set to provide an authoritative “one-stop shop” for the key knowledge at the core of a discipline. The internet supplements texts with much valuable source material, but one must beware ephemera, read more critically because many pieces will not have been peer reviewed and resist the temptation to read narrowly or focus only on recent literature. One can even have a good laugh at those slow to accept new technologies (<http://www.youtube.com/watch?v=pQHx-SjgQvQ>) — assuming, of course, that the link is still active.

### REFERENCE

- Evans, J. A., 2008. Electronic publication and the narrowing of science and scholarship. *Science* **321**: 395–399.

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