## On the Circuit

## ASSUMPTIONS VERSUS REALITY: USER BEHAVIOUR IN SOURCING SCHOLARLY INFORMATION

ingenta Institute seminar, the Royal Society, London, 25th September 2001

The first speaker at the latest in the series of ingenta Institute seminars was **David Russon**, ex British Library. His presentation was based on a study in 2000, funded by ingenta and ICSTI, on the relationship between journal subscriptions and document delivery. The aim of the study was to investigate whether there is any evidence that document supply is used as an alternative to taking out a journal subscription and, therefore, if there are any adverse effects on subscription levels for publishers. Phase I of the study included 28 titles from 15 publishers and used document requests from two suppliers – BLDSC and CISTI in Canada.

The main conclusions of the study were: there continues to be some degree of overlap where organisations request documents from journals to which they subscribe; subscribers request articles for issues spanning all ages of material and tend to be more likely than non-subscribers to ask for older journal issues; the journal price can influence the document supply activity of nonsubscribers - the more expensive the journal, the greater the annual request volume; and, only one organisation exceeded the calculated threshold where, with the number of year 2000 articles that they received via document delivery, it would have been cheaper to subscribe to the journal. Russon concluded, therefore, that document delivery meets a significant need on the part of a large number of organisations for article supply and that this distribution medium does not appear to have had any discernible negative

effect on subscriptions to scholarly journals.

The second speaker - David Worlock of Electronic Publishing Services Ltd - described an ingenta-funded, research project, investigating end users' usage of full text articles, the level of demand for full text articles, how end users pay for full text articles and why various payment options were chosen. The key findings of this research were that the use of individually purchased, full text articles is significant and growing but that the increase is not yet materially affecting the use of printed journals. There is a clear cultural split emerging between papercentric and screen-based users and there is an equal split between those who want to archive articles in printed from and those who prefer an electronic archive. Almost 70% of respondents did not need to refer any purchasing decisions to a higher authority and two thirds of those, who expressed an opinion, said that they believed that full text articles were too expensive. In the ensuing discussion, delegates from the audience expressed some concern about the small sample taken in the research and its UK bias.

Worlock was followed by **Christopher Woodhead**, reporting on yet another piece of ingenta-funded research, investigating the flow of a manuscript from author through the multiple delivery routes to the individual researcher/academic. The purpose of the research was to quantify the market and trends for article delivery, and the results indicated that there is a large market for subscribed 'document downloads'.

According to Woodhead, the controversial, and perhaps crucial, part of the research report is the summary of the various elements of the 'separates' business. This gives a total of over 305 million in 2000. If that figure is taken, and an average commercial price is applied to each, the cumulative value of 'separates' is 50% of the journal subscription business!

Just before lunch, John Cox gave a useful and considered, integrated summary of the key results and conclusions from the morning presentations. For readers of *Serials* some of his most pertinent comments included: "while readers see the library as the principle source of articles in print, only one-fifth credit the library with responsibility for online material, implying that libraries are no longer seen as the principal source of information for scholars and researchers". Publishers have defended their position as the gatekeepers of the peer-reviewed research literature with considerable success. But this can only continue, if they recognise that readers have become much more demanding; they want information to be available more quickly and more easily. The expansion of usage once journals are online points to a pent-up demand that print cannot satisfy. The printed journal may be discontinued in many disciplines in the next ten years, based on the sheer convenience of researching and reading at one's desk...

After lunch, there was the opportunity to hear the user's perspective in the form of **Ian Butterworth** who is an experimental particle physicist and also a former Vice-President, responsible for publications, at the Institute of Physics. Butterworth's presentation put forward the view that researchers increasingly relate to colleagues at other institutions. The new paradigm in the networked scientific community is the formation of internationally-based research teams and there is a notable growth in internationally collaborative papers. He believes that researchers support discipline-based e-print archives far more than institution-based archives. He noted that the Worlock behavioural study – described in the morning session - seemed to contradict previous research by Bjork and Turk, who found quite different results - particularly that researchers hated pay-per-view and were averse to using credit cards to pay for information. He concluded by saying that

universities should have a greater involvement in 'open systems' and that they have a vested interest in moving to online-only as quickly as possible whilst recognising that long term preservation is an unresolved issue.

Michael Breaks, University Librarian at Heriot-Watt University, spoke about the problems and opportunities relating to document delivery in university libraries, which he claims is at a critical point in its history and is experiencing rapid and unpredictable change. This change is evidenced by falling demand from libraries, as full text e-journals become much more widely available and libraries introduce charges to their users for document delivery. Other changes taking place include the internationalisation and commercialisation of document supply and a growth in resource discovery tools. There are a range of different projects and initiatives, which may also have an impact upon the market for document supply, including EASY, HERON, COPAC and the proposed SUNCAT (National Serials Union Catalogue). Breaks predicted that: the demand for interlibrary loans and other document delivery services will continue to fall; access to full text journals will continue to increase; individuals will not pay current document delivery prices, but the real market in 'separates' will also continue to grow.

The final presentation of the day was from Bob Campbell of Blackwell Publishing, who spoke about priorities for publishers. He noted that the volume of document delivery has increased steadily for decades but very recently new pricing models, which include document delivery of non-core titles, have reduced the number of requests received by the BLDSC. Publishers are already improving the range of material they offer online by including 'legacy', that is, access to earlier articles, which is also likely to lead to some reduction in document delivery and interlibrary loan volume. Generally, he concluded, publishers could take some encouragement from the research. Hardcopy still has a following and the huge market for individual articles represents an opportunity. Smaller publishers may find this more difficult and will need to form partnerships and/ or rely more on intermediaries.

> Hazel Woodward Cranfield University

### NASIG ANNUAL CONFERENCE

Trinity University in San Antonio, Texas, May 23-26, 2001

#### Introduction

The 16th annual conference of NASIG, the North American Serials Interest Group, was held at Trinity University in San Antonio, Texas, May 23-26, 2001, marking the first time that NASIG returned to a campus where it has already met: our sixth annual meeting was held at Trinity back in 1991. Approximately 550 people attended the conference.

Trinity's red brick campus is situated on a hillside overlooking the city of San Antonio. The facilities – in terms of both meeting space and dormitories – are among the best that we have enjoyed. Texans are known for their friendliness and informal hospitality, and San Antonians, in particular, know how to entertain and eat!

The buffet supper immediately following the opening session on Wednesday, May 23, and the reception on Thursday at the Institute of Texan Cultures, included an opportunity for conference attendees to sample a variety of festive Mexican-American dishes. A mariachi band played for the crowd at the opening buffet, while the Institute reception included an opportunity to enjoy lively country dancing with Jill Jones and the Lone Star Chorale or to wander quietly among the exhibits and learn about the history and culture of the host city. On Friday, NASIG had buses take attendees to the famous San Antonio Riverwalk, where we could choose from among many restaurants. Many indulged in a margarita or a local beer, a relaxing ride on one of the riverboats, and shopping for souvenirs. Optional postconference tours were 'Viva San Antonio', a chance to visit the Spanish missions, markets, and Governor's Palace; 'Arts and Flowers', a visit to the San Antonio Museum of Art, which is housed in the former Lone Star Brewery - and is fascinating both architecturally and exhibitionwise; and 'San Antonio Showcase', which offered a chance to see a number of historic homes in the King William District.

The conference theme, in keeping with the year 2001, was 'A Serials Odyssey'. But this writer thinks that the theme might as well have been 'Choices, Choices, and More Choices.' Plenary sessions are scheduled at non-conflict times, but we are asked to pre-register for workshops and concurrent sessions. Pre-conferences require an additional fee.

#### Pre-conferences

There were two pre-conference options. One, 'Getting Published: Surviving in a 'Write Stuff or They Will Fire You' Environment', was presented by Ladd Brown (Virginia Polytechnic and State University), Jeff Bullington (University of Kansas), Wayne Jones (Massachusetts Institute of Technology) and myself. We advised participants to take advantage of publishing opportunities, to seek out a writing mentor, and to work in writing teams when feasible, while learning to write for publication. The other preconference, 'Licensing for Beginners', was offered by Laurie Thompson (a librarian from the State University of New York Upstate Medical Library) and Harry Youtt (a lawyer from the University of California at Irvine). This team discussed strategies for negotiating and managing license agreements. Both of the pre-conferences were well attended and well received.

#### Plenary sessions

Steven Bachrach (D. R. Semmes Distinguished Professor of Chemistry at Trinity and co-editor of The Internet Journal of Chemistry) opened the conference with an excellent, energetically presented talk entitled, 'Chemical Publications: a Critical Evaluation'. A strong proponent of electronic publishing, which offers new communication options and can make research available quickly, Bachrach also proved to be highly knowledgeable about the cost of chemistry

and other STM journals emanating from both commercial and society publishers. He laid responsibility for changing the current situation on the backs of academics, who at present assume a variety of roles in scholarly publishing - author, editor, editorial board member, and peer reviewer - but then turn over their copyrights to journal publishers. Bachrach also discussed whether it was necessary to launch 22 new journals in the field of organic chemistry in the last decade. He strongly encouraged competition in the marketplace through organizations such as SPARC and indicated that academic institutions must rethink the extent to which they push faculty to publish or perish, since this adds immensely to the volume of scholarly publication. Adrian Alexander (Executive Director, Big 12 Plus Libraries Consortium) had been asked to serve as responder to Bachrach but instead praised and agreed with him. Alexander also talked about the Tempe Principles and the Public Library of Science initiative.

In the second plenary session, 'Scholarly Communications: Issues in Publishing', Stanley Chodorow (Vice President for Academic Affairs, Questia Media, Inc. and former Associate Vice Chancellor for Academic Planning at the University of California at San Diego) provided background and information about the Tempe Principles, a set of guidelines developed in March, 2000 by a group of scholars, librarians, and university administrators to address the crisis in scholarly communication (see http://www.arl.org/scomm/tempe.html). Chodorow also reviewed the history of scholarly publishing and, like Bachrach, encouraged the academic community to find alternative publishing venues such as those available through BioOne and SPARC. Reactor John Cox (Principal, John Cox and Associates) took issue with the Tempe Principles, pointing out that the principles are biased, since commercial publishers were not represented at the meeting in question. Cox spoke to issues such as consortial pricing of e-journals and the quality that certain 'brands' offer to authors and readers alike.

The closing session of the conference was a plenary entitled 'Generation Y: a Discussion of Today's Youth and Their Impact on Higher Education'. Stephen R. Merritt (Dean of Enrollment Management at Villanova University

in Philadelphia) simultaneously entertained and informed the audience with his description and discussion of America's 'Generation Y', those born since 1981. These children have been groomed by their "Baby Boomer" parents to be active achievers. They are highly consumeroriented, consider education a commodity, and are technology veterans. Merritt talked about how colleges, universities, and libraries should respond to the demands of this new generation of learners. Merritt's personal web site includes outlines/text from similar presentations (see http://www17.homepage.villanova.edu/stephen.merritt/

#### Concurrent sessions

Attendees could attend two of eight concurrent sessions - and the choices we had to make were excruciating! I attended both 'Sensemaking and Digital Librarians', by Mary Lynne Rice-Lively, Assistant Dean and Coordinator of Information Technology, Graduate School of Library and Information Science, University of Texas, and 'Three Dimensional Serials: or How I learned to Love Content Management on the Web', presented by Debora Seys (Information Consultant, Hewlett Packard Labs Research Library). Drawing on input from the audience, Rice-Lively explored new roles for library and information professionals, defined the concepts of 'sensemaking' and 'the digital library', and then identified and discussed innovations and changing work processes in the digital library environment. Seys, who was such a favorite at NASIG in 2000 that she was invited back again in 2001, emphasized the multi-dimensionality of materials on the Web and the need for, and options involved, in the management and bibliographic control of non-static content.

Other concurrent sessions included a number of outstanding speakers and topics, including several names well known to UKSG members: 'Infomediaries in the Internet Era', presented by Heather Steele and Philipp Neie (Co-CEOs, Swets Blackwell, Runnemeade, NJ)

'UCITA and Fair Use: A Compatible or Combatable Relationship', Sarah (Sally) Wiant (Law Librarian and Professor of Law, Washington and Lee University)

'New Models for New Serials: Redefining the Serial and the Licensing Environment', offered by

perennial NASIG favorite, John Cox (Principal, John Cox and Associates);

'Mexical Serials: Their Titles, Content and Readers', Jesús Lau (Director of Information Services and Accreditation, Universidad Autónoma de Ciudad Juárez);

'Licensing E-Journals – UK Style', presented by Hazel Woodward (University Librarian and Director of Cranfield University Press, Cranfield University);

'Is XML in Your Future?' Art Rhyno (Librarian, Head of Systems, University of Windsor).

#### Workshops

This year's NASIG Program Planning Committee offered attendees two dozen timely workshops. I chose sessions on cataloging webbased serials using OCLC's CORC (Tschera Connell, Ohio State University Library); creating home-grown use statistics when vendors/publishers don't provide them (Fannie Cox and Weiling Liu, University of Louisville Libraries); counting the number of electronic journals in a library's collection (Christie T. Degener, University of North Carolina at Chapel Hill and Yvonne W. Zhang, California State Polytechnic University, Pomona); and being aware that what publishers and aggregators bill as full-text journals may not in fact be "full-text" (Carolyn Henebry and Ellen Safley, University of Texas at Dallas). Other workshops addressed topics that ranged from jump starting a career in serials, to coping with automated system migration, to implementing electronic claiming capabilities, to providing access to journals in aggregator databases.

#### Networking nodes

I tend to go until I drop at NASIG but given the heat, this year I chose to skip the networking nodes and did some informal networking instead. My decision likely deprived me of some stimulating interactions among my peers, since the nodes for 2001 centered around several hot topics: serials cataloging issues, positions for 'electronic resources librarians' (this node drew about 90 participants), preservation, public libraries, and reference-public service related serials issues.

#### Published proceedings

Proceedings of the annual NASIG conferences are published annually as special issues of *The Serials Librarian*; the Trinity proceedings will be available in the Spring of 2002. NASIG members can also access the proceedings online on the NASIG Website at http://www.nasig.org/

#### Awards

NASIG gives a variety of awards:

The Fritz Schwartz Serials Education award (named after a colleague from Faxon who died several years ago, well before his time) provides a scholarship to a library school student with an interest in serials and/or standards work and free conference registration

Three Horizon awards that cover conference registration, housing and travel expenses are offered to individuals in any aspect of serials work with less than five years of experience who have not attended a previous NASIG conference

Seven Student Grant awards are offered to current library school students, providing them with full registration, housing and transportation costs to attend the NASIG conference, as well as a year's membership

The Marcia Tuttle International Grant provides \$1000 "...for a person working in serials to foster international communication and education, through overseas activities, such as, but not limited to, research, collaborative projects, job exchanges, and presentation of papers at conferences". It is named in honor of Marcia Tuttle, a retired serialist well known to members of the UKSG. Those readers who know Marcia may get a kick out of seeing the mode of transportation she is pictured using on the award's web site at http://www.nasig.org/public/timedated/tuttle.html.

More information about the NASIG awards can be found at http://www.nasig.org/award/index.htm

#### Next conference

The 17th annual NASIG conference will be held at the College of William and Mary in Williamsburg, Virginia, June 20-23. William and Mary is the second oldest college in the nation; it is located in the colonial capital of the state,

Williamsburg. The Conference Planning Committee is hard at work on local arrangements – which we anticipate will give us ample time to enjoy Colonial Williamsburg; we may also get to Jamestown, the Yorktown battle field, and Busch Gardens. UKSG members might also be happy to know that there are some excellent golf courses in the area! The Program Planning Committee is working with a theme that offers them the chance to delve into controversies, 'Transforming Serials: The Revolution Continues'. NASIG would love to have many of our UKSG friends and mentors join us to learn and to "network" in Williamsburg next summer!

> Cindy Hepfer State University of New York at Buffalo

### PELICAN CONFERENCE

London Zoo, 18 September 2001

#### The project

PELICAN (Pricing Experiment Library Information Co-operative Network) was a one-year project supported by the Joint Information Systems Committee (JISC) of the UK Higher Education Funding Councils. It was conceived by Charles Oppenheim, of Loughborough University, and the consultant Mark Bide, who noted that much required undergraduate reading consists of book chapters rather than journal articles. They decided to investigate possible pricing models for digitised book chapters made available electronically to students. The project was carried out by Charles Oppenheim and two Research Associates, Rachel Hardy and Iris Rubbert.

It followed on from Electronic Library Programme (eLib) projects such as SCOPE and ACORN, which had investigated the creation of digitised collections of high-demand, short-loan materials in a university library. A major finding of these projects had been the difficulty and effort involved in obtaining agreement on copyright permissions and pricing from the rights owners. HERON carries on from those projects as a full service activity, now used by 43 universities in the UK, as a centralised service for copyright clearance, digitisation and fee payment for journal articles required in electronic form in lecturers' reading lists and course packs. A further project, carried out at Loughborough by Charles Oppenheim and Leah Halliday, had

developed economic concepts for pricing of electronic information products.

#### The conference

PELICAN's aim was "to develop a pricing mechanism for the delivery of digitised text that satisfies all stakeholders". As the project approached completion, a conference was arranged, to which representatives of the stakeholder groups – academics, students, librarians, intermediaries, rights-holders' organisations and publishers – were invited. The conference, which took place at London Zoo on 18 September 2001, discussed the project's findings and provided feedback to the project team prior to the preparation of the final report.

#### **Existing models**

PELICAN's starting point was the two models for the provision of printed texts to students: the textbook purchase model, in which each student buys a copy of a textbook from a bookshop, and the library purchase model, in which the university library buys reference and background materials for reference, loan and (within fair dealing restrictions) photocopying by students.

HERON had adopted these two models in negotiating copyright permissions with publishers: more commonly the bookshop model. Payment has usually been agreed based on the number of students registered on modules for which the item concerned is required reading. A fee per page, per student, per academic year is agreed; HERON suggests five pence, but agreements have been reached up to eight pence. Publishers have asked for higher amounts, up to 20 pence, but no agreements have been reached on these higher figures. At five pence, a 20-page chapter which is core reading for a module studied by 100 students, would be made available electronically for £100/year. It has not been usual for access to the material to be restricted to those students registered on the modules considered in the price calculation, though such a restriction might be technologically possible in some universities. More typically all staff and students in the institution can access the material.

Librarians tend to favour the library purchase model but publishers have had difficulty in deciding appropriate prices for one-time purchase of electronic products. In many cases HERON has encountered outright refusal from publishers to negotiate this model, even though the publisher then receives no revenue at all. However, the PLS has recently recommended that a price of £5/page for a five-year, unlimited access licence would be reasonable. Compared with the bookshop model at five pence per page, this price would provide the publisher with the same revenue as would the adoption of the text under the bookshop model, as required reading for only a twenty-student module each year for five years. However, there would be a cash-flow advantage to the publisher.

Unlike models for printed books, but like HERON, PELICAN dealt with parts of books rather than whole books. Where the entire content of a book is needed it is likely that purchase of the printed book by the students and/or the library will continue, at least in the short to medium term. PELICAN was conceived in the context of permission to digitise, and whilst the future is likely to be increasingly concerned with "born digital" material, it is hoped that the pricing models developed will also adapt to this environment. It needs to be remembered that, in HERON, the decision whether any particular work is suited to the bookshop model or the library model lies with the publisher. Finally, all of PELICAN's models assumed the existence of a central administrative body of some kind, rather than a requirement for every library to negotiate with every publisher separately.

#### PELICAN's survey

PELICAN started its work by surveying the views of all the stakeholders involved. In all 38 interviews took place, some of them with more than one respondent. The interview transcripts were analysed using ATLAS.ti, the qualitative analysis software package, and the main themes from the views of publishers, academics and librarians were separately derived.

#### **Publishers**

There were varied current practices, but publishers foresaw flexibility in future licensing negotiations so long as the outcome was economically viable for them. They favoured the bookshop substitution model in general. They pointed to difficulties in granting permissions for material, such as illustrations, that had itself been reproduced with permission from other publications. They were reasonably content with the idea of a central administrative body, though they disagreed on who should provide this service, but insisted that control of pricing should remain with the publisher and that the central body should provide for technological independence. The pricing model used would depend on the size of the publishing company, and the proportions of the market for that particular title that came from the corporate and academic sectors.

#### **Academics**

Academics tended to have two attitudes depending on whether they were thinking as teachers or as researchers. They felt, though, that provision of electronic full texts should be the library's responsibility, and the principle of free access to materials should survive in the electronic environment. The central administrative body should concentrate on providing access with the minimum of bureaucracy for the lecturer. The system should be fair across large and small publishers and across the whole of the HE and FE sectors. Speed of access is important: long copyright-clearance

delays remove one of the major advantages of electronic text. Pay per view is not favoured.

#### Librarians

Digitisation activity has usually been funded by special one-off projects, and it is unsatisfactory that no permanent funding source for this work exists. Lack of uniformity of approach among publishers and delays in obtaining permissions have also been continuing problems. Librarians feel that they have to police the users but get no support from publishers in doing so. They favour a central administrative body, but control should remain with the individual library. They favour the library substitution model over the bookshop substitution model. They are sceptical about claims for "added value"; extra features on portals are often unnecessary and unused but inflate prices.

#### The Models

Based on the survey results and the various concepts that have been discussed in the literature, the PELICAN team proposed three pricing models.

#### Model 1

Each HE institution would pay a sum at the beginning of the year, which would be held to its credit in an account at the central administrative body. This body would maintain a database of all available items in the scheme, with their prices. The university would decide which of these it wished to purchase. The amount to be paid for any particular item would be dependent on the number of students registered on the module(s), for which the article was listed reading, and the value of the item as judged by the publisher. The appropriate sum would be debited against the university's account and access to that article them permitted. The amount paid in could be topped up during the year, if necessary. The advantages of this model are simplicity, transparency, and control of prices remaining with the publisher. Publishers could over time adjust their prices depending on levels of demand for different items; there is clearly no point in charging prices that are so high that noone buys the item. On the other hand, this is only a "bookshop substitution" model, and does not accommodate material that would be background or supplementary reading.

#### Model 2

So far as core readings are concerned this model is identical with model 1. It also provides, however, an alternative, "library substitution" model for supplementary reading. In this second variant, there would be an annual charge per item (initially the same for all items), which would depend on the JISC banding of the institution – this band classification is based on the number of students in the university. This charge would be paid out of the money deposited by the university with the central administrative body, and would then entitle all members of the university to unlimited access to the item. In subsequent years, charges for different items could be different depending on demand.

One issue that arises with this model is the question of who decides whether an item is charged according to the core or the supplementary tariff. In the present HERON model, the publisher does, so an item has to be "core" for all customers, if so defined by the publisher. Librarians point out that the same item might be core for one degree programme and supplementary for another.

#### Model 3

Again starting from model 1, this model has added sophistication, so that the price of the item would vary according to both the size of the institution (JISC banding) and the number of users of the item in question. Users could be either potential users as measured by the numbers registered on relevant modules, or actual users as measured by logins. If based on actual use, this model makes no distinction between core and supplementary use. One possible advantage of this model would be that the costs could be charged-out by the library to the departments where the items are used.

#### Discussion

The conference broke into workshop groups to discuss the merits of the different models. Each group contained librarians, academics and publishers so that the different interests would all

discuss the issues together. The discussion ranged widely in the group that I attended and did not confine itself to the questions set by the organisers.

It was difficult to obtain consensus among such disparate groups, and there was also a feeling that the original concept of the project – dealing with permission to digitise book chapters for student use – was perhaps too narrow, since the team had in fact tried to arrive at more general conclusions. From now on, too, much of the material will be "born digital" and publishers

will be seeking to sell their electronic products themselves or through intermediaries.

If there was a consensus, it was the old computing KISS principle of "keep it simple, stupid", and thus the straightforward and transparent model 1 was favoured. It was recognised, though, that this was essentially limited to core readings and did not satisfactorily cover supplementary material.

Fytton Rowland, Department of Information Science, Loughborough University

# THINKING ABOUT LINKING: LATEST DEVELOPMENTS IN REFERENCE LINKING

A UKSG seminar at the Scientific Societies Lecture Theatre, London, Tuesday 15 May, 2001

This seminar was a challenge to all speakers and attendees, as the majority of it occurred without the benefits of electricity. A majority vote had decided to go ahead anyway and many of the attendees commented that they were able to concentrate on what the speakers were actually saying, without the distraction of complex PowerPoint presentations. For the speakers and Chair it was a different matter, speaking without the benefit of notes (or in some cases a pencil flashlight partly illuminating their written notes). We would like to thank all those who contributed to the seminar by their patience and understanding, including the technicians, who eventually ran extension leads through to the net door building to power our projector, if not the air-conditioning!.

'Electrons Know No Boundaries', was the appropriate title of the talk by Peter Boyce, Senior Consultant, American Astrophysical Society (AAS), who was the first to suffer (but he had his own flashlight!).

Six years of experience at AAS has shown enormous changes in electronic publishing and foretells more. Through links, the article is a portal to information, to other articles' data and information, and to inter-operating distributed information sources. Integrating information multiplies usefulness. There are multiple types of links: author/editor/publisher links - set during publication; post-publication links added later, which include future citations and lists, and query links developed in response to user query. Thus the serial becomes a managed database and is only part of the information system.

The basic concepts of information packaging will change because of links. At the article level (inter-article) fixed links, like traditional references, reflect the authors construct of what is relevant. Dynamic discovery links produce search/query/result lists, and future citation lists. Sub-article links (intra-article) fixed, forward and reverse, produce navigation aids within the article to add extra information. Unfortunately, reverse links are often omitted. Knowledge Assembly (query) links are dynamic and build query answer documents from "infochunks".

The article is a portal in itself. Where does the article end, and where do the databases start, as all information services interlink. There is no end and no beginning. The article is the author's list of important information sources, a portal to relevant information, to all sources not just articles. The journal is no longer an independent entity.

The present electronic world and astronomy's experience with linked information shows that:

links are highly valued by users; e-journals are only part of the information net; the article is a portal into an electronic information web, and linked journals plus a database equal a powerful information tool. For example, they can reduce two days of work to 30 minutes. Easy and transparent access is critical. Every good electronic journal is a complex system, not just a collection of individual static pages and is a working matrix of scripts images programs and infrastructure, for which updating and technological migration are required

These are truly exciting and revolutionary times, we have only just begun to utilise the power of linking. Static and dynamic links serve different purposes. Users have differing information needs, served by different information/linking strategies. New software search tools will evolve, but they must solve problems relevant to the end user. Complexity of the information landscape will increase, and journals alone are not enough any more. Can we prevent information chaos?

## 'Linking: The State of Play Today' by Andrew Richardson, Ovid Technologies

(What follows is an edited down version of his full text paper – available on the UKSG website)

Just as "full text" was the mantra for 1999-2000, "linking" has become a hot topic for 2001. As librarians are discovering, it is not possible to license all desired full text from a single source, and yet there are real disadvantages to having full text reside on dozens, or even hundreds of disparate sites. Licensing, managing variable access conditions and terms, setting up access appropriate to each publisher and user, training users, and maintaining links to multiple publishers from a central Home Page, can quickly become an unmanageable task - particularly for large, complex information environments. Given this reality, ever-practical librarians and information specialists are looking for other ways to provide full text access to end-users. Beyond that, they are additionally looking for ways to inter-link a variety of information sources, and thus maximise investments in databases, OPACs, document delivery services and internal document collections. Because there is a tradition of using indexing and abstracting databases as an

entrée to the professional literature, and given the model for linking presented by the World Wide Web, it is unsurprising that products linking bibliographic databases to full text would arise to fit this need.

And arise they have. Products, and potential products, are surfacing almost daily, in a variety that rivals the previous few years' full text offerings. Furthermore, key researchers and thinkers such as Herbert Van de Sompel or Clifford Lynch posit systems in which linking from bibliographic databases to full text, or from references to full text, is but one of many services that a comprehensive system should provide. With all this activity, it is sometimes difficult to determine what systems and technologies can provide today. In order to understand the advantages and disadvantages of available linking, it would be helpful to understand the technologies that underlie them, what product issues arise from the types of technology, what product issues are caused instead by logistical or contractual matters, and how do standards fit into the linking process?

#### Linking standards

The very first thing to understand about the state of current linking products is that there are no standards that comprehensively address the issues of linking, even in the simple case of links from bibliographic databases to full text. There are certainly linking standards of various pedigree. The World Wide Web itself is a spectacularly successful example of a linking standard. The DOI (Digital Object Identifier) and its implementation in the CrossRef initiative, is a system, in very early stages, which posits a way to do some aspects of linking. Slinks (Scholarly Link Specification Framework) is a proposal to normalise a particular aspect of linking (the "dialog" by which information is exchanged), and SFX is both a software and a "framework" which describes a comprehensive linking system. The OpenURL (used by SFX) is also a standard for the dialog of link exchange. There are in addition a number of standards for describing bibliographic data (or metadata), that can certainly facilitate the process of matching data in two different locations.

To date, however, none of these ideas have

actually become comprehensive standard for linking. None of them address all the basic parts of a linking transaction as it relates to the exchange of scholarly information (and to the user experience): metadata description, link syntax, access validation, security, link types (what can the user expect from the target?), and error handling - not to mention issues such as quality. The basic problem is that, as with the z39.50 standard, the devil is in the details. The z39.50 standard describes how systems can exchange information about search syntax and database structure – but leaves both the syntax and structure wide open, and at the discretion of each site. As a result, various z39.50 sites have basically incompatible structures and syntax, and the communication between them gets "dumbed down" to the lowest common denominator.

With linking the various potential players vendors, publishers, libraries, etc. - all have widely varying agendas, business models, and technologies, making for a very complex system yet standards, to be successful, need to be simple. The Web, as a linking standard, succeeds because it ignores all the sticky issues that would make it complicated. A universal, scholarly linking standard, however, is not going to be widely adopted in an environment that ignores licensing rights, copyright, authentication, security, predictability or quality. On the Web, such issues are left to auxiliary programs written at the discretion of each site and in reality, in today's linking environment, such issues are also left to individual sites.

The way that linking occurs today, even in systems that present themselves as "standard", is that two organisations talk; probably make a contractual agreement; exchange information about technology; at least one partner in the transaction writes programs; and the other adds information to tables; then linking "occurs." It's not magic; it's not standard; and issues such as business model and quality are dealt with contractually, if at all. It is also labour-intensive, in much the same way that creating a Home Page, with links to hundreds of journals, is intensiveintensive. The major advantage of products, that have gone to all the trouble that it takes to link, is that the links can then be made widely available as "product" - and each individual librarian at each site does not have to do the work.

In the absence of standards for the basic parts of a link session, the user's experience of linking will be extremely varied. Much of the control over the user experience is at the target server's end. When a user presses on a link, whether it is a direct link from a site to a target, or a link processed through a database, what happens next can vary by publisher or by titles within publisher. The experience can even vary from minute to minute or day to day, depending on the status of the target server or of the linking database, when such a database is in use. The user experience of linking will be more thoroughly considered in a later section, but as you will understand by the end of this paper, the day of a seamless user experience via linking is not vet here.

Pre-processed (static) vs. Live (dynamic) Links

In one sense, all linking technologies and schemes are the same: at some point the source data (say, a bibliographic citation) has to be compared with the target data (say, a full text article) to find a match. Librarians are certainly familiar with all the ways that such a comparison can go wrong. Much of the profession has been concerned with exactly this issue in terms of library catalogues, union catalogues and databases. If, after years of concentration on this issue, we still have a world in which it is not possible to compare and dedupe citations in two different bibliographic databases with complete reliability, then imagine what it is like to compare and link citations between dozens of commercial players - some of whom are new both to online and to databases.

The actual point of comparison occurs in one of two basic ways: pre-processed or live. Pre-processed links are computed in a batch process and a link database is built. Records in the database describe the relationship of the source data to the target. Presumably, pre-processed links are more reliable than live links, because, during the pre-processing, it is determined that a link should exist, or at least that the item to be linked does, in fact, exist on the target server. In reality, unless links are individually checked, which is very costly, it is rather easy to end up with a link to almost the right thing – say, to the second letter-to-the-editor on a page full of letters on the same topic, and not to the correct, third

letter. A real problem with pre-processed links is that they are time-consuming, and the database of links will always be out of date – especially if it is then distributed, as with the Silver Linker database or Ovid's locally distributed internal links. Either the target or the source may add new records at any time, but until the next time the links are pre-processed and delivered, there will be no link for a user to select.

Dynamic, or live links, make the comparison between source and target data on the fly without reference to a database. With dynamic links, the link is always there, and when the user presses on the link, it is activated. This overcomes the lag time mentioned with preprocessed links, but may lead to dead-end links, because there is no pre-processing step to verify that the item exists on both servers. That is why, for example, that sometimes when a publisher has pre-submitted citations to PubMed, the user will experience a "dead" link during the lag period between submittal of the citation and actual electronic publication of the article. It is also the case that many publishers do not load letters, editorials, supplements, or meeting abstracts, yet such material is often indexed in bibliographic databases.

With live links, a lot depends on the amount of customisation work done and the reliability of the source and target information. Ovid's OpenLinks, which are dynamic links, often compare favourably with pre-processed links for reliability and of course for timeliness - but this is because there is a tremendous amount of intensive-intensive customisation involved in these links. Finally, live links also depend on a close working relationship between the target and the source - if anything changes on either end, the algorithm used to compute the live links will break. Potentially all links to a particular target could break at once. This is one of the reasons that linking is logistically complex rather than being just a technological problem. Before live linking can even be begun, a contractual arrangement between the entities is absolutely necessary to spell out the terms of what is truly a relationship. Contractual relationships are time-consuming and resourceintensive - which is why a good technological prototype is not necessarily a good predictor of a robust linking product.

#### CrossRef

Sometimes links are both pre-processed and live, as with the CrossRef initiative. At the time that a user presses on a CrossRef link, the link is routed to the DOI handle system and the link occurs "live." However, whether or not to present a CrossRef link in the first place is determined by means of a pre-processed comparison of the source data (references) to potential targets in the CrossRef database. The original purpose of the CrossRef initiative was to provide a mechanism whereby individual publisher sites could link to one another's full text from references. The CrossRef database allows publishers both to register all their articles with a DOI and to look up DOIs that may correspond to the references in their full text. If such a DOI is found it can be embedded, as part of the editorial process, right into the reference. Thus links are guaranteed to exist on both ends, as with pre-processed links (although the links are not guaranteed to be correct - that depends on the quality of the data in this co-operative database), and are also executed "on the fly" for good performance. Since the DOI Foundation presents itself as if it were indeed "standard" in spite of the many publishers and vendors who do not participate, it is worthwhile to consider this linking scheme in a little more detail.

For many publishers and bibliographic vendors, it is already quite possible to link directly without CrossRef. Indeed, a number of the "CrossRef publishers", such as Academic and Springer already have extensive linking agreements with vendors who are linking directly and not using CrossRef. Still other publishers have no technical capability to link directly, and will, therefore, only be able to link via CrossRef. Critics of both the DOI Foundation and of the CrossRef Initiative (CrossRef is, if you will, an "instance" of the DOI) are critical in regard to one major issue - which all CrossRef links lead to the publisher, even though the "most appropriate" copy of the full text might reside elsewhere. The DOI Foundation, in fact, has responded to this issue by rolling out plans for an architecture that can link to more than one place, even link to local content - but this is a future.

CrossRef, which is in an early stage with 54 of the 70 "CrossRef publishers" having contributed

to the CrossRef database (and many of them with a very small number of documents - the database is dominated by a few of the publisher's records), is for the present a one-way street directly to the publisher. It is also worth noting that each CrossRef publisher determines the link destination, which is not necessarily to the full text, but which could be to some interim page where advertising or promotional information appears. Additionally, there are data issues, such as duplicates, and a lack of standardisation for how to handle journal titles for which an ISSN has changed. (Many times a publisher continues to use an out-of-date ISSNs for DOI submissions, which can lead to real problems when the bibliographic databases correctly change to the new ISSN.) That said, the beauty of CrossRef, from the standpoint of a vendor like Ovid, is that once CrossRef is fully implemented, it will cut down on the number of relationships and technological implementations that must be maintained in the linking product. Eventually links to all the 70+ participating publishers could be made with one mechanism. Similarly, on the publisher's end, CrossRef has the potential to cut down on the numbers of vendors that must have individual contracts and support.

#### Summary

It is very exciting that there are many linking products, with links from bibliographic databases to literally thousands of journals from many different sources. However, it is also easy to infer some magic to linking where none exists, or to get confused between a standard and a good idea. You will make the best decisions if you maintain a realistic viewpoint and investigate options with a bit of scepticism. Try before you buy, and be sure that if what you are buying is a prototype, that you understand the long haul.

'Why Librarians Still Rule The Earth', was explained by Simon Inger of ingenta, after a welcome break but with time running short, due to the numerous false starts to the seminar.

Simon gave a necessarily abbreviated presentation. A potted history of the development of dot coms was followed by an analysis of dot coms in the serials industry and his views on issues, problems and solutions in the context of

the 'Appropriate Copy'. Underpinning these headings were the themes of dis-intermediation of subscription agents and the growing power of libraries in the process of the acquisition and dissemination of information. Whilst publishers have re-assessed the ambitious objective of capturing the end-user and eliminating all intermediaries, agents are still in danger of marginalisation - this despite the fact that the gateways, which now threaten them, began with subscription agents themselves as a means of increasing their subscriptions volume. The development by aggregators of 'library portals' has succeeded in better serving libraries by widening and deepening usage. The need to provide portals was born of the lack of information about the accessibility of content - a database of access rights remains the 'major missing link' (a Catchword initiative in 1996 to persuade subscription agents to put their vast funds of information into a shared rights access database failed!).

Meanwhile libraries are increasingly building their own access control layers - they know what users can access because they pay for it. Resources such as Jake, SFX and Openly Jake are moving towards solving the 'Appropriate Copy' issue; all tackle multiple manifestations (or incarnations) of content and help Librarians and Collection Developers to select the best, most relevant and cost-effective material. The cautionary note is that the exposure of pricing differentials may make publishers more cautious about proliferation of their content. Simon's conclusion centered on the empowerment of libraries versus the dis-intermediation of subscription agents. "Librarians may not rule the earth, but they are in a much stronger position than three years ago".

SFX – Jenny Walker of Ex Libris USA suffered more than most at the hands of the power-cut which blighted the day; her presentation was based around a substantial number of dense and graphical slides, which in the event she was unable to 'talk to'. Anyone wishing to see Jenny's representation of the proposition should contact her at jwalker@exlibris-usa.com.

'Here a link, there a link, let the librarians decide, with SFX and the OpenURL framework' centred around the delivery of localised extended services via the OpenURL framework as a

solution, the SFX software and the interaction of SFX/OpenURL, DOI and CrossRef, all in the context of the issues faced by libraries in moving from reference linking to extended linking. Closed systems do not allow context-sensitive links, hence the need to move to an open system and the OpenURL framework. Context-sensitive links are vital in addressing the 'appropriate copy' problem. OpenURL was explained as a mechanism for transporting metadata to an interlinked server environment – conceived at the University of Gent and in the process of being accepted as a NISO standard. OpenURL must be implemented by the local ISP to enable their use as an SFX source.

SFX resolves links determined by libraries via an OpenURL-compliant link server. Users will see an SFX button, which produces a menu of service links as well as a menu-enabled list of 'sources and targets'. Sources must provide an OpenURL and targets must have a defined link-to or search syntax. Within the SFX environment, the library can create its own range of services. SFX and OpenURL are compatible with CrossRef and DOI and can sit alongside existing linking solutions. SFX accepts OpenURL as an input, collects metadata, evaluates the appropriate services and computes the links to the targets. In summary, Jenny highlighted the ability of SFX to provide extended services, to enable the localisation of services, to set up standardisation of services across resources and to act as a single point of administration. For those of us pondering the possible expansions of SFX, Jenny explained that it was an imaginative abbreviation of 'Special Effects' – the SFX guru Herbert van de Sompel is apparently an avid movie fan. Jenny also referenced the comprehensive article by v.d. Sompel and Beit-Arie, "Open Linking in the Scholarly Information Environment Using the OpenURL Framework", in the March 2001 (7(3)) issue of D-Lib Magazine.

After lunch we returned to the darkened lecture theatre (even darker now that the batteries supplying the emergency lighting were running down) to be greeted by a fully working data projector. Over lunch the staff had managed to rig up an emergency power feed to the data projector.

'Automatic citation linking' by Justin Needle, the Syntalex Commercial Manager from Context Ltd, was the first presentation to benefit from the ability to use PowerPoint. Justin's company is a leading independent electronic publisher of UK and European Union legal and official information. Syntalex is the technology unit of Context Ltd. This presentation focussed on a description of the system that Syntalex have developed for the automatic creation of hypertext links from textual references to millions of legal cases. The references appear in the body of the text of a wide variety of documents, from many different sources. Using the Hamilton vs Al Fayad case as an illustration, Justin described how they have developed techniques, which treat citations as structured patterns of text and which can, using contextual information, identify citations which can appear in numerous distinct formats. The system then automatically interprets the citations and uses the resulting metadata to create links to the cited documents. He described how they had a choice of either inserting the links directly into the text of the documents, or going for a dynamic linking system that would create the links 'on the fly'. They adopted the latter system, called J-Link, because of the advantages of not needing to edit documents after changes or additions.

The 'jake Project'(http://jake.med.yale.edu/ docs/about.html) was described by its project maintainer and founder, Daniel Chudnov from Yale. Daniel is working to build a not-for-profit corporation devoted to ongoing development support of jake and related projects. Reviewing the earlier presentations, he said that he was very impressed and felt that we had 'tied down the reference linking issue'. As a result he said he had decided to cut out two thirds of his talk. jake stands for Jointly Administered Knowledge Environment. He described the most important aspect of jake as being that it is an Open Source product, available free of charge. Daniel said that he was a great advocate of open systems and free software because it means that you can have many people working on it bringing new ideas, checking and updating the system. Daniel himself described his enthusiastic embracing of this manner of developing systems as a personal crusade. He felt that the people working on this were doing a great service for all of us.

By the time Daniel had finished his presentation, the lights had come back on.

Perhaps he managed to turn the lights on for the audience as well with his personal zeal for the concept.

'Discovery then location: join-up with well-made seams' was the last presentation of the day and was given by Peter Burnhill, Director of EDINA. He started with a brief overview of the JISC, the DNER initiative and the roles of the three national data centres which he described as 'bricks in the wall of the UK Virtual Library'. The main part of his talk covered the JISC-funded DNER infrastructure project being carried out by EDINA, King's College London, and the British Library called Join-Up. This is a group of four projects, two of which are concerned with document delivery (Docusend and ZETOC) and two (Xgrain and ZBLSA), which are broker

services. He described Xgrain, which cross-searches A&I and ToC databases, as a 'Google' for A&I databases.

He then described in more detail ZBLSA (Z39.50 lightweight Broker Locating Services on Articles – Peter thought that the secret of success in project proposals was a good name!). This is a scoping study, which will produce a pilot system that will take as input article references and information about the requester, locate services on the article, and then present an appropriate list of services to the requester.

Further information about Join-Up is available at http://edina.ed.ac.uk/projects/join-up/events

Helen Henderson, Richard Savory (Everetts) Terry Morrow (ingenta)

### A DAY IN THE LIFE OF A LIBRARIAN

Report of a UKSG seminar, Sheffield Hallam University, 19 June 2001

The day in the life of a librarian was the second in the series and followed "A Day in the Life of a Journal Publisher," held in November 2000, and reported in *Serials*, 14(1) March 2001.

20 delegates met in the impressive Adsetts Centre, which was opened by David Blunkett, Former Shadow Secretary of State for Education and Employment, on 11 October 1996, and takes its name from Norman Adsetts, the prominent Sheffield businessman and Chair of the University's Governing Body.

Ann Betterton, Collection Development Manager, hosted the day and began by giving an overview of the Adsetts Centre, which is known as the Learning Centre. It has the strip line "Taking learning into the 21st century" and certainly lives up to this by leaving behind the typical image of a library and receiving over 60,000 student visits a week.

During the morning session we were given four presentations: two from academia, and two from the corporate sector. Following an exceptional lunch and overview of the centre by Graham Bulpitt, Director of the Learning Centre we split into two groups. Each group was given a tour of the centre and a behind the scenes look at how the journals make their way onto the main shelves. Each group then had an informal session with the speakers to discuss issues raised during the morning session.

## Issues about access: serials information in an academic context

Ann Betterton (academia)

Sheffield Hallam University has a student population of 27,000 students, a high number of which are undergraduates.

The Learning Centre has to cater for distance learners, part timers and flexible mode of attendance. Because of the diversity of students the centre is always reviewing their teaching profile and have to take into account student loans, independent learning and the fact that an increasing number of students want computer-based packages and have internet access from home.

High on the Centre's priority list is management of the budget, which has increased by 28.5% since 1995. Reviewing the budget on a yearly basis is a lengthy process with many factors being taken into consideration. These include:

- · cost of books and journals;
- student numbers:
- new courses being introduced;
- areas of stock which need developing;
- new databases.

Once the data is gathered and reviewed, there follows a selection process that makes sure the appropriate data is available to students. It is not the University's policy to duplicate journals or books at any of its sites. This in turn allows expenditure in other areas.

Electronic data is the preferred way of providing information and includes full text databases and e-journals that are free with print. The university is also a member of the NESLI project, which gives students access to over 2400 electronic titles.

Bibliographic details are provided via catalogues and not web pages, which have become too long. There are also separate catalogues for electronic and print journals. Linking has proved a useful way of obtaining information, as it provides access to electronic journals and reduces the number of inter-library loan requests.

All the above raises issues about collection management and the University has to consider staffing levels. The need for daily contact with the subscription agent continues to grow. The University is committed to integrating electronic learning but realises that this raises new problems, for example, losing access to e-data, and technical problems.

The conclusion is that although many of the issues raised are frustrating and complex but also challenging. When everything is working well they are effective, successful and provide seamless information.

## Snap, crackle and pop: do electronic serials meet our daily requirement?

Andrew Booth (academia)

The School of Health and Related Research (ScHARR) employs 260 staff and aims to "improve the health and well being of the population through excellent research, training,

consultancy and advice." This paper looked at how we manage and provide information.

When do we decide to cancel the hardcopy journal and only subscribe to the e-journal? Customers are requesting inter-library loans (ILL), when the article required is available electronically. However, we have to look at staff costs involved in checking ILL's, searching the e-journal and printing the article.

As more links become available from databases, customers' expectations rise and they expect more journals to become available electronically. User authentication can be complex and differs between publisher and aggregator. For example, Athens uses a single password, whereas Lancet has individual passwords and is accessible by machine or by person?

There are many issues surrounding bibliographic control of e-journals that still need addressing. Not all e-journals have a different ISSN from the printed copy; supplementary material and letters are not always included with the electronic copy.

E-journals do provide added value for the customer, in that they allow users to set up emailed table of contents alerts, but why are titles packaged as e-journals? As more journals become available electronically, the reading pattern changes. This was illustrated as:

- the publisher has become more critical;
- the journal title becomes less relevant;
- the article becomes less useful;
- the paragraph in context becomes more useful;
- the references (with hypertext links) become more valuable;
- the search facility becomes indispensable.

#### Discovering e-journals – a personal perspective

Jackie Bower (corporate)

Smith & Nephew Group Research Centre based in York employs 120 scientists and has a small library. They presently subscribe to 110 print journals about fourteen of which are available electronically free with print.

An electronic journals project was started in 1997 to monitor:

what was happening in the world of e-journals;

- the availability of e-journals and advise on implementation;
- to source free access to tables of contents and abstracts;
- negotiate site or global licences;
- keep users informed of availability.

From Smith & Nephew's point of view, the project found academia had access to many e-journals through special deals and were way ahead of the corporate sector. They were offered deals, which the corporate sector was not, and there were discrepancies between publishers and pricing. They found full text journals could be very expensive and not all the titles they wanted were available electronically. There were also the issues concerning archives.

The problems and frustrations around e-journals were: increasing journal costs; IT infrastructure, and problems with access due to lack of visible IP ranges. Contacting publishers individually to arrange access was time consuming and how to set up access was not always clear. For journals purchased via a subscription agent, there was a problem with subscription ID numbers being available.

The above cause concerns for academia and the corporate sector, but everyone is keen to progress with e-journals and customers a like, and expect us to provide more e-journals wherever possible.

## Serials, solicitors and suppliers – a work in progress

Catherine E Hearn (corporate)

Irwin Mitchell is one of the top 20 law firms and employs 1500 staff. The company subscribes to

3,000 printed journals and has access to over 30 online databases. Key functions within the Library are to provide speedy access and focus on the individuals information needs.

Current awareness is very important within the business, together with training and administration support, content management and focusing on IT delivery methods.

There are various types of legal serials, which range from newspapers through to online databases, all of which need to be evaluated, packaged and users made aware of the content.

As previously mentioned by all the speakers, ejournal access is very important and having packaged titles, remembering passwords and communicating with publishers can be very frustrating.

#### Summary

The four speakers all summarised their views and problems in a similar way to those already expressed at other conferences that I have attended, by saying that they were very keen to progress with e-journals. However, setting up access is not always straightforward and they were not confident about having continued access to the e-journal archive. Therefore, publishers, subscription agents and customers must continue to liaise with each other and meet at conferences, such as this, to discuss the issues.

Caroline Moss-Gibbons, UKSG Education Group representative chaired the day very effectively by encouraging input from the group and leading the afternoon discussion groups.

> Catherine Brown AstraZeneca R&D

# Publishers and Libraries: working together (an ALPSP/SCONUL/IIS seminar)

Society of Chemical Industry, 14/15 Belgrave Square, London SW1X 8PS, 20 July 2001

The speakers covered current issues in their own organisations, and the day was split into four sections: National libraries; HE/FE libraries; Special libraries and National (UK) initiatives.

Lynne Brindley from the British Library (BL)

spoke of their new strategic directions, and the consultation survey related to it. Their key strategies are collection and access and there is an increasing emphasis on accessibility at work, school and home, via a virtual bookshelf. There is

a Digital Library Store project in partnership with IBM. It was interesting to note that revenue from BLDSC (BL document supply center) is decreasing, due to many institutions having increased access to content via e-journal bundled packages. The British Library business models are changing, for example BL is participating in TEL (The European Library) project (for details see www.europeanlibrary.org).

Leo Voogt, the new Library Relations Director for Elsevier Science, whose topic was 'Working with national libraries', spoke of the many challenges involved in moving from ownership (of print) to access (of electronic). One of the changes means that long-term preservation and digital archiving being achieved through collaboration between publisher and national libraries. Elsevier is seeking to get closer to their customers to better understand their needs and provide more personalised services.

Tom Graham, from the University of Newcastle, addressed the issue in FE, commenting on how the electronic information world has led to a change from ownership of print, to licence to access for electronic content, with archiving yet to be resolved. There are many varied licencing models and pricing options, and it is more time consuming to manage these than print subscriptions! Roles of publisher/agent/library are changing and HE funding councils will not subsidise content. Users have increased expectations for coverage and access (24/7), with 'as much as you can eat' models often offered by

publishers in the e-World. There are often significant price increases involved in moving from print to electronic. This has led to a feeling of loss of control over budgets and collections.

Dan Greenstein, of CLIR, is working with the Digital Library Federation in the US, where 26 members of large research institutions have set up a co-operative to investigate and work on issues, such as archiving, which are of relevance to them all. For details see: www.digilib.org.

Jayne Marks, Publishing Director of Nature Publishing Group, addressed the publisher issues of changing business models, loss of print subscriptions, and the significant investment required to provide online services. Threats such as Public Library of Science (see www.publiclibraryofscience.org for details), which is a demand from academics to have free access to a central, database six months following publication, are not considered economically viable by publishers, but academics have given a September deadline for commitment from publishers.

David Alsmeyer, from BT, provided the corporate specialist library viewpoint, where the library is effectively re-selling content, rather than collecting it.

Carol Ann Halliday, from Emerald (formerly MCB), presented a survey that they had conducted on user needs re e-journals. Emerald is 're-purposing' their content to enable user self-service, in order to provide just enough, "just in time, just for me".

Liz McNaughton, RoweCom UK

# LIBRARIES AND LIBRARIANS: MAKING A DIFFERENCE IN THE KNOWLEDGE AGE

67th IFLA Council and General Conference, August 16 – 25, Boston, USA (www.ifla.org)

The 67th Council and General Conference of IFLA (International Federation of Library Associations and Institutions) attracted record crowds of nearly 4000 to Boston in August 2001. This was the first time in 15 years that the annual meeting had been held in the United States and the conference organizers were creative in obtaining sponsorships from among libraries before approaching vendors for support.

IFLA's primary focus is organizational and institutional members. The national organizers for the U.S. meeting included ALA (American Library Association), SLA (Special Library Association), MLA (Medical Library Association), ARL (Association of Research Libraries), AALL (American Association of Law Libraries) and ALISE (Association for Library and Information Science).

Many companies familiar to U.S. library conferences were found among the 150+ exhibitors, along with national libraries and major U.S. public libraries. The opening reception was colorful as international librarians displayed various styles local to their customs and culture. The opening and closing sessions and selected other sessions were simultaneously translated into English, French, Russian, German and Spanish.

There were 11 satellite meetings held on a variety of topics in conjunction with IFLA and seven of them were scattered in different cities including two in Canada. Two pre-conferences that I attended were informative and brought together interesting and experienced groups to discuss topics of growing interest.

Fourth Northumbria International Conference on Performance Measurement in Libraries and Information Services http://www.arl.org/stats/north/index.html

The format of this four-day program was uniquely designed to allow 60 speakers to present their activities in short (30 minute) parallel sessions to the 120 attendees. This enabled a wide range of ideas and experiences to be shared with those drawn to discuss the shift in focus from statistics on collection activity to assessment of the users' experience.

Associate Directors duties and titles are changing from AD for Collections to AD for Assessment. This parallels the shift from ownership to access.

One of the new tools being developed under the ARL New is a survey instrument called LibQUAL www.arl.org/libqual that was adapted from ServQUAL, a marketing tool which analyzes the gap between the users' perceptions and their expectations of service quality. It shifts the focus from measuring the size of a collection or the amount of activity to determining whether users feel that their needs were met.

Librarians are experiencing the need to focus on their customers and the opportunity to understand them, in a way that was not possible in the print environment. Amos Lakos, Information Services and Resources Librarian at the University of Waterloo, www.lib.uwaterloo. ca/~aalakos/CUtoolkit.html described the need to establish a culture of assessment, in order to incorporate the results of measurement into daily operation.

Preconference on Library Consortia co-sponsored by IFLA and NELINET (New England Library Network) http://silver.ohiolink.edu/ioclc/ifla-registration.html

Hosted by those active in the International Coalition of Library Consortia (ICOLC), this program attracted a surprising number of vendors, who were interested in learning more about how to work with consortia.

Arnold Hirshon, Executive Director of Nelinet began the program discussing consortia generally and defining how Nelinet is working with its members using market segmentation strategies. He was followed by representatives from consortia around the globe, who described how they were structured, their purpose, funding and the challenges facing them.

Tom Sanville, the Executive Director of OhioLINK showed a number of graphs that demonstrated his point "you can only underestimate demand". He noted that librarians use consortia for economic leverage, for operational leverage and to increase access.

IFLA will be held in Glasgow Scotland August 18-24, 2002.

Judy Luther, Informed Strategies