PAPYRUS to PIXELS

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For many years, when asked the question whether I thought that the paperless library could ever be a reality I replied that it was about as likely a concept as the paperless lavatory. My brother, who lives in Tokyo recently e-mailed me to announce that his new flat has such a device…not only that, but this appalling invention also measures weight and had to be strongly dissuaded from checking other 'biometrics' also. Clearly, there was a need for me to reconsider the pace of technology!

In association with former colleagues from the Department of Information Studies at the University of Aberystwyth in the United Kingdom, the Department of Information and Library Studies at the University of Cape Town has run an annual three-day international workshop in December for several years; previous workshops have focused on collection management and information literacy. The aim of the workshops has been to provide insights and information on some of the new issues confronting managers of libraries and information services of all types, with an emphasis on creating a forum within which ideas can be exchanged and discussed. For 2004 it was decided to consider the concept of the electronic book and other electronic media and what effect this development might have on libraries of all kinds.

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Doom and gloom?

There is no evidence to suggest that books are about to be replaced by electronic media, so the presenters agreed that it would be quite wrong to present the electronic book (or e-book) as if it was a fully-developed technology about to sweep away libraries - and librarians.

Our profession has suffered, in recent years, from many apocalyptic announcements and predictions, which may have encouraged hard-working and committed librarians to question their career choice and the worth of what they do for their communities. Whilst it is true that many changes in the way that information is recorded have taken place - papyrus to vellum to paper to microfilm and now, to electronic forms - it is also true that these have been complementary developments, where a new medium does not replace another but is subject to experiment and adoption for purposes for which it is eventually found suitable. Microfilm, for example, has proved an excellent medium for archiving purposes but is not a suitable form for publishing a novel - although the pioneers of microfilming often suggested that this would become the favoured 'information technology'. The number of titles published each year is steadily increasing and print on paper is still the preferred medium for most publishers. A study of trends in the United Kingdom provides confirmatory evidence of this but also points to the future. Considering the year 2010, when between 140 000 and 200 000 new titles are expected to be published, the prediction is that: 'Most of these books will be available in print on paper form. However, a growing proportion - almost certainly the overwhelming majority - will also be available in digital form, either for distribution to e-book devices or for print-on-demand. A smaller (but nevertheless significant) proportion of titles will be published only in this way.'
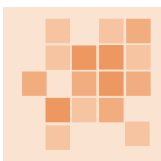
The workshop, *Off the shelf: the provision and use of e-books in libraries, resource centres and information services*, needed to help librarians make informed choices about the e-book medium. The presenters described the e-book publishing industry and introduced the range of e-books currently being made available to libraries, explaining their structure and content and then discussed the issues surrounding the identification, acquisition and promotion of this resource in academic, school, public and special libraries; they also considered the state of e-book publishing and provision in South Africa.

Definitions

What is an e-book? Chris Armstrong and Ray Lonsdale - two of the presenters - have defined it as: 'Any piece of electronic text regardless of size or composition (a digital object), but excluding journal publications, made available electronically or optically for any device (handheld or deskbound) that includes a screen.' (Armstrong, Edwards & Lonsdale, 2002.)
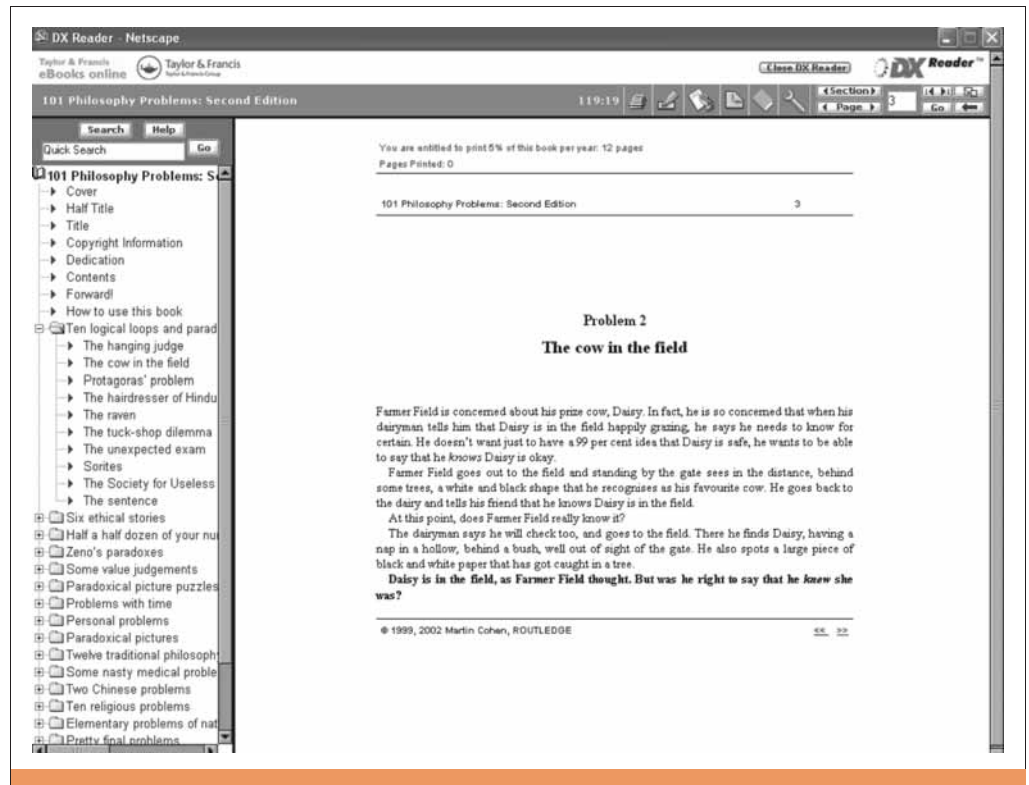
Here's an example from Martin Cohen's *101 Philosophy problems* (2nd ed; Routledge, 2002): A 'browser' is needed to read the contents. In this case, the DX Reader software produced by Digital Publishing Solutions *(http://www.dpsl.net/Products/ActiveContentTechnology/*

4dps.dxreaderon.asp [site visited 15 January 2005]) is being used; it is freely available from publishers using this software format for distribution of their titles. The 'browser' (this term is used in this article to avoid confusion with our 'readers') displays the text and also provides several 'navigation' features in the left-hand pane of the display, enabling the reader to jump to sections of text. Other tools, such as annotating and 'highlighting', can be started from the menu bar at the top of the display. Because it is a copy that is being viewed, the use of these tools does not affect other users of the book - so one of the banes of the librarian's life is removed, along with the need for erasers! Another helpful feature is the ease with which text and images can be enlarged to suit the needs of the visually impaired.

In this example (right), the text is being displayed on a computer screen; handheld browsers powered by batteries are also available, thus freeing the user to read the e-book wherever and whenever is convenient.

Advantages and disadvantages

Libraries have always been expensive to build because paper needs space and is heavy, requiring the construction of reinforced floors. The e-book requires computer space - digital space - and this can be provided at very low cost. Weight is no longer a consideration. However, computers take up physical space and the space provision for readers using computers is usually greater than that provided for readers consulting 'paper' books. This can provide some headaches for the planner in trying to balance the space provided for book stacks and that provided in the reading areas.

An electronic text is also easily edited, corrected and updated, a facility that has obvious advantages for rapidly changing information sources such as directories, statistical data and textbooks. The changed text can be quickly and simply distributed if both publisher and recipient have network connections of sufficient capacity, or bandwidth. In South Africa at present, network access is improving but few libraries yet have the fast and reliable access that is enjoyed in Europe, North America and elsewhere.

Supplying a 'tailored' document is also easy: only those sections of a textbook that are required for a particular course could be supplied, for example, bundled with a 'course reader'. It would also be possible to assemble a tour guide containing just those sections on countries to be visited; one can easily think of similar compilations that could be built on the interests of individual readers.
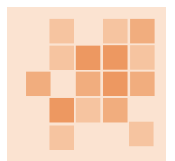
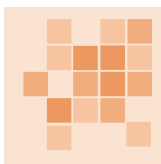However, the ease with which such changes can be effected also highlights some concerns. What constitutes the text? Librarians have both a custodial and a facilitative role with respect to supplying information to the communities they serve. The custodial role has usually been accomplished by ensuring that a copy of each edition of a text is kept - often by a legal deposit library - and this has been regarded as the stable form of the text. Even special forms, such as loose-leaf publications updated by inserting new pages supplied by the publisher, have been successfully archived so that it is possible to reconstruct earlier 'states' of a publication. Who, however, is responsible for archiving an electronic publication so that its development can be tracked?

The custodial role of libraries is also important in preserving copies of out-of-print titles and journals that have ceased publication. Electronic publications are increasingly made available through licensing from a publisher - so the purchaser does not own anything other than a right to gain network access to the publication for a defined period. If a publisher goes out of business, or a publication is withdrawn, the possibility of access ceases. Some publishers have recognised that this may constitute a serious drawback and have made provision for a permanent archive of their publications.

These problems are further confounded by technology. It is a curious fact that the technology that provides access

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may also be an impediment. Many of the browsers are proprietary - they are specific to a particular publisher - and cannot necessarily be used to display publications from a different publisher. This means that a library might have to have available a range of browsers. Furthermore, as the technology changes and develops, there is no guarantee that today's browser can be used to read tomorrow's electronic publication.

Are e-books coming to your library?

Probably, yes - and if your library has computers capable of linking to the Internet, e-books are already there! A personal computer (PC) can be used for viewing some electronic publications and may not need any special software other than a web browser such as Microsoft's Internet Explorer. At the end of this article are some examples of e-books to view.

The most immediate impact will probably be in providing access to reference materials, handbooks, directories and similar materials. These are expensive to produce and distribute, out-of-date at the moment of printing and vital for many reference enquiries. By purchasing a licence for access to electronic forms of these publications, the librarian can ensure that the community is well served with current information. Newspapers and similar publications are also readily available, including the major South African titles (to see the range of these available worldwide, try *http://www.onlinenewspapers.com/* [site visited 15 January 2005]). Journal publishers are also distributing many titles in electronic form by offering a licence for access.

What about fiction? Although the crew of the Starship Enterprise regularly settle down with a good book displayed on a hand-held reader, the reality is probably a good way off. The display technology on such devices is still too poor to make extended reading a comfortable activity - quite apart from doubts about their robustness. Experienced librarians are all too familiar with the dangers of reading in the bath or throwing a library book at the cat. Most books survive this mistreatment - but browsers?

Hillesund provides a reflective article on the longer-term impacts of a move to e-books and concludes that there will be far-reaching effects on the way in which the publishing industry is structured. Garrod and Weller and McKnight and Dearnley have considered the impact on public libraries. There is no readily available information yet about use of e-books in South African public libraries - but we can safely conclude that the e-book is coming and that we will need to think through how best to make this additional resource available to our communities.

If you missed the workshop, it is planned to repeat it towards the end of 2005.

Examples to try

School textbook

The publishing of educational e-monographs has been focussed largely upon the higher education field. Recently, we have seen a move by several publishers towards producing e-texts for the secondary education sector. An example to try is 'City sites', which was conceived as an e-book rather than being a 'conversion' from a conventional textbook. It is the product of collaborative research on architecture in relation to the society and culture of New York and Chicago. Multimedia is used to enhance understanding of urban culture. It is an example of a non-linear e-book.
Web address: *http://artsweb.bham.ac.uk/citysites/*
[site visited 15 January 2005].

Fiction / literature

There are thousands of examples of novels, poetry collections, literature, et cetera, available on the Internet - quite a few of them free to the user; the Gutenberg archive (*http://www.gutenberg.org/*) is one example. If you decide to make free e-books available to your users it is necessary to consider their authority and accuracy very carefully - often they are out-of-copyright editions and there may be little quality-control in their digitisation. The Literature Network, for example, offers a large selection of titles from many authors but the collection is far from comprehensive.
Web address: *http://www.online-literature.com/*
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References and other reading

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