

The Future Landscape of Scholarly Communication: Exploring Faculty Values and Needs in Twelve Disciplines

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Project Website and Associated Document Links:

**[http://cshe.berkeley.edu/research/
scholarlycommunication](http://cshe.berkeley.edu/research/scholarlycommunication)**

http://escholarship.org/uc/cshe_fsc

ARL: April 28, 2010 Seattle, WA

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Why Study Users?

- **Academic Values and Scholarly Communication Practices—talk to scholars**
- **Distinguish between Archival publishing and what we call In-Progress publishing (2005)**
- **Anthropologist, Not a publisher or librarian**

Scholarly Communication

Funded by the A.W. Mellon Foundation

Team: D. Harley, King, Earl-Novell, Kryzs Acord, Lawrence

- **“The lack of willingness of the faculty to change” key barrier to moving to more cost-effective publishing models?**
- **Our research: assess the criteria by which faculty decide when and in what venues to communicate the results of scholarly research—at all stages.**
- How do faculty values relating to advancement (tenure and promotion—T&P) and stature in their fields affect these decisions? What about other factors?
- Analyze what roles universities and faculty play in resolution of the perceived “crisis in scholarly communication.”

Interview Protocols/Topics

- Tenure and promotion, making a name
- Criteria used for disseminating research at various stages (publication practices, new publication outlets, new genres)
- Sharing (w/ whom, when, why or why not?)
- Collaboration (w/ whom, when, why or why not?)
- Resources created and consumed
- Public Engagement

Today

Research Universities—45 mostly elite institutions

12 disciplinary case studies in 12 fields.

160+scholars

- Planning project. 2005-2006
- Current project. 2007-Present

N=5 Anthropology, biostatistics, chemical engineering, law and economics, English-language literature.

N=7 Astrophysics, Archaeology, Biology, Economics, History, Music, Political Science

- No perfect set of disciplines

Research Activities/Methods

- Relevant stakeholders (faculty primarily, PLUS high level administrators, editors, publishers and librarians), UC and beyond
- Many more formal and informal conversations; attendance at meetings, literature and web review, tracking online interchanges
- Formal interviews (+) = Development of case studies
- Disciplinary traditions and culture matter.

The current publishing landscape

Scholars use a range of mechanisms for disseminating scholarship at various stages.

Within any given discipline there may be a variety of publishing strategies available to authors.

Scholars in a field can name top 3-5 outlets w/o missing a beat.

- **In physics, astrophysics, and mathematics**, discipline-specific repositories, such as the arXiv, are essential outlets that exist alongside formal commercial- and society-owned journals. Massive data bases, shared, very expensive telescopes, etc.
- **Economists and quantitative political scientists** use working paper repositories, such as SSRN and personal websites, for disseminating research but continue to rely heavily upon society and commercial journals for final archival publication.

The current publishing landscape (cont'd)

- In **computer science**, peer-reviewed conference proceedings are the most prestigious archival outlet, but distribution of scholarship using more open methods, such as posting on personal websites, is common. Software as product.
- **History and archaeology**, and other fields of the humanities, such as **languages and media studies**, rely *heavily* on the book for long arguments; journals are still very important as a means for disseminating short arguments, book reviews, and other communications.
- **Musicology** includes “art” historical studies of western music, computer composition, ethnomusicology, and music theory. As expected there are multiple outlets used ranging from books and critical editions to highly competitive and selective society journals to encyclopedias to MP3s, CD’s, and networked performance.

The current publishing landscape (cont'd)

- In **Molecular and cell biology**, and perhaps other sciences such as **chemistry**, that are *fast-moving, well-funded, highly competitive, and have commercial potential*, there is a MUCH more limited range of outlets (although numerically many more journals in some subfields).
- The journal article reigns in these fields and the more prestigious the journal, the better from the perspective of faculty at competitive institutions. *Nature, Cell, Science. (Former 2 the enemy of reasonable costs)*
- Some PloS journals rising in prestige (not PloS One). Society Journals (and scholar editors) the most trusted.
- Preprint servers are unheard of. Publication lags are exceptionally short. Large databases linked to publication are common.

T&P as flexible system?

- Stellar Publication record most impt for T&P.
- “Groundbreaking, moves field forward, judged of high quality by internal and external reviewers, original”
- Quality over quantity. Metrics such as impact factor viewed w/ suspicion.
- Exceptions to the “rules” made; lots of filtering once someone hired.
- Databases, cell lines, critical editions, software: credited in T&P decisions; rarely sole criteria in most fields.
- Service and Teaching, Public Engagement. Impt but age and institution dependent.
- Assessing multiple authorship/ a growing challenge. Interdisciplinary work can present challenges as well.
- New Genres are acceptable as long as peer reviewed.

Peer Review and Advancement Process

- Heavy reliance on peer reviewed publications to aid institution/T/P committees and external reviewers in evaluation of scholarly work.
- Damning: “no one has heard of you,” and “high impact” pubs are a way of making a name.
- Many worry that lack of peer review is associated with newer, untested forms of publication.
- Advancement process can and *should* be supportive (and unprejudiced) of non-traditional publishing models, **provided that peer review is strongly embedded.**
- **Written policy: New electronic genres should NOT be undervalued in consideration of advancement. Does actual practice vary? Committees not seeing many examples.**

Peer Review

Questions around where faculty publish and why?

Peer review is the coin of the realm.

- THE value system **supporting assessment of and perceived quality of research.**
- The **primary mechanism through which research quality is nurtured.**
- The primary mechanism through which **research is made both effective and efficient.**
- Excellent **quality filter** for the proliferating mass of scholarly information available on the web.

**More difficult for time-pressed faculty to sift through it all.
This will get worse.**

Faculty Expectations re SC?

- **Access to others' scholarship will be provided / costs covered by the institution.**
- **Want their scholarship to be accessible to right audiences in a timely manner.**
- **Want the highest prestige outlet as possible given the nature of what is being published and the targeted audience. OA not the issue for many.**
- **Don't want to slog through dreck/need peer review as a filtering mech.**
- **Work protected from rip-off/must receive credit.**
- **High quality pubs/editorial/production/persistence.**
- **Back-end data support.**

Perceptions: Enhanced Capabilities of Electronic Communication (Electronic not = to OA)

- Ability to reach a larger audience
- Ease of access by readers
- More rapid publication even when peer reviewed
- Ability to search within and across texts /surface old literature
- Opportunity to make use of hyperlinks, embed media
- Enable innovation in scholarly work
- Possible democratizing effect on scholars outside of North America /EU
- Ability to have enough information (e.g., software code, back-end data, text archives, etc.)

Giving it Away? Sharing

Scholars share but What, With whom? When?
Web 2.0? Wisdom of crowds? Crowdsourcing?

Personality and disciplinary tradition very impt.

Early “half baked” work? Universally not shared publicly. **First w/ trusted circle of colleagues.** Modicum of privacy needed.

Public Posting of Working papers, (different from posting preprints/post prints)

Not posted until it has been vetted by inner circle.

“Penultimate” drafts.

- CASES: Astrophys—arxiv ; Econ, Quant Poli Sci --IRs, personal websites
- Bio? Not much in MCB **before** publication
- History/Arch/Musicology? Not much

In-progress communication VS fully peer-reviewed archival publication

Dichotomous situation:

- Electronic forms of print (and other) publications *consumed* heavily.
- Perceptions and realities of the reward system = strong adherence to conventional, high-stature print publications as record for reporting research and having it evaluated institutionally.
- Promotion depends almost exclusively upon final, fully peer-reviewed archival publication (arts are different).
- Making a reputation also dependent on where one publishes and other “in-progress” communication activities (conferences, etc.)

Conclusions

- Distinguish—open access journals, postprints of published material, well-developed preprints and working papers published on web site, vs blogs and other casual **non peer reviewed** postings
- Disciplinary culture and tradition, PLUS individual's imperative to advance his/her career and field trumps hopes and dreams for new world order?
- Young scholars? Adopting norms of mentors. Young scholars very conservative in archival publication choices.
- Don't confuse hype about "social scholarship" with hard realities of T +P requirements in highly competitive professional environs (and the peer reviewed publishing demands in those fields)

Mythology

- Old = Conservative ?
- Young Scholars more innovative/Socialization
- What counts for tenure? Blogs? Technical work?
- New genres rejected in T&P. Showing up in dossiers?
- Scientists = More Innovation in Publishing
- Open Peer Review Will Work. Who has time?
- All Societies are bad. Who are the real bad guys in Publishing?

Identified Faculty Needs

- (1) The development of more nuanced tenure and promotion practices that do not rely exclusively on the imprimatur of the publication or easily gamed citation metrics,
- (2) A reexamination of the locus, mechanisms, timing, and meaning of peer review,
- (3) Competitive high quality and affordable journals and monograph publishing platforms (with strong editorial boards, peer review, and sustainable business models),
- (4) New models of publication that can accommodate arguments of varied length, rich media, and embedded links to data; plus institutional assistance to manage permissions of copyrighted material, and
- (5) Support for managing and preserving new research methods and products including components of natural language processing, visualization, complex distributed databases, and GIS, among many others.

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