Scholarly communication and the E-library

Peter Judge has attended two significant conferences

Their significance lay not only in what they discussed but in who attended them. The first, held in the Australian Academy of Science's dome in Canberra on 14-16 April, examined *Changes in Scholarly Communication Patterns: Australia and the Electronic Library.* Invited speakers from Australia, the USA and the UK addressed an invited audience that included some of Australia's most distinguished academics and senior librarians—more than 150 participants in total.

The conference, as John Shipp told us, 'was the brainchild of Eric Wainwright, Warren Horton and Colin Steele, further developed at the Joint Academies' Library Committee and intended not only as an educational exercise but as a political opportunity too.' It almost certainly succeeded in this. It was remarkable in that, for perhaps the first time in Australia, academics and librarians contributed on an equal footing to a major discussion on the future of libraries and what this may mean to the processes of scholarship.

The second conference, on *Electronic scholarly communication: the library response,* followed on 17 April in Parliament House in Sydney. It included some of the previous days' speakers along with others. It was an opportunity for the rest of the library community to take part in the debate, and at short notice a hundred of them did so.

In Canberra—Australia and the Electronic Library

The Canberra conference was introduced by Professor Peter Sheehan, President of the Academy of the Social Sciences and Chairman of the Consultative Committee of the Australian Academies. 'Radical new computing architectures will compel us to redefine what is meant by the scholarly leadership of the library community.' he said, 'The whole alignment of the activities and planning of resources in libraries, however, is contingent on having a plan for meeting the challenges which lie ahead. Stakeholder participation is particularly important.'

The Hon Ross Free, Minister for Schools, Vocational Education and Training, formally opened the confer-ence. He was in no doubt of the importance of what was at stake, and offered $5 million to facilitate the processes of change in libraries.

Dr Peter Lyman, who is simultaneously University Librarian, Dean of Libraries and Head of the Centre for Scholarly Technology at the University of Southern California, gave an overview of the changes in scholarly communication pattern as he saw them. Scholarly publishing seems to be slowing down although data accumulation is still accelerating. Publishing in some fields—business, law, economics, science and technology—continue to increase in both quantity and price, while in fields like the humanities these are decreasing.

Brewster Kahle, the President of Wide Area Information Servers, Thinking Machines Corporation, Massachusetts, presented a concept for a corporate information system for untrained users to search gigabytes of unformatted data residing on distributed servers anywhere on a wide area network, giving the users access to personal, corporate, and published information from a single interface. He explained that the primary goal in building and testing the system was to determine if the technology and infrastructure existed to make end-user searching of unstructured information profitable. He finds that they do exist,

but network technologies are still a limiting cost factor.

Dr Douglas Greenberg, of the American Council of Learned Societies, identified some problems and

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possibilities for the humanist. Electronic information offers unprecedented opportunities for better instruction, better scholarly communication and better access to resourc- ▶

UnCovering the serials

John Cox, MD of B H Blackwell (Oxford), fitted in a pleasant task and marked another significant E-development

John Cox rushed across the ANU campus during a well-timed Conference lunch-break to launch this new current awareness and document delivery service, *UnCover,* in which Blackwell is collaborating with the Colarado Alliance of Research Libraries (CARL). ANU Library now subscribes, and offers access to the university staff via Telnet through the campus network.

UnCover is a database that provides up-to-date access to the contents pages of approximately 13 000 journals (soon to be 20 000). Within 24 hours of each issue of a journal received by the vendor, tables of contents are entered by CARL into the *UnCover* database.

The database can be searched by keywords to locate titles of articles within journals. Arrangements can be made for the full text of articles, which can be read only in the print form, to be faxed direct to users, who are then charged for that service. Delivery time is usually made within 24 hours. Alternatively, users can request articles of journals not held on campus through the ANU's InterLibrary Loan service with the normal ILL charges. ∎

...and almost everybody closed the conference in Sydney: (from left) Jenny Cram, Boyd Rayward, Neil McLean, John Cox, Peter Lyman, Brewster Kahle, John Levett, Don McNicol and Warren Horton.

es for research, but there are significant barriers between our current circumstances and the realistic possibility of exploiting those opportunities. Life in the 'virtual university' may not be quite the utopia that some predict: it will take a concerted effort by scholars, librarians, technologists and administrators to secure a 'virtual future' in which the work of the humanities can be carried on in an environment the preserves their the historic values.

Dr Robin Derricourt, Cambridge University Press, asked whether the electronic age heralded the end of the book, and resolved the funding problems of libraries. He thought not, and believed that the attempts by libraries to share book resources push up book prices to no net gain. In his experience, the divide in scholarly communication patterns is not between expensive hard copy and apparently less expensive electronic publishing, but between permanent (and printed) forms of publication and temporary forms of communication such as the electronic journal. Each has its appropriate application.

Dr Dale Spender, Australian Society of Authors, gave a graphic account of the impact on society when print entered the scene in the fifteenth century. New classes of disadvantaged arose—women in particular. But what the scribes saw as 'deskilling', the historians now call the democratisation of knowledge—the shift from an elite to that of a mass readership.

Great changes continue in the role both of the book and the author. Electronic culture allows a collective approach to authorship—already there are teams of writers working on everything from soap operas to Open Learning programs. For the younger generation, books now have to compete with the visual media. We worry about the future of literacy, but what about its replacement, 'visualcy'?

Professor Max Brennan, of the Australia Research Council, commented that although most scholars want to publish in refereed journals, both to record their results and to disseminate them, in many fields journals serve mainly an archival function. The real communication continues to take place informally through personal networks and conferences.

Dr Ian Reinecke sketched a scenario that detailed how a university library could be taken over by a commercial firm and run for profit. Horrifying? Not to everybody present...

Many saw the E-library as an efficient 'just in time' library, with no massive holdings, but guaranteeing prompt delivery of all the required information on demand. Others commented that *your* 'just in time' service needs *my* 'just in case' collection in order to function: ultimately, somebody has stock the material, whether electronically or in hard copy. And the main barriers to the use of information technology by academics remain cultural, not financial.

In Sydney—Electronic scholarly communication: the library response

Jennifer Cram began the Sydney conference by thanking all those involved in its organisation, and particularly Joanne Fuller 'who has basically done all the work'. And a thankyou also to sponsors, especially the Coop Library Services and Subscriptions Divisions.

The formal opening was performed by the **Hon Kevin Rozzoli MP,** Speaker of the NSW Parliament, who claimed a genetic link with libraries: 'I have a very longstanding family commitment to libraries. My Grandfather was the first Treasurer of the Free Library Movement in Australia and was instrumental before World II in raising well over a million pounds to launch the Free Library Movement in NSW. Each generation of our family has contributed to libraries and I hope to carry on that tradition.

'I saw that the Federal Government has 'earmarked', an interesting term, up to $5 million for University Library infrastructure. Through my experience with the Parliamentary Library, I know that $5 million will not go very far. There is a compelling need to establish within the decision-makers who hold the purse strings in this country, a far greater intellectual appreciation of what libraries do, what their functions are and the degree to which they will hold the key to decision-making in the future. This is what this conference and the conference that just concluded are very much about.'

John Shipp, President of CAUL and Librarian of the University of Wollongong, summarised the outcomes from the Canberra conference. It had brought together the stakeholders: scholars, information service providers, information technology departments, publishers, educational administrators and policy makers, to address the issues of:

- the 'national scholarly information vision';
- the mechanism for future action;

- intellectual property in the electronic era;
- the national research and education communications network (an expansion of AARNET?);
- the preservation and archiving of electronic materials;
- equity of access;
- pricing, management and support mechanisms;
- the definition of a 'publication' in the academic context; and
- just how is information accessed, used and stored by scholars.

The unstated outcome was to establish a forum for continuing discussion, similar to the coalition for networked information. Formally, it was agreed (without a vote) that there was a need to:

- investigate the benefits of the new information technology's access and delivery mechanisms in the Australian context—Barry Jones had emphasised the role here of the State governments, and of the public and state libraries. The investigation may be directed by the Academies or by a new body if it can be established quickly—at all events, it will be in consultation with stakeholders;
- encourage rational, equitable and collaborative approaches to the purchase of traditional library materials;
- educate the academic community in the use and development of new information technologies (such as AARNET). Training is needed in 'the acquisition of both technical and discovery skills' (or interfaces that are so intuitive that users do not need training);
- develop AARNET into a national research and educational network, reaching to a broader user group than at present;
- examine questions of intellectual property as they affect individuals, institutions and the community (who eventually *owns* the work done by academics?)

Some other contributions in Sydney, not duplicated in the Canberra conference, included **Boyd Rayward**'s optimistic comment that 'E-publication is a return to the great Commonwealth of learning'.

Mairéad Browne had surveyed academics' wants from the E-services. In order, these were:

- access to a number of databases:
- searches supplied quickly;
- user-friendly;
- direct user-access;

- staff knowledgeable about the databases;
- to get *Current Contents* on disc;
- good explanation of procedures and protocols;
- staff available for joint searches;
- academic staff to have their own dedicated terminals in the library;
- access to the library catalogue from their home or office;
- access to databases from home or office.

Mairéad commented that librarians have underestimated the importance of simple factors like *Current Contents* on disc, staff always available to help, user-friendly services, and services provided quickly.

Neil McLean looked at the economic issues, and wondered what the market-place would look like in 5 years. Would E-journals have risen from the present 0.3% to, say, 10%? What would be the response to the spiralling operating costs of libraries? More 'say' for the users? Ultimately, how will the E-framework be funded and should Australia aim for greater self-sufficiency?

Don McNicol, Vice-Chancellor of Sydney University, gave an administrator's opinion that the Distributed National Collection can only work if it is based on firm guarantees and sanctions. He mused that computing costs had essentially vanished from the budget sheets with the introduction of a distributed system of desktop computers through the university, rather than a great mainframe to which everybody had to be connected at great—and visible—cost. Will the same thing happen, he wondered, to university libraries in an E-future?…

John Levett summed up the day and added a few thoughts of his own. The format changes both the way in which information can be used and the nature of librarianship. Librarians need to educate not only the users but themselves. Dale Spender's comment in Canberra that 'print was a leap backward for women' was true, and many other groups have been disadvantaged by print. 'Visualcy' rather than 'literacy' may be a great equaliser, but what do we lose in the change? The E-revolution means that limiting factors of size of library or its distance no longer apply—we have access to infinite stocks of information transportable at the speed of light. The great challenges for the future are knowledge mapping and knowledge access. ■