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Digital Media and Open Access: A Solution for Readers and Writers

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Hello everyone.

Thank you for coming to "Digital Media and Open Access: A Solution for Readers and Writers."

Today I'll try to answer the questions:
• What is Open Access?
• Why Open Access?
and
• How do we get there?

Then I'll leave plenty of time for questions and discussion.

What is Open Access?

"Open-access (OA) literature is digital, online, free of charge, and free of most copyright and licensing restrictions."

— Peter Suber, "Open Access Overview,"
http://legacy.earlham.edu/~peters/fos/overview.htm

Definition of OA: [[read slide]]

Thus Open Access removes **price** barriers (like subscription fees, licensing fees, pay-per-view fees) and Open Access removes **permission** barriers (that is, most copyright and licensing restrictions).

Thus far, the open access movement has *primarily* targeted peer-reviewed journal literature, because it is the low-hanging fruit (Suber):

Authors give their scholarly articles to the world without the expectation of payment, and it is in their interest that their work be read as widely as possible.

Since we don't make any money on our articles, and our reward for writing good articles is an enhanced professional reputation, it only makes sense to make our articles as widely available as possible.

However, open access can also refer to books, dissertations, data sets, educational resources, and other materials.

There have been a number of recent experiments with open access monographs, for example, but I won't go into that today.

Gratis and Libre

"Gratis OA is free as in beer. Libre OA is free as in beer and free as in speech."

— Peter Suber, "Open Access Overview,"
http://legacy.earlham.edu/~peters/fos/overview.htm

Again, Open Access content is not simply free to read.

In fact, all the major public definitions of OA agree that removing price barriers alone is not enough.

To describe the different sub-species of OA, we can use the terms "gratis" and "libre."

Gratis OA removes only price barriers, while…

Libre OA removes price barriers and at least some permissions barriers.

Thus, **Gratis** OA is free of charge, but <u>not</u> free of copyright or licensing restrictions, whereas…

Libre OA is free of charge <u>and</u> expressly permits uses beyond fair use.

An example of Libre OA would be releasing work under a Creative Commons license, e.g. a CC-BY Creative Commons attribution license.

Why OA?

A library that could today afford full coverage of the journal literature would have to pay:
- In 20 years: 2.7 times more
- In 60 years: 18.7 times more
- In 100 years: 131.5 times more

But, with the library's budget unchanged, the library could only offer:
- In 20 years: 37.7% coverage
- In 60 years: 5.4% coverage
- In 100 years: 0.8% coverage

— Richard Poynder, "Suber: Leader of a Leaderless Revolution," *Information Today*, July/August 2011.

Here's another reason why the Open Access movement has primarily targeted journal literature: **The subscription model for journals is simply unsustainable.**

The domination of scholarly journal publishing by a few large publishing conglomerates seeking to maximize profits, combined with a steady growth in the number of articles published, has resulted in declining access by researchers to the scholarly literature they need to do their jobs.

Since the mid-1980s, journal prices have risen **four** times faster than inflation as publishers raised prices to whatever the market would bear.

And library budgets have not kept up with the rate of increase in journal prices, forcing libraries to cancel subscriptions.

It's worth noting, however, that even if prices and library budgets held steady, access to the literature would still decrease over time. The current subscription model is unsustainable in a world in which the volume of published information is growing rapidly. It is just not scalable.

Why OA?

A library that could today afford full coverage of the journal literature would have to pay:
- In 20 years: 2.7 times more
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— Richard Poynder, "Suber: Leader of a Leaderless Revolution," *Information Today*, July/August 2011.

FOR EXAMPLE, A common industry estimate is that the journal literature grows by 5% a year.

At this rate, no library would be able to keep up, even if journal prices and library budgets remained the same.
A library that could afford full coverage today would have to pay 2.7 times more for full coverage in 20 years, 18.7 times more in 60 years, and 131.5 times more in 100 years.

But, with the library's budget remaining flat (as most are), in 20 years it will only be able to offer 37.7% coverage, in 60 years 5.4% coverage, and in 100 years less than 1% coverage.

In the end, as Peter Suber says, "It doesn't matter whether we blame unaffordable journals on excessive publisher price increases or inadequate library budgets... The volume of published knowledge is growing exponentially and will always grow faster than library budgets."

In fact, as the volume of research literature expands, we will need what Suber refers to as "software prosthetics" or "prosthetic eyeballs," to mediate our access to information.

These software tools will require open access in order to be able to analyze the body of research literature.

As Heather Joseph, Executive Director of The Scholarly Publishing and Academic Resources Coalition, noted
[[read quote on screen]]
http://www.publishersweekly.com/pw/by-topic/digital/copyright/article/55988-publishers-blast-new-open-access-bill-fastr.html

This is true not only in the sciences, but in the social sciences and humanities as well.

Why OA?

"As the volume of research information increases, with a mind-boggling 1.5 million research articles published each year, no person can realistically hope to make full sense of this information by simply accessing and reading individual articles on their own. We must enable computers as a new category of reader to help power through this volume, thousands of articles at a time, and to highlight patterns, links, and associations that would otherwise go undiscovered. Computational tools like text mining and data mining are crucial to achieving this, and have the potential to revolutionize the research process."

— Heather Joseph, SPARC executive director, *Publisher's Weekly*, Feb. 13, 2013

[[[Suber: "As we move further into an era in which serious research is mediated by sophisticated software, commercial publishers will have to put their works into the public internet in order to make them visible to serious researchers. In this sense, the true promise of [open access] is not that scientific and scholarly texts will be free and online for reading, copying, printing, and so on, but that they will be available as free online data for software that acts as the antennae, prosthetic eyeballs, research assistants, and personal librarians of all serious researchers."
http://legacy.earlham.edu/~peters/fos/2004_02_01_fosblogarchive.html

"Readers need OA to find and retrieve everything they need to read and to allow their software prosthetics to process everything they need to process."
http://www.infotoday.com/it/jul11/Suber-Leader-of-a-Leaderless-Revolution.shtml

"Free online literature is free online data for software that facilitates full-text searching, indexing, mining, summarizing, translating, querying, linking, recommending, alerting, "mash-ups" and other forms of processing and analysis."
*http://legacy.earlham.edu/~peters/fos/overview.htm*

"Computational analysis by state-of-the-art technologies" from the Fair Access to Science and Technology Research Act (FASTR)
http://legacy.earlham.edu/~peters/fos/newsletter/03-02-13.htm]]]

OA Benefits Readers

"Open access gives readers barrier-free access to the literature they need for their research, unconstrained by the budgets of the libraries where they may have access privileges."

— Peter Suber, "Open Access Overview,"
http://legacy.earlham.edu/~peters/fos/overview.htm
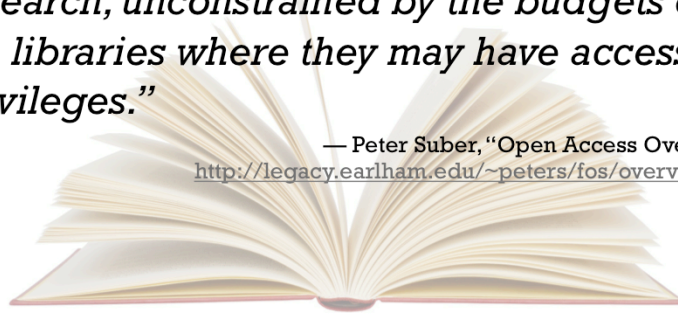
Besides being necessary, and I would argue, inevitable, Open Access has many benefits.

Open Access benefits readers.

[[read slide]]

And, of course, in many parts of the world, access to expensive subscription content is simply unavailable.

Suber: "Open access puts rich and poor on an equal footing for these resources and eliminates the need for payments or permissions to reproduce and distribute content."

In short, open access democratizes access to scholarship.

OA Benefits Writers

- Studies have shown a citation advantage for OA articles ranging from 45% to over 500%.

  — Alma Swan (2010), "The Open Access citation advantage: Studies and results to date," http://eprints.soton.ac.uk/268516/

Open Access also benefits writers.

Open Access can increase the readership and impact of our scholarship.

With OA, because our research is not trapped behind publisher pay walls, more people read it, and more people cite it.

Open Access is good for us as authors.

OA Benefits Everyone

"OA accelerates not only research but the translation of research in to new medicines, useful technologies, solved problems, and informed decisions that benefit everyone.."

— Peter Suber, "Open Access Overview,"
http://legacy.earlham.edu/~peters/fos/overview.htm

Really, Open Access benefits everyone.

Open access makes research more widely available, more discoverable, more retrievable, and therefore more useful.

Open access is good for progress in the arts and sciences.

This is why many research funders (e.g. the National Institutes of Health, Howard Hughes Medical Institute, and the Wellcome Trust) require that publications resulting from research they fund be made available open access. They require this because they want their funding dollars to have maximum impact.

The same argument can be made for research funded by tax dollars, which is why on February 22, 2013, the Obama administration issued a directive ordering federal agencies spending at least $100 million a year on research and development to develop open access policies within the next six months. This is huge.

So, how do we get there?

There are two commonly-recognized "roads" to Open Access: the Green Road and the Gold Road.

[[use contents of slide to summarize each]]

Many disciplines have been travelling the Green Road for a long time, for example, the open access disciplinary repositories ArXiv for physics, RePec for economics, SSRN for social sciences. A large number of higher education institutions now have repositories, e.g. DASH at Harvard and DigitalCommons@URI.

The Green and Gold Roads are complementary, and both are important to the transformation of scholarly communication.

Both roads rely on journals to perform the important work of peer review.

Hopefully during the discussion period we can talk more about the Gold Road to Open Access, but in the remainder of my presentation I want to focus on the Green Road, and how we can start down that road at URI.

Green OA Strategy@URI

Deposit into DigitalCommons@URI a version of the scholarly articles written by URI faculty in order to make them available open access

Fortunately, we have a strategy to achieve green OA at URI.

Again, in the "Green OA" model, faculty publish in whatever journal they want (the best journal possible)

And then they archive a _version_ of their article (the final manuscript, post peer-review) in the DigitalCommons@URI repository.

Barrier: Copyright

When we transfer our copyright in an article to a publisher, we lose the the right to make it available to colleagues and students for the purposes of teaching & research, to post it on a personal or institutional website, and to create derivative works.

A potential problem with this strategy is copyright.

Copyright is a bundle of exclusive rights. As authors, we own the copyright in our work as soon the work is set down in fixed form.

But when we sign these exclusive rights away to a publisher, we can no longer make use of our own work without the publisher's permission.

When other scholars do the same, we cannot access and read their work when it appears in a journal to which we do not have a subscription.
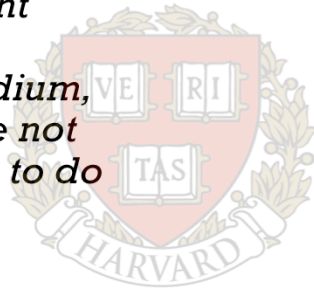
For example, when we give away our copyright, we cannot:

- Make print or electronic copies of articles for students and colleagues
- Post articles to our personal website
- Post articles in Sakai for students to read
- Archive articles in DigitalCommons@URI (except as publisher policy allows)
- Allow our articles to, for example, be republished as a chapter in a book, or refuse to allow this

Of course, there are some limitations to copyright, such as fair use, but they are not always clear and involve some risk.

The URI Open Access Policy, passed by the Faculty Senate on March 21, 2013, is a solution to the copyright problem.
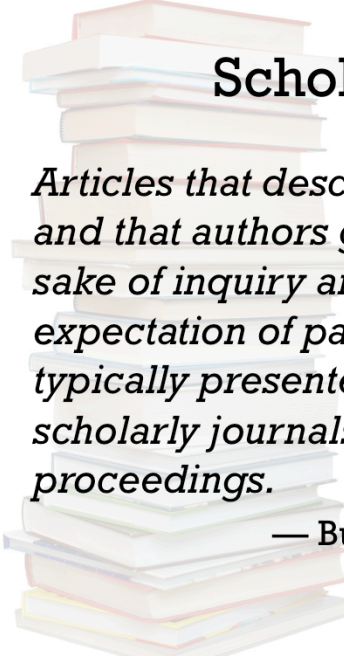
Pioneered by Harvard in 2008. Passed first by faculty of the College of Arts & Sciences then subsequently Harvard's other colleges

Similar policies have been passed by faculty at other institutions, including:
- MIT
- University of Kansas
- Oberlin College
- Duke
- University of Hawaii-Manoa
- Emory University
- Princeton
- Utah State
- University of California, San Francisco
- UMass Medical School
- Amherst College
- Wellesley College
- Rutgers

In many of these cases (including URI!), the faculty voted for the policy *unanimously*.
See http://oad.simmons.edu/oadwiki/Unanimous_faculty_votes

Heart of the policy reads: [[read text]]

Scholarly Articles

Articles that describe the fruits of research and that authors give to the world for the sake of inquiry and knowledge without expectation of payment. Such articles are typically presented in peer-reviewed scholarly journals and conference proceedings.

— Budapest Open Access Initiative

I want to point out that the policy only applies to scholarly articles

[[as defined on slide]]

Policy does NOT address:
• Books and book chapters
• Popular articles
• Fiction
• Poetry
• Encyclopedia entries
• Lecture notes or videos
• Other copyrighted works

Only deals with scholarly articles (the low-hanging fruit).

Plain English

- URI faculty authors retain full copyright in their articles.
- Authors give URI permission to make available a version of their journal articles in DigitalCommons@URI.
- URI can reproduce, display, and distribute the articles as long as they were not sold, and can authorize others to do the same.
- **Because the university can grant these rights back to the author, in effect, the policy allows authors to retain their rights.**

So what does the URI Open Access Policy do in plain English?

First, understand that we have NOT transferred the copyright in our articles to URI.
We retain full copyright in our articles.
We have simply given URI permission to make certain uses of our work.

"Non-exclusive" means that the permissions we gave to URI do not prevent us from giving permissions to others, thus…
We are still free to transfer our copyright to a journal publisher if we want to.

However, if we do so, URI retains the nonexclusive right to distribute our articles in DigitalCommons@URI and to exercise other rights in copyright, including:
Reproducing ; Displaying ; Distributing the article… AS LONG AS THE ARTICLE IS NOT SOLD.

This strategy is 100% legally sound, because the transfer of copyright to a publisher must honor the prior non-exclusive license to URI.

Key idea here: The policy actually allows us as authors to RETAIN OUR RIGHTS in our articles, because the university grants those rights back to us.

The policy is in effect a strategy for us as faculty authors to use the university to help us retain our rights. As Stuart Shieber of Harvard has explained, in passing the policy, we are granting these rights to "our future selves."

No-Questions-Asked Waiver

"…The Faculty Senate or Faculty Senate's designate will, on behalf of the University, waive application of the license for a particular article or delay access for a specified period of time upon express direction by a Faculty member…"

A key component of the policy is a no-questions-asked waiver that allows any faculty member to opt out of the open access requirement for a particular article for any reason at all.

We anticipate creating a simple web form for this process.

This preserves the academic freedom to publish in any journal, even in a journal that will not cooperate with the policy (though this is rare).

The waiver provision allows us to change the default for URI faculty articles to Open Access while remaining non-coercive.

Nuts & Bolts

1. Attach library-provided author addendum to publisher CTA in order to notify publisher of policy (optional but recommended).
2. Submit via email or a simple web form journal information and author's final article manuscript, post peer review.

So how will the URI Open Access Policy work in practice?

1. The library will provide a legal addendum to convey to the publisher that your article is subject to URI's prior non-exclusive license.
• This will be a writable PDF form that you attach to the copyright transfer agreement when you send it in.
• According to Harvard's and others' analyses, this is not even necessary legally, but it prevents us as authors from misrepresenting to the publisher the rights we can transfer to them.

2. Because URI cannot claim rights to the publisher's final PDF version, the version of the article targeted by the policy is the author's manuscript, post peer review, as submitted for final publication.

Faculty will submit their manuscripts to the library via email or simple web form by the date of publication. The library will then post the article in DigitalCommons@URI.

Note that DigitalCommons@URI can also accommodate supplementary material such as illustrations, figures, media files, and small data sets.

The whole process should take no more than 15-20 minutes per publication.

The overall intention of the policy is that a relatively small investment of time will greatly increase the overall accessibility and impact of our scholarship.

Here is an example of an article (by Prof. Tiffani Kisler from HDF) in DigitalCommons@URI.

Note that the DigitalCommons record always includes a full citation to the final published version of record and a hyperlink to the article at the publisher's site.

As Stuart Shieber at Harvard explains, it is helpful to think of the version of the article in the repository NOT as a substitute for the final publisher version, but as an advertisement for it.

People can read an article in DigitalCommons@URI and if it is what they are looking for, and they want to cite the version of record, they can link through to the publisher site.

Keep in mind, though, that many who read the DigitalCommons@URI version will have NO access to the publisher version and would not otherwise be able to read the article at all.

Note too, that DigitalCommons sends the author monthly statistics on the number of times each article has been downloaded and what search terms were used to find it, which is a nice benefit.
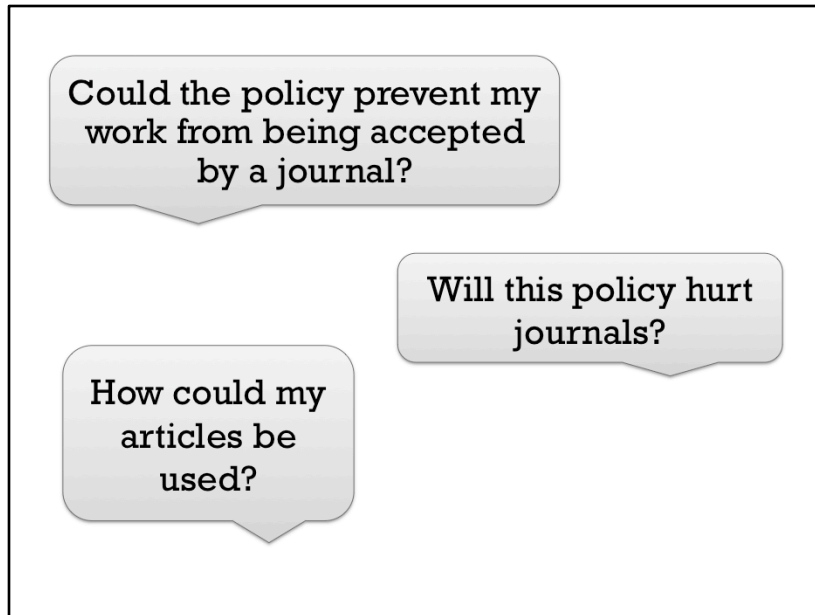
Wrap up with a few of the most common questions about the policy:

1. PREVENT WORK BEING ACCEPTED
- Decision to accept made by editors and peer reviewers, scholars like ourselves.
- Independent of the "business" side of the journal.
- Usually takes place before we are asked to sign publication agreement.
- So, no, the policy would not prevent our work from being <u>accepted</u>.
- Any objections to publishing an article under the policy would be made by publisher, not the editor.
- If that happens, you can always seek a no-questions-asked waiver and go ahead and publish.

2. HURT JOURNALS
- At this point in time, there is no empirical evidence that OA through green repositories causes cancellations.
- High Energy Physics – all work OA through ArXive for >10 years, journals are fine.
- In a variety of disciplines, some journals have found that OA actually increases their submissions and subscriptions.
- Most publishers already allow some degree of self-archiving by authors in IRs; they wouldn't allow this if it hurt their business.
- **If they feel it is a problem, journals have the solution in their own hands: They can require a waiver of the policy.**
- Greatest threat to journals comes not from OA, but from unsustainable price increases.
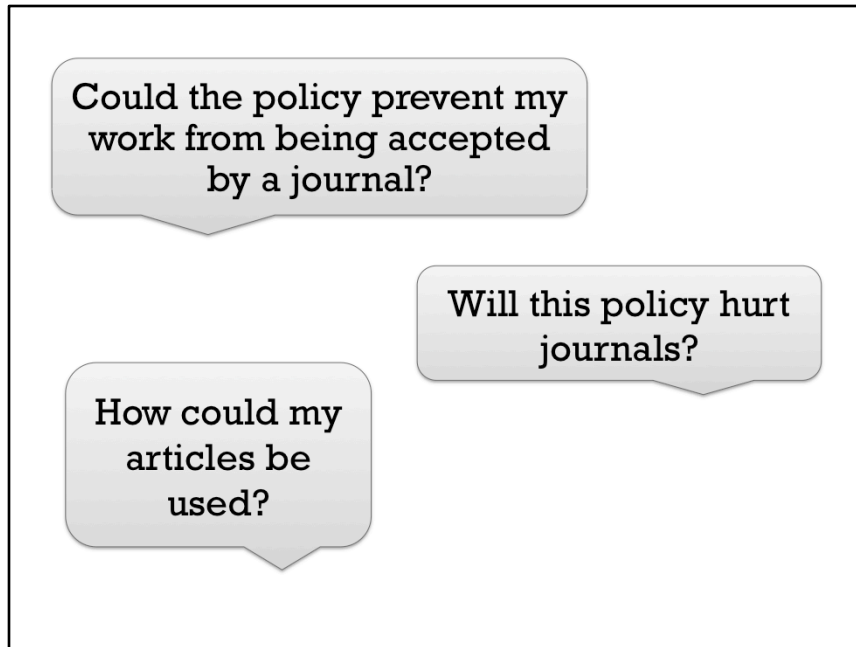
3. HOW COULD ARTICLES BE USED
Recommending URI adopt the Terms of Use of DASH repository at Harvard
ALLOWS articles to be used for
- Personal study
- Teaching
- Research (including data mining and text mining)
- Provision of value-added services (e.g. full-text searching, citation extraction)
Terms of Use have a number of PROHIBITIONS:
- Users may not charge for any article or sell advertising on same page as any article
- Users must at all times retain article title, authors, any copyright notices, and reference to the Terms of Use
- Users must cite and provide link to publisher's definitive version
- No translations, adaptations, or other derivative works without permission
Any arrangements agreed to would respect the integrity of the author's work and be consistent with the goals of open access.

To this end, the URI Open Access policy was placed under faculty oversight, through the Faculty Senate. A proposed update to the charge of the Faculty Senate Library Committee is to: "serve in an advisory capacity to the Faculty Senate regarding the implementation and interpretation of the University of Rhode Island Open-Access Policy, resolving disputes concerning the interpretation and application of the policy, and recommending changes in the policy to the Faculty Senate."