This year's conference, entitled "Empires of the Mind: Inventing the Future of Scholarly Publishing," celebrated the 30th anniversary of the founding of the Society for Scholarly Publishing in 1978. With over 700 attendees and a plethora of sessions of interest to academic librarians, the conference proved to be another wonderful opportunity to engage and interact with the world of scholarly publishing. Whether librarian, publisher, vendor, author, editor, or reviewer, it behooves us all to keep up with changing paradigms in scholarly publishing. In a way, now more than ever, we are all in this world of research together-moving libraries and publishing forward into an uncertain future. It would seem to be better to collaborate than to compete. There can be discussion and openness from all stakeholders interested in crafting the future, rather than just reacting piecemeal to what seems like constant change. I found this SSP conference to be welcoming, enjoyable, and well organized to promote dialogue and learning.

Pre-meeting seminars focused on such topics as Web 2.0, digital preservation, how to comply with public access mandates, how semantic tagging makes content more discoverable and useful, and a discussion of issues surrounding supplementary materials. I was unable to attend these seminars due to the added cost, but was especially interested in the recent trend toward linking supplementary materials to journal articles. Luckily, many of the sessions I was unable to attend are captured in part on the SSP website at: http://sspnet.org/News/Gems_from_the_SSP_30th_Annual_Me/news.aspx

In particular, the issue of linking to supplementary materials is a topic that will be of interest to librarians dealing with interlibrary loan, reference, and the subject areas where sharing data is becoming common practice. The common topic at the informal breakfast and lunch discussions I attended seemed to be e-books. Publishers were asking librarians to share what they think that users want, and librarians were asking about business models and seeking a rationale for the chaos of the current e-books landscape. The complex subject of e-books is clearly an interest common to both librarians and scholarly publishers.

The keynote speech, "The Deep History of the Information Age" by Alex Wright, now of the New York Times, but at one time a librarian, was focused on disruptive new technologies, as well as how the past has been marked by many transitional periods. Alex Wright is the author of "Glut: Mastering Information through the Ages." Although libraries and scholarly publishers are experiencing a time of transition, Wright reminded attendees that humanity has gone through many disruptive periods on the way to our current situation. This talk took attendees through various transitional time periods in history, and focused on the fact that once people began living together in social groups, they attempted to organize information into hierarchies and networks. Social networking in its various forms has existed throughout the ages; from the Ice Age Information Explosion to the "Age of Alphabets," where counting gave way to writing, and a schism between the oral and literate cultures developed. The emergence of the scribes of the literate elite, and the great libraries of the ancient world followed the transition from the papyrus scroll to the new technology of the time-the codex book. Each book, held in the medieval monasteries, was a work unto itself. Wright discussed the Gutenberg Era, and the beginnings of the popular or secular literary tradition, and after this disruption, the industrial information economy. This time period popularized the mass production of books and public education. Modern library catalogs developed, and the library systems we have come to know to this
point have flourished. Wright mentioned as major contributors Charles Cutter, librarian of the Boston Athanaeum and rival of Dewey, H.G. Wells's publication of "The World Brain," Teilhard de Chardin (the heretical idealist), and Paul Otlet, creator of the Universal Decimal Classification. It seemed many audience members had been unaware of the important contributions of Otlet, the founder of the Mundanaeum, a new kind of library. Otlet’s concept was to create a worldwide repository of knowledge, available to anyone. People would be able to get inside the book, and to extract information. Otlet also envisioned a system where people could telegraph questions and they would be answered. Otlet's Mundanaeum was closed by the Nazis, but his concept almost surely evokes a kind of early internet, and may even have been a precursor to today's virtual reference services. Of course, the much more familiar Vannevar Bush, author of the Atlantic Monthly article "As We May Think" in 1945, proposed the Memex, a microfilm-based system where users could create their own associations. Bush met resistance to his ideas from librarians. Eugene Garfield, the inventor of citation ranking, could be said to be the forefather of the "page ranking" concept in use by search engines today. Other notable contributors Wright discussed included Doug Engelbart, author of "Augmenting Human Intelligence," Ted Nelson who coined the term "hypertext," was the creator of Xanadu, and authored "Literary Machines," "Dream Machines," and "Computer Lib." Another interesting fact was that even though not much credence is given to oral culture in the information age, it is manifesting itself anew on the web in applications like Facebook, MySpace, and blogging. This phenomenon is in opposition to literate culture, and now we see they can both coexist and flourish. People want to participate in both the use and generation of information, and the example was given of Amazon with its two kinds of reviews, generated by both publishers and users.

Wright's presentation really provided food for thought about the role of modern libraries as repositories for information objects, but also primarily today as places for people. Maybe we should maintain a role in providing vetted scholarly content, but also allow our users to participate more through portals, websites, and social networking tools of all kinds. The library could be a place where scholarly information is organized and presented, but then our users can manipulate this shared space in ways that work best for them. Publishers can also partner in their information space on the web by allowing users of their information a shared space to organize relevant information and participate in various ways in each particular community of scholars and readers.

The first engaging session, one that drew a large crowd, was entitled "New Content and Business Models in the New Publishing World Order." The session dealt with new business models, the importance of adding value, issues with re-purposing content, and suggestions for ways to monetize and adapt to a new publishing order. This session featured Michael Beveridge (American Association for Cancer Research), Geoffrey Bilder (CrossRef), David Durand (Tizra), and Sharon Mombru (BlueInsights). Mombru introduced the topic of online communities (which seemed to keep coming back throughout the conference). Knowledge exchange is happening between and among niche scholarly communities and their membership. Examples given of tools in current use for sharing included networking tools such as LinkedIn and Facebook, information sharing/uploading, filesharing through players such as LimeWire and YouTube, and information organizing/gathering references through services such as Connotea which allows sharing references with all members of a defined group. References are gathered from the web and shared with large audiences, and there is a convergence of people and information. People belong to various networks which deliver information to them, and sharing is what people want to do. A fundamental principle is that people get information from those they know and trust. Your social peer networks are becoming content discovery platforms. This concept of sharing links, articles and other research information not surprisingly came back in another session on copyright infringement. Following Mombru's presentation, I am sure both publishers and librarians were wondering what they could do to become part of these sharing
communities, especially in niche areas. Opportunities would seem to be there for libraries to take advantage of free web technologies to promote services and all kinds of collections. Any space where collaboration can take place will be of interest to both librarians and publishers.

Beveridge discussed the use of portals, and the AACR's focus on members, institutions, and site licenses. The flagship journal of the AACR is Cancer Research. Portals allow publishers to capitalize on non-journal content as well as to get away from strictly topical organization. An example of a portal that searches across AACR content is "Cancer Reviews Online." New in 2009 will be "Cancer Prevention Journals Portal" providing greater visibility and more knowledge of the breadth of this publisher's content. On the publisher side, use of portals can increase use of products, thereby expanding business. So far, only members are using the portal, and there is opportunity for others to engage with this. How can libraries make use of publishers' portals? Is there any opportunity here for the specialized library to be involved?

Following the presentations of Monbru and Beveridge, a debate ensued about the potential use of iTunes for scholarly publishing. Would this be of interest to libraries-as an alternative to ILL or for those that replace ILL with traditional "pay per view" models? The debate featured Geoffrey Bilder of CrossRef taking the position that iTunes would be a good model, and David Durand providing another viewpoint. If these kinds of models (iTunes) are inexpensive, convenient, and ubiquitous to most students and faculty, maybe marketing articles this way would be advantageous for publishers and cheaper for libraries.

Bilder commented that librarians design bad websites, and publishers design bad interfaces, and the library and the publisher are both in silos. Users don't want a brand; they want a simple interface. Still, it is interesting that none of us (publishers or librarians) really know who our users are, or how or why they are coming to our sites. There was discussion of how much researchers are willing to pay for an article; the ninety-nine cent model of iTunes is attractive. The pay per view prices of 20-35 dollars commonly seen may be prohibitive. Maybe article content could be priced much lower. Bilder mentions some of iTunes' strengths as: critical mass, simple pricing, disaggregation (per song), cheap price (encourages more buying), and use of the iPod (ubiquitous). All of this could lend itself to an expansion of the article-based economy.

David Durand of Tizra talked about books; most cannot be found online. Can you identify potential readers? Branding, and the smaller things that the "gorillas" cannot do are important. The question was raised as to how this iTunes model would affect academic libraries. The money is in the academic libraries, and not in the hands of students or faculty who might wish to buy articles piecemeal. Usually, the pay per view model is not used in the institution, and money would have to be shifted to the users themselves, and it is not clear how this type of individual or departmental funding could occur. Would this be the death of libraries? There was a suggestion that libraries could draw up a pot and have students and faculty use it. A librarian from the floor commented that her library may be very interested in this. My own thoughts were around the effects on interlibrary loan, and other established paths to information, and also whether this model might allow a short-term or less expensive strategy for libraries dealing with cancellation and budget pressures. The interruption to subscription revenue to publishers, and the resulting wholesale change in how scholarly information is being discovered and accessed is really interesting. Of course, any way that libraries can get the information they need as cheaply as possible tends to be of interest. iTunes calls to mind a 99 cent purchase, and I'm sure metrics could be employed to determine what a scholarly article is worth to a given researcher in a given institution.

For a break from the practical side of business, the first plenary session provided a look toward the future. The fascinating speaker was Patti Maes, Associate Professor of the Program in Media Arts and Sciences at MIT, and her topic, "Just-in-time Information" gave attendees a visionary and somewhat
futuristic idea of some of the technology that might be utilized to offer readers and researchers a way to gather information at the point that it is needed. The innovative products Maes described could have great implications for the future of information gathering and search. Instead of interrupting work to gather contextual details surrounding an information need, a person would have ready access to this "just in time information." For instance, a search engine browser could learn about you, and a system or agent would be able to find other information of interest and present it to you, or you could subscribe to a service that would present information from "mentors" who would be able to present opinion and further information on a topic. A most interesting development was the wireless wristband that can read RFID tags (for instance in a book), and send information to a reader about nearby books. There would be more interaction with the everyday. Maes said that "just in time" information supports insight, inspiration (brainstorming), and opportunities for personal connections; for instance you may be automatically connected to others reading the same work. Devices would give you the information when you are most concerned with that information; right at the moment. It seems that all of this information would help with everyday decision-making and analysis of available data in many settings; for example as a physician is collecting available information at the moment from many sources to make a correct diagnosis and formulate a treatment plan for an individual situation.

Other applications for "just in time" information systems might be to enhance decision-making in health, environment, community, and everyday transactions. The applicability to scholarly communications would be in the sharing with others, and in gaining knowledge about who is working in the same areas. There is value in capturing expertise and information on the go. Other examples were given of a "post-it note" system of remembering and organizing information in small chunks as the day goes on, the concept of multiple devices that can work together such as "siftables." The concept that got the largest response from the audience was the example of books on a shelf trying to attract consumers to them based on an interaction between the device the shopper is wearing and the information emitted by the book. As the shopper walks by in the bookstore, books of supposed interest (based on profiles that consumers have set up) would begin lighting up to attract the customer. The booksellers in the audience must've found this compelling. Librarians, for that matter, might be able to envision a library where relevant books call out to patrons. This presentation allowed attendees to consider radically rethinking digital interaction with their environment, and how the offering of information that is highly relevant and useful to a person during their current focus of attention could enhance productivity in daily life.

Maes's ideas were invoked in many other sessions throughout the conference.

The concurrent sessions that followed offered choices of sessions on "Working in Global Markets," "Building a Better Blog: Value-Added or Just Another Distraction," or the one I attended, "Search Meets Deep Web-Maximizing Reference Resource Discovery." Speakers were Doug Goldenberg-Hart of CQ Press, Chip Nilges of OCLC, and Cathy Norton of the Woods Hole Oceanographic Institute, BioDiversity Heritage Library. The speakers focused on how they are integrating and making their valuable content visible on the public web. Goldenberg-Hart discussed CQ Press's flagship product, "CQ Researcher," and the value of the resource for the political science community. This most interesting discussion had a lot of relevance for librarians; the problem of the impediments to getting students to discover the content, and also for publishers to sell it to librarians. I mentioned the necessity for publishers to feel free to contact subject specialists when they wish to discuss a new product or a change to a service, as my feeling is that often vendors and publishers are contacting the wrong people at many institutions in trying to effectively market their resources. In my opinion, the subject selector seems to be out of the loop in some of these processes. How do publishers get their resources discovered on the public web, and connect assets on the public and private web? Widgets, APIs that provide display of data for users, and user blogs and wikis were discussed. Moving firewalls, and
using Google Book Search to enable discovery were mentioned, as was the potential to use technical solutions to enable ubiquitous authentication. Do publishers maintain a posture that librarians are essential? What are librarians doing to promote discoverability of subscription products?

Cathy Norton of Woods Hole provided a different perspective as the project director of the BioDiversity Heritage Library. Woods Hole is doing exhaustive work to produce a record of species curated and authenticated by leading taxonomists. The foundations of the Encyclopedia of Life were discussed, and the fact that large grants have been procured to produce a web site for each of 1.8 million known species. This challenging biodiversity project is a collaboration of ten institutions including the Field Museum, the Mann Library, and Marine Biological Laboratory at Woods Hole. Whereas 95% of biodiversity exists in Africa and South America, more than 90% of the literature originates in North America. The challenge is to find all of the names for each species and link them. It is possible to search major databases such as PubMed and JSTOR and find no link between different names for the same organism. Since funding started in July 2007, 36,000 websites have been put up, beginning with the fishes. Other current initiatives like "Species of Life" and "Wikispecies" will be incorporated.

This is a case where information must be gathered, organized and presented on a very large scale. Issues of preservation and curation of data were discussed as needing attention from various communities.

Chip Nilges of OCLC focused on initiatives connecting people to knowledge through library cooperation, with OCLC being the world's largest library cooperative. OCLC partners with both libraries and publishers, and is an example of one of the many who are "working both sides of the fence." WorldCat use had become flat, and OCLC decided to offer OpenWorldCat.org free. OCLC's products function as both a library catalog, and an affiliates program. From a librarian perspective, OCLC has been indispensable for years for its discovery function, but also as an engine of verification for scholarly works. Nilges mentioned the unfortunate end of Academic Live Search, and discussed affiliations with Google, Google Scholar, Yahoo, Abebooks, and Google Books, as well as the option of using a Facebook widget. In WorldCat.org, researchers will see links to Internet Archive. WorldCat is good news for libraries and publishers alike. Nilges also discussed the use of library websites, the fact that people value libraries, and that a percentage of people always start with web search engines when looking for information. WorldCat Local is up and running, and has garnered tremendous interest. It is able to produce dramatic increases in the use of physical collections. 57 million article citations are integrated into WorldCat Local. Even the fee product is thriving, with libraries supporting WorldCat with increasing numbers of subscriptions. Partnerships are very valuable, and globalization is a focus for OCLC, libraries and publishers. The future focus of WorldCat is toward constantly expanding coverage, and OCLC will expand social networking functionality with their huge networks.

It was difficult to choose between the next sessions also. Concurrent sessions focused on "E-Learning: The Next Big Thing for Scholarly Publishers," "Online Communities: What Does It Take to Make Them Succeed," "Beyond Books and Journals: Delivering Nontraditional Content that Users Want," and a session on "Copyright 2.0: The Agony and the Ecstasy." There is not one of those presentation titles that did not have relevance to academic librarians, but I chose the copyright session. Copyright is a growing interest of librarians, and as all areas encompassing scholarly communications, requires constant monitoring of many information sources if one wants to remain current. The moderator, Ed Colleran, from the Copyright Clearance Center set the stage for the trying times we live in. There are 1.2 million internet users today-up from 48 million in 1996. Today it takes five years to read the scientific material produced every 24 hours, and users are doing a variety of things with content. Greg Merkle from Dow Jones Enterprise Media Group (includes Factiva) discussed the interaction of content
creators, participants, and readers. How much revenue is lost to publishers when articles are emailed? Publishers are not asking authors to take down content. Are publishers still worried about the sharing of content? It will only become more difficult for publishers to know what's going on. Audience members' questions reflected the frustration with all of the offshoots of the internet age-too much sharing, copying and pasting, and plagiarism. Control of rights was the main focus, and how best to move forward, while at the same time acknowledging how readers and writers currently are working.

Ammy Vogtlander of BlueInsights discussed the concept of selective online sharing of content within a professional environment. Using folders where a person can post material to be shared, the system would promote networking and potentially drive impact. Addressing copyright infringement in online sharing programs was an interesting topic. Publishers need to think from the current users' point of view when grappling with copyright issues. YouTube, Twine (excellent description on the web by Tim O'Reilly in O'Reilly Radar (http://radar.oreilly.com/archives/2007/10/web2summit-radar-networks-unwi.html), and Ezmo (music sharing) were used as examples of sharing initiatives. The onus is on the content creator to protest if material is not to be shared. The publisher does not necessarily know what people are doing with content. The solutions are imperfect. YouTube uses a reactive strategy of taking down content, Twine is more passive with an end user agreement, and Ezmo limits sharing to a group of ten friends. Dapper and Yahoopipes also were given as examples, and even Swivel for use of data. Online communities are starting to form around data. Some proposed solutions for dealing with scientific information may be to recognize that online sharing is going to happen, embed copyright information into the article, possibly give away a "free layer" of the content, specify the number of "friends" entitled to view the full text, and include links in the article directing friends to content. Solutions require collaboration, and stakeholders must agree on standards for copyright information across publishers. Some feel that online sharing is a form of web promotion of a publisher's content. A very interesting discussion followed from the perspective of many different stakeholders, and it was very evident that this conversation about copyright infringement in the age of online sharing could continue long into the afternoon. Creative Commons was discussed, and of the content that Factiva aggregates, a component uses this license. There is a shift toward users creating news, and there is value in the aggregation of content. One history publisher offered the advice that publishers refrain from being too rigid, don't stonewall, and that they all continue the conversation about plagiarism. Plagiarism and repurposing of content are big concerns, and the practical issues of identifying plagiarized content, working in a world of mashups, and the differing mindsets around the issue are topics of interest. Turnitin and Crosscheck are important tools. There is a great interest in what "college kids" are doing with content. Since most of these students are library customers, librarians should be able to gather this type of information about users. Librarians in the group offered the researcher's perspective. What kind of sharing most benefits the researchers in terms of impact and web visibility? What do the authors really care about? My comment was that researchers would have different motivations for publishing their work depending on whether they are interested in promotion and tenure, maximum web visibility, or some other benefit. There are no obvious conclusions, and the topic provoked great emotion and response among audience members. I could only wonder where libraries fit in this conversation; the original places where content is shared with interested users. Librarians must work with publishers, readers, and researchers, or risk becoming marginalized as part of communities of those sharing information. Many libraries now have scholarly communications librarians or copyright librarians, or both. There must be a library voice in the larger conversation. Couldn't the library, with its valuable, vetted content be at the center of this movement, and help bring people together around learning?

The next group of sessions included "The Agile IT Organization," "Interactive Marketing and Advertising: When the Web Gets Personal," "Accessibility: It's Real and It's Realistic," and the session...
I attended, "Dropping Print Without Getting Hurt." This was another blockbuster session with a large crowd featuring Keith Seitter of the American Meteorological Society, Greg Malar of Rockefeller University Press, and Constance Hardesty of the American Animal Hospital Association. This discussion had some of the most surprising information that I heard at the conference; namely that publishers were having trouble selling "online only" to libraries, and that many of their library customers still wanted to buy print only subscriptions. My experience in a large research library system that has actively pursued online only options for many of our subscriptions made this a very informative session. The library patrons I deal with, with their heavy use of tools such as Zotero, EndNote, and RefWorks, and their habits of working at home, would make the print only option terribly inconvenient. I was very interested in trying to understand the motivations behind the print only choice, and had the chance to discuss this with both librarians and publishers. The other librarians present at the session were from institutions that had been moving their collections online so we did not get to hear from the other side. Seitter stressed that each society is different with its own culture, and that the American Meteorological Society has nine journals serving the research community. AMS print went online in 1998, and all content older than five years is open access. Every back issue is online back to 1873. One publisher sitting nearby made a disparaging comment about open access which was interesting to me in itself, having myself been on the "library" side of the open access debate for many years. AMS offers its institutional customers choices of print, print plus online, or online only. In 2005, only 20% of institutions were online only. They use subscriptions and author page charges, with authors paying more for color. Authors would like to get rid of print, and the author base would like to move to online only. The institutions still wanted print. By 2007, AMS offered a model where institutions could add print for a higher fee. Seitter explained the pros and cons of the various models, but most interesting was that for many of the customers that chose print plus online, there were a large number that have not even activated the online. I am more than curious about this remaining preference for print subscriptions. For AMS, online only subscribers doubled in the two years (2005-2007), and two-thirds are now getting an online version. The key is to achieve nimbleness, and the dropping of print as a practice becomes a philosophical choice, taking into account what is right for the communities served. The discussion will continue at AMS, and print will remain available for now. Also, publishers may decide to take advantage of new technologies that allow them to offer print on demand and other services to customers willing to pay.

Greg Malar of Rockefeller University Press represented a hybrid model of university press and society publisher. Rockefeller publishes three biomedical journals, and there is no membership base. All of the journals have high impact factors. They went with online early through Highwire starting in 1997. Now there is a six month embargo on Rockefeller titles, and at that point, the content is free to anyone in the world. Libraries were pushed toward online, but slow to adopt. 155 countries receive the content free as members of various initiatives. Malar listed reasons to stop the traditional print, including the fact that the online is now the version of record, online image quality is now quite high, online archiving is well established, the print is not widely read, the cost of traditional offset printing is high, and the environmental cost of producing print. To get rid of print would require getting the balance right; there will be personal print subscription losses, institutional duplicate print losses, and institutional subscription cancellations due to the short six month embargo. Malar says the answer may increasingly be multisite, consortial, and national deals. It will be possible to partner with third parties. Some concerns Malar listed of dropping print would be loss of print advertising revenue (small for Rockefeller), and the lessening of visibility of the product in traditional places like tables in office suites, journal clubs, and marketing and exhibit spaces. The answer may be print on demand. The goal of Rockefeller was to stop print in 2008, but now they will continue through 2009. Malar feels that many libraries will keep going with print. Of course, my own institutional library dropped print some
time ago, and has been perfectly happy with that choice. An interesting perspective was presented by Constance Hardesty of the American Animal Hospital Association. Interestingly, they dropped print for online only for their flagship journal in 2003. The journal is read by practicing veterinarians, and to the Association's horror, 20% of their members quit after the switch to online. They may have to bring print back after learning this hard lesson. Hardesty stated that 95% of members read the journal when it lands in their mailboxes, and this visibility keeps the name of the Association in front of its members. When it went online, they no longer could read it on the plane, or between appointments in the clinic. Members do not necessarily have color printers so the important color was not there when they printed from the online version. Going online only ended up costing more. The Association made the mistake of not taking into account what their particular customers really wanted. Hardesty is asking what non-text component might be absolutely essential. Is there anything that the online can provide that is truly value-added for that community of practitioners? It seems that whichever part of the information chain we find ourselves in, we need to keep in constant touch with the needs of our customers and users. Mistakes can be made, and can be costly, as Hardesty pointed out. In summary, this issue of dropping print is hardly a no-brainer, and much study needs to be undertaken before any action can be taken.

Even lunch had its learning component. A series of luncheon roundtables had been set up that focused on the following interesting topics: author rights, publisher copyrights, digital repositories, generating online advertising revenue, free trials, print on demand, the NLM DTS for XML workflows as an archiving format, search engine optimization, the consortia market, changing editorial structures, preservation and outsourcing. There was truly something for everyone, even those who chose to just do some further networking with new or old contacts in either the publishing or library world.

Following lunch, at the packed plenary session, attendees gathered to listen to Adrian Johns, Professor of History at the University of Chicago discuss "The Authenticity Engine," another topic relevant to the theme of the conference-the 30th anniversary of SSP, and that historical precedents must inform current practices. Unfortunately, I had to catch a train before the session was over, so was only able to attend some of it. Johns made clear that the current crisis is a "crisis of opportunity." Whenever things seem particularly confusing and the way forward is not exactly clear, it is helpful to look at the situation as an opportunity for growth and change. Lessons can be learned from the past, and Johns presented illustrations of interesting periods from the history of publishing. I look forward to reading Johns' book "The Nature of the Book: Print and Knowledge in the Making," which has won many significant prizes.

Although the organizers packed a lot of information into a couple of busy days, there was still time for a lovely event at the restaurant at the Skywalk on the top of the Prudential. The panoramic view of the city was spectacular. The Society for Scholarly Publishing's 30th Annual Meeting (1978-2008) was an informative and welcoming event for any librarian interested in finding out what is happening in the world of publishing. The next conference, which will most likely offer the same favorable pricing for librarian attendees, will be held in Baltimore in 2009.

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