Scholarly Communications 101: Starting with the Basics

New Modes & Models

Ruth Lewis, Washington University in St. Louis
Scholarly Communications System

New modes & models

- rewards
- copyrights
- new business models
- open access
- OA mandates
- grants
- university
- taxpayers

Publisher

Peer Reviewers

editor

Academic Library

cost

budget
Overview

1. What is a new mode or model?
2. Examples of new modes & models
3. How academic libraries are supporting or initiating new models
What is a new model?

Technology
Activism
Scholarship
Ideas about authorship & scholarly publishing are evolving

- New technologies, interactive multimedia, online-only scholarly resources
- “In-progress” communication rather than a final archival publication
- New forms, such as, databases, datasets, digital text, images, simulations, visualization, animation, specialized software
- A changing picture for all involved in the life-cycle of scholarship (researchers, authors, editors, reviewers, publishers, scholarly societies, libraries, funders, readers)
Some examples of new models

- Visualizing Cultures
- BioMed Central
- H-France Forum
- Nature.com blogs
- Atmospheric Chemistry and Physics
- Pea Soup
- National Virtual Observatory
- PubMed Central
- SSRN
- arXiv
- Encyclopedia of Life
- FishBase
- SIGMA
- Hindawi
- Savage Minds
- PhilSci Archive
- PLoS
- Valley of the Shadow
- Ask Dr. Wiki
- Perseus Project
- RCSB Protein Data Bank
- eBird
- JoVE
- Alzheimer Research Forum
- Real Climate
Characteristics of new models

• Internet enabled
• New genres: forms of presentation, information blends
• New containers/software
• New modes for interaction
• New distribution & business models
• New relationships to peer review process
• Trend to open availability
Top Reasons Faculty Use New Models

• Facilitates exchanges among scholars
• Provides access to current research
• Supplies useful co-location of works

or http://dx.doi.org/10.3998/3336451.0012.105
Disciplinary Differences

Humanities & Social Sciences
- More often cited the value of models that facilitate *exchange of ideas*; e-only journals most commonly mentioned, then discussion forums

STM
- More often cited the value of models that provided access to *new research*, the value of data sites & e-only journals

Scholars at all stages of their career are experimenting with new models

Facilitates exchanges among scholars
Discussion Forums

http://www.h-france.net/forum/h-franceforum.html
Resurrecting the Woolly Mammoth
THE BUZZ IN THE BLOGOSPHERE

From the well-preserved remains of a woolly mammoth that was buried by Siberian winters about 18,545 years ago, scientists were able to extract viable DNA and sequence the majority of an extinct species' genome for the first time. The mammoth's genome is currently about 70 percent sequenced, and researchers estimate the size of the genome to be 40 percent larger than the human genome—approximately the same size as the modern day elephant, which scientists could theoretically use to birth a cloned anachronistic creature.

LATEST RELATED ENTRIES

Quote: Life Science 11/21/08
11.21.2008 - Arkia Millikan

... Pleistocene Park becoming a reality. Saber tooth tigers. mammoths—I'd pay anything to see that!! So I hope they really do clone a mammoth. Ethics be damned!!" Christie on We have the technology; we can resurrect them!

We have the technology; we can resurrect them!
11.20.2008 - Razib

... Regenerating a Mammoth for $10 Million: If the genome of an extinct species can be reconstructed, biologists can work out the exact DNA differ .......

The spread of disorder - can graffiti promote littering and theft?
11.20.2008 - Erd Yong

... despite its popularity, the Broken Windows Theory still divides opinion, for it lacks the backing of hard evidence, it's plagued by woolly definitions of "disorder" and critics have questioned its role in New York's drop in crime. These...
What factors limit simulation speed?

I'm at the part of the manuscript where we introduce the analysis done with our simulation model, and I want to begin by considering which parameters affect how fast the runs are, because run speed is what limits our ability to fully investigate how the different factors affect uptake sequence evolution.

1. **Mutation rate.** Runs with lower mutation rates take longer to reach equilibrium. I expect the effect to be proportional - a run with a ten-fold lower mutation rate will take ten times as many cycles to reach equilibrium.

2. **Amount of DNA recombined per cycle.** The individual cycles will take longer if more DNA needs to be recombined. The amount of DNA is the product of the number of fragments to be recombined and the length of the fragments; although cycles using many short fragments may take a bit longer than the same amount of DNA in a few long fragments, I expect this effect to be minor. On the other hand, fewer cycles should be needed when more DNA is recombined in each cycle, but this only applies when the total amount of recombination is substantially smaller than the length of the genome.

3. **Present state of the genome.** More fragments will need
Category? Book? Blog?-- or new genre?

The Googlization of Everything

How One Company is Disrupting Culture, Commerce, and Community--and Why We Should Worry

A book in progress by
Siva Vaidhyanathan

Comments, please: How Chapter 2.1 opens

Google raises our expectations about things both deep and shallow. Unhappiness and anxiety dwell in that space between reality and expectations. When our expectations about significant things - justice, peace, health, and knowledge - exceed reality by significant margins, the difference can motivate us to achieve marvelous things both collectively and individually. But when that tension is constant and loud about things trivial - the speed of delivery, access to services, and acquisition of the latest and coolest goods - we indulge in decisions and actions that merely satiate us rather than enrich us. The comedian Louis CK tells a story that illustrates the constant ratcheting-up of expectations for newness, "nowness," speed, and convenience. He was traveling on an airplane in early 2009, CK told television host Conan O'Brien, when the flight attendant announced that his flight offered a new feature that airlines had been working to install for some years now: wireless access to the Internet while in flight. "It's fast and I'm watching YouTube clips," CK said. "It's amazing. I'm on an airplane! Then it breaks down and they apologize that the Internet is not working. The guy next to me goes 'phhhhhh. This is bullshit.' Like how quickly the world owes him something he knew existed only 10 seconds ago." CK's point is that when we become immune to the amazing achievements that have flowered around us in recent years, we forget to be thrilled and amazed. We miss the wonder. We take brilliance for granted. The dynamic of consumer expectations has been running on such high gears for so long that we've come to think of it - and of the people behind it - as simply routine and unremarkable.
Experiments with Peer Review

Traditional peer review vs “open blog-based peer review”
(via Grand Text Auto Blog)

“Blogging had already changed how I worked as a scholar and creator of digital media. Reading blogs started out as a way to keep up ... then realized blogs also contain raw research, early results and other useful information never presented at conferences.”

- peer-to-peer nature of blog-based peer review
Provides access to current research
E-only journals: (Experiments with new Peer Review Models)
Preprints & working papers

New distribution model; in progress research, peer review
“TeraGrid is the world's largest, most comprehensive distributed cyberinfrastructure for open scientific research.”
Help Scientists Track Rusty Blackbird Migration!

October 24, 2008

Populations of Rusty Blackbirds are crashing! Their numbers have plummeted by as much as 88-98% over the last few decades, according to data gathered between 1966 and 2006 for the North American Breeding Bird Survey and Christmas Bird Count. A species that was once considered to be abundant is rapidly disappearing before our eyes. Your observations can help save this species by arming scientists with critical information about its migration ecology. Last spring we conducted a pilot study with the Rusty Blackbird Working Group where eBirders collected migration data over a one week period. While the data collected were excellent, we found that short survey window to be inadequate for gathering data from across much of the species’ route. So this year we’re broadening the net! Birders across North America are asked to help scientists by recording Rusty Blackbirds during the entire fall migration period using eBird. Your observations of this species can help fill in the gaps we identified in the pilot study.

Supplies useful co-location of works
Encyclopedias, dictionaries, annotated content?

Dynamic, constantly updated, in progress
Encyclopedias, dictionaries, annotated content

New genre/new information blend?

On July 8, 1853, residents of feudal Japan beheld an astonishing sight—foreign warships entering their harbor under a cloud of black smoke. Commodore Matthew Perry had arrived to force the long-secluded country to open its doors.

This unit was funded in part by The National Endowment for the Humanities, The d'Arbeoff Excellence in Education Fund, The Center for Global Partnership, and MIT iCampus Outreach.
Categories? -- or new genres/information blends?

THE VALLEY OF THE SHADOW

The Eve of War
- 1860 Statistics
- Church Records
- Maps & Images
- Letters & Diaries
- Reference Center
- Newspapers
- Census & Tax Records
- Site Map

Fall 1859 to Spring 1861

The War Years
- Images
- Official Records
- Battle Maps
- Letters & Diaries
- Reference Center
- Newspapers
- Soldiers' Records

Spring 1861 to Spring 1865

The Aftermath
- 1870 Statistics
- Freedmens Bureau
- Maps & Images
- Letters & Diaries
- Reference Center
- Newspapers
- Census & Veteran Records
- Memory of the War

Spring 1865 to Fall 1870
Florence Nightingale Letters

Additional Resources

This biography from the Florence Nightingale Museum offers an overview of Florence Nightingale’s life and her contributions to the profession of nursing.

Other sites with digitized Florence Nightingale letters:

- University of Illinois at Chicago
- University of Kansas, Clendening History of Medicine Library
- University of North Carolina, Health Sciences Library Historical Collections
- Wayne State University

For a lively account of some of these purchases see Dr. W.C. Gibson’s remarks on the history of the Woodward Library Memorial Collection.

Thanks to Dr. Lynn McDonald at the University of Guelph for her transcriptions of the letters written by Florence Nightingale. The transcriptions may be accessed from the document viewer by clicking the “View Options” menu and choosing “page transcription”.

Advanced Search
More options – make searches more precise and get more useful results.

My Favourites
Collect, view, compare, and move selected collection items. Share images with others, or view saved items as a slideshow.

Preferences
Customize options for search results, My Favourites, etc.

About
More about UBC Library Digital Collections and Services.

Help
Learn more about these search options.
New genres/New information blends

- New containers for content (also for storage & interface)
- Notion that information is harvestable
  - repurposed, repackaged from wherever it exists…
- New groupings of information
  - hubs
In what ways do scholars engage with new models?

- Scholars are both the producers and the audience.
- Roles in print world (writing, peer review, editing, reviewing, etc) also exist in digital world. Examples: moderating discussion list, contributing data to a shared repository, posting thoughts & annotations on a blog or editing a wiki, opting to negotiate rights (or not).
INSIDE HIGHER ED PIECE ON HASTAC/MLA TASKFORCE ON TENURE IN A DIGITAL ERA

CAT IN THE STACK
Cathy Davidson's HASTAC blog on the interface of anything.

Submitted by Cathy Davidson on May 26, 2009 - 3:43am.

INSIDE HIGHER ED's Scott Jaschik has written an excellent summary of the HASTAC/MLA Taskforce on Tenure in a Digital Era being spearheaded by HASTAC SC member Tim Murray and HASTAC new member (and new leader--it's the HASTAC way!) Laura Mandell of Miami of Ohio. HASTAC is teaming up with MLA to come up with constructive guidelines for how to evaluate digital scholarship. Here's the url for this great piece, and hats off to Tim and Laura for both making this happen and getting publicity. Spreading the word is half the battle---so pass it on.


We will be building on a wiki already in progress and already full of useful information, documents, stories, suggestions, guidelines. You can find that here: http://www.philosophy.cmu.edu/MLA/MLADigitalWork
How are academic libraries engaged in initiating or supporting new models?
New dissemination roles/ publishing models at our Libraries

- Hosting journals
- Institutional repositories
- Digitization efforts
- Digital content owner
- Licensor
- Publishing centers
  e.g., California Digital Library, Columbia, Cornell, SFU, Stanford, Univ. of Michigan, …
New tools to support new models

- Repository software: Dspace, Fedora
- Blog support: MBlog, UThink
- Ejournal software: OJS, Dpubs
- Content delivery systems: DLXS, XTF
- New ways of calculating article worth
- Digitization software and services
- Data webs
Keeping up with the world  
November 20, 2008

Posted by Kevin Smith in: Open Access and Institutional Repositories, add a comment

At the SPARC Digital Repositories meeting earlier this week, I was particularly struck by the remarks about the policy environment for open access scholarship in Europe made by David Prosser of SPARC Europe. Without any apparent intent to be boastful, Prosser began his address by telling us that the policy argument in favor of open access has been won, and he proceeded to back up that assertion pretty effectively.

First, Prosser cited three separate studies of research policy in Europe that all concluded that open access was a necessary component of the ambitious European Community imperative to develop a highly competitive knowledge-driven economy. These reports all seemed to recognize that public access to scientific research is a prerequisite for increasing the pace of scientific and technical innovation.

Next, Prosser reminded us of the major funder mandates for open access.

Policy on Electronic Course Content
For help deciding whether course content in Blackboard or some other digital form is fair use or requires copyright permission, consult the policy document adopted by the Academic Council in February 2008.

Pages
- About
- What we do
- Copyright in Teaching
- Copyright @ Duke
- FAQs
- Scholarly Communications Toolkit
- For Faculty Authors
Help & Support Scholars and Researchers
U of C funds Open Access Authors Fund

Fund gives professors and students access to new funds  
University of Calgary professors and graduate students will now have access to a $100,000 Open Access Authors Fund designed to increase the amount of publicly available research.

The new fund, announced today by Thomas Hickerson, Vice-Provost, Libraries and Cultural Resources and University Librarian, is the first of its magnitude in Canada.

"I am proud that the University of Calgary is taking leadership in this movement to increase the worldwide accessibility of cutting-edge research," said Hickerson (dept).

The new fund will provide U of C students with financial support to pay for Open Access publishing costs. The number of academic journals that have adopted Open Access publishing is increasing. Many journals allow authors to pay for publication themselves, and in return, the research will be freely available to the public.

This new publishing model does not place financial barriers on authors, as is the case with traditional subscription publication. With the establishment of this fund, University of Calgary will have its own choice in publishing dollars.
Design Infrastructure/Systems

About DPubS

DEVELOPMENT > FAQ > FEATURES > PROJECT GALLERY > PRESENTATIONS > POSTCARD

What is DPubS?

DPubS (Digital Publishing System) is an open-source software system.

Home - Software and Services

Open Journal Systems

“Scholars need the means to launch a new generation of journals committed to open access, and to help existing journals that elect to make the transition to open access...”
Budapest Open Access Initiative, 2002

Open Journal Systems (OJS) is a journal management and publishing system that has been developed by the Public Knowledge Project through its federally funded efforts to expand and improve access to research.

OJS Features

1. OJS is installed locally and locally controlled.
2. Editors configure requirements, sections, review process, etc.
3. Online submission and management of all content.
4. Subscription module with delayed open access options.
5. Comprehensive indexing of content part of global system.
6. Reading Tools for content, based on field and editors’ choice.
7. Email notification and commenting ability for readers.
8. Complete context-sensitive online Help support.

OJS assists with every stage of the refereed publishing process, from submissions through to online publication and indexing. Through its management systems, its finely grained indexing of research, and the context it provides for research, OJS seeks to improve both the scholarly and public

PKP Blog

- OJS now available in Romanian and Welsh
  May 26, 2009
- PKP Conference 2009 - Early Bird Registration Ends June 8 May 22, 2009
- PKP Completes First Journal Survey of OJS Users May 21, 2009
- African Journals Online launches full-text functionality using OJS May 3, 2009
- OJS 2.2.3 Released April 9, 2009

Search

Search

Featured Journals
Welcome to digitalculturebooks
the online home of a joint publishing project between the University of Michigan Press and the Scholarly Publishing Office of the University of Michigan Library.
digitalculturebooks is and will be a work in progress, as we develop new publishing strategies to meet the needs of both our authors and readers. In the coming year we will be publishing innovative and accessible work about the social, cultural, and political impact of new media, and developing our online community to support and extend these publications. Read more >>

To celebrate our new imprint, we are happy to announce the free, online publication of The Best of Technology Writing 2006, edited by Brendan I. Koerner. The paperback edition is also for sale from the University of Michigan Press.
SCOAP³

A consortium facilitates Open Access publishing in High Energy Physics by re-directing subscription money. This answers the request of the High Energy Physics community.

Today: (funding bodies through) libraries buy journal subscriptions to support the peer-review service and allow their patrons to read articles.

Tomorrow: funding bodies and libraries contribute to the consortium, which pays centrally for the peer-review service. Articles are free to read for everyone.

Read now:
- The Executive Summary of the Report of the SCOAP³ Working Party
- The complete report

» To know more

Latest news

27/05/2009, Join the SCOAP³ Forum at SLA in Washington on June 14th!
The SCOAP³ Open Access initiative has a unique potential to transform scholarly communication. It offers an opportunity to U.S. libraries of all sizes to experiment with Open Access in a cost-neutral fashion and make a real difference in Open Access. Come to the SCOAP³ forum at SLA in Washington on June 14th to learn how you can get involved!

SCOAP³ has so far collected pledges for a total of 8.8 Million $/year from partners in 21 countries, corresponding to 63% of its worldwide budget envelope. In the U.S., leading libraries and library consortia signed an Expression of Interest pledging to support the SCOAP³ initiative, if successful. These pledges represent 2.5 Million $/year, totaling over 70% of the expected U.S. contribution. However, additional pledges for about 1 Million $/year are still needed to allow the initiative to move forward.

This forum complements the recent ACRL and SPARC SCOAP³ FAQs. It will present an overview of the SCOAP³ initiative and answer questions on the way the consortium
Publish

NEWFOUND PRESS

Editorial Board
Contact Us
Scholarly Communication
Digital Library Initiatives
The University of Tennessee Press
Related Links
Libraries Catalog
Databases
Services
Branch Libraries
Libraries A to Z
AskUsNow!

University Libraries

NEWFOUND PRESS

A DIGITAL IMPRINT OF THE UNIVERSITY OF TENNESSEE LIBRARIES

The Present Future

Today’s scholarly publishing environment presents a strategic opportunity for academic libraries to expand their role in the publications process. Universities are both creators and consumers in the information economy. A digital library press offers the potential for making scholarly and specialized resources widely available at a reasonable cost.

The University of Tennessee Libraries is developing a framework to make scholarly and specialized works available worldwide. Newfound Press, the University Libraries digital imprint, advances the community of...
“By late 2007, 44% of the 80 responding ARL member libraries reported they were delivering publishing services and another 21% were in the process of planning publishing service development. Only 36% of responding institutions were not active in this arena.”
Acknowledgements:

• Karla Hahn for the original concept of “characteristics of new models” and “new roles for libraries.”
• Originally created by Joy Kirchner for the ACRL National Conference, Scholarly Communications 101 Workshop, March 2009
• Joy Kirchner’s collaboration with Maria Bonn to develop “New Models for Libraries” for the ARL/ACRL Institute for Scholarly Communication, December 2008.