Open Access: A Model for Sharing Published Conservation Research

Peter D Verheyen, Syracuse University
Priscilla Anderson, Harvard University
Whitney Baker, University of Kansas
Beth Doyle, Duke University

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Open Access: A Model for Sharing Published Conservation Research

By Priscilla Anderson, Whitney Baker, Beth Doyle, and Peter Verheyen

The conservation field has articulated the importance of publishing our research to disseminate information and further the aims of conservation. Article X of AIC’s Code of Ethics states that conservators should “contribute to the evolution and growth of the profession, a field of study that encompasses the liberal arts and the natural sciences” in part by “sharing of information and experience with colleagues, adding to the profession’s written body of knowledge.” Our Guidelines for Practice state “the conservation professional should recognize the importance of published information that has undergone formal peer review,” because, as Commentary 2.1 indicates, “publication in peer-reviewed literature lends credence to the disclosed information.” Furthermore, our Guidelines for Practice state that the “open exchange of ideas and information is a fundamental characteristic of a profession.” In publishing our research, we can increase awareness of conservation and confidence in our research methods among allied professionals as well as the general public.

However, current publication models limit the free flow of information by making access expensive and re-use complicated. An alternative to traditional subscription publishing is the Open Access movement, which strives to remove barriers to access and re-use of published information by reducing the costs of publishing and rethinking permissions issues.

To synthesize growing interest in professional publishing and spark discussion, this article proposes to:

- Define Open Access and how it differs from traditional publishing in its approach to access and re-use of peer-reviewed publications
- Discuss the implications of Open Access for the conservation field including interdisciplinary research, outreach opportunities, preferred medium for consuming professional publications, perspective of the Journal of the American Institute for Conservation (JAIC), and author impact.
- Outline issues related to funding models, copyright, and licenses
- Raise questions about current and future publication practices

Open Access

As described in the Budapest Open Access Initiative FAQ (legacy.earlham.edu/~peters/fos/boafaq.htm#openaccess), Open Access is the publication of scholarly information that is free for readers to view online and puts little restriction on the use or re-use of the content. Peter Suber, the Director of the Harvard Open Access Project, in an interview with co-author Priscilla Anderson, explained that the Open Access approach is different from traditional (usually for-profit) publication, which generally requires

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readers to purchase access (through paid institutional subscription, individual membership, or per-article purchase by non-members). Additionally, in the traditional model copyright is generally assigned to the publisher (not retained by the author), and re-use of the content is limited to what “Fair Use” restrictions will allow.

Suber debunked some common assumptions about Open Access publications, including that authors must pay a fee to publish their work and that there is no peer review. Suber reports that in reality, many Open Access journals have alternate funding models (i.e. neither author nor reader pays) and most are peer-reviewed, although some employ alternative review models such as committee abstract review. Furthermore, many of these journals retain a high “impact factor,” an indicator of respect a journal commands within its field as measured by university standards. Suber provides more details in his Open Access Overview, available online at legacy.earlham.edu/~peters/los/overview.htm. Authors should inquire about sources of funding before publishing with an open access journal, to ensure there are no conflicts of interest.

In correspondence with co-author Whitney Baker, Ada Emmett, Head of the Office of Scholarly Communications & Copyright at the University of Kansas, clarified that there are two main types of Open Access models. In one model, individual authors choose to share their published journal articles, making them “open,” whether or not the journal is a traditional “subscription” journal or open access journal. In the other model, the journal publisher chooses to make the entire issue/volume/title open, and the author goes along with it. The important distinction is who is making the decision to “open” access to the resource.

One common feature of Open Access journals is that they are available primarily online in digital form. Most have eliminated print versions. Printed publications can be expensive to produce and distribute, and removing these costs makes alternative funding models feasible. Some Open Access journals offer a hard copy option using a “print-on-demand” model (as opposed to traditional offset printing which requires a large minimum order).

Conservation Buzz about Open Access

During fall of 2010 there was a lively discussion on the Conservators in Private Practice listserv about how to meet the research needs of conservators, especially those in private practice. In July 2013, Niccolo Caldararo started a thread about on the ConsDistList that discussed ways to share conservation treatment documentation and research online (cool.conservation-us.org/byform/mailing-lists/cdl/2013/0686.html). Other ConsDistList posts have announced three international journals that propose new ways of sharing conservation research under the principles of the Open Access movement: Rui Bordalo, “New publication--e_conervation,” May 28, 2007; Daniele Pipitone, “Call for Papers—Archeomatica,” September 17, 2012; Antônio João Cruz, “Conservar Patrimonio,” July 24, 2013. Co-author Peter Verheyen’s guest post about Open Access on fellow conservator Jeff Peachey’s blog (jeffpeachey.com/tag/peter-verheyen/) formed the starting point for this article.

Information Access for Conservators and Allied Professionals

In order to understand the history of an object and to formulate a treatment proposal based on full understanding of many technical options, conservators must keep abreast of developments in allied fields as well as in our own field. However, for conservators who are not affiliated with a research library, published research from such fields (art history, chemistry, etc.) can be difficult to access. These conservators can discover the existence of articles through online searching, from citations in other works, or from abstracts put online by publishers, but the costs of reading the full version can be prohibitive, especially when the research requires use of multiple sources. AIC has recently made a move to recognize this challenge by arranging for a 50% discount for AIC members (normally $199/year, now $99 for AIC members) for access to the JPASS subset of JSTOR (jpass.jstor.org/collections), a digital archive of journals and other scholarly materials. Even a journal that provides free online access to portions of its historical material may institute an “embargo” or “moving wall” that can delay free online access for one to several years. For example, IIC’s Studies in Conservation only runs through 2010 in JPASS, so access to recent articles is restricted to current subscribers. To what extent does this inhibit conservators from engaging in thorough interdisciplinary research?

Within the conservation field, there are different preferences for consuming published information. To summarize the print versus digital access perspectives:

• Some conservators prefer to read professionally printed, paper-based publications that do not require electronic access.
• Others prefer the convenience of managing their digital articles in a content management system like Zotero, which affords the ability to zoom into details of a high resolution digital image, access information from multiple locations, and lower one’s environmental footprint by reducing paper and the other resources needed for postal services.
• Some conservators feel that a printed publication serves as a reliable permanent record of scholarship.
• Others place faith in the library community that is rapidly resolving issues related to digital preservation through efforts like LOCKSS (www.lockss.org/), CLOCKSS (www.clockss.org/clockss/), and Portico (www.portico.org/digital-preservation/), as well as institutional digital repositories, as they work to guarantee future access to digital information.

Having free access to our peer-reviewed publication (JAIC) deferred by a three-year embargo (as well as some specialty group postprints like the Book and Paper Group Annual, which has a one-year embargo prior to posting on CoOL) delays researchers from other disciplines from discovering, using, and citing this significant body of conservation research. It perpetuates the silos that Anne-Imelda Radice and other speakers at AIC’s 2012 General Session on Outreach and Advocacy adamantly insisted we should try to break down. Radice, for one, exhorted us to

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share information much more broadly as part of an outreach mandate, sharing not only with other researchers, but with administrators, potential investors, and the general public, to create a consistent message such as “We take heritage responsibility seriously.” Radice suggested that achieving these outreach goals could potentially influence job creation and attract funding. (See the video of Radice’s presentation “In Praise of Conservators and Conservation” ytcchanneledemb.com/video.php?id=d4nOM4mRscI.) Who would benefit if JAIC and specialty group postprints were freely available from the moment they are published? Would the benefits of AIC and specialty group memberships remain as valuable without restrictions on these publications?

In an Open Access environment, where the information is free and accessible from the moment of publication, presumably greater access to our and others’ publications would allow for a more timely exchange of ideas. In the scientific community, speed of peer-reviewed publication is crucial. Enhanced access would also bring our work to a broader range of colleagues who might not be able to afford access to online journals and databases. In both traditional and Open Access publishing, many authors also deposit their pre-publication (“pre-print”) versions in online repositories like ArXiv arxiv.org/ or academia.edu. Would greater and freer access to conservation information enable more timely production of results? On the other hand, how could we increase the reach of JAIC without a publisher marketing the research?

**Author Impact**

Successful career advancement for conservators who are in academic positions at universities can be substantially dependent upon the number and quality of their publications. Quality is judged in several ways. First, by publishing in a peer-reviewed journal, authors receive an initial stamp of approval from their field. Ada Emmett posits that all Open Access journals should be peer-reviewed as a way to support Open Access as a viable scholarly venue.

The impact of scholars’ research is enumerated traditionally by counting how many of their colleagues quote, review, or cite their work in their own subsequent publications. These days, complementary methods to demonstrate and measure the overall impact of a published work offer a richer view of the reach of the published work. These methods, known as “altmetrics,” include mentions of works on listservs, in blog posts, online reviews, news articles, mentions in Twitter, and other non-peer-reviewed “publications.” However, in order for one’s work to make an impact, it has to be accessed, digested, and acknowledged by another writer. Print-only publications, and online journals with high access fees, reduce the number of potential authors that might acknowledge the article in some way, and consequently, the impact of the research is impeded. Emmet points to research from 2010 indicating that both altmetrics and traditional metrics are increased when copies of the scholarship are made “open” (Swan, A. (2010) The Open Access citation advantage: Studies and results to date. *Technical Report. School of Electronics & Computer Science*, University of Southampton). In conservation, the peer-review process requires time and resources. Maney now covers the cost of the manuscript management system but peer reviewers and AIC staff must still commit substantial time to the endeavor, which can delay publication. How should AIC best scrutinize submissions to JAIC for quality and professional verification, yet at the same time create a timely and widely available product?

**Funding Models**

In academia, institutions (and the grants that support much of their work) are in effect paying twice for the research and scholarly output of their faculty and staff, as they pay salaries and provide resources for the research, and then pay for access to that research through expensive journal subscriptions. Sometimes they even pay a third time in order to reuse content for which they did not retain any rights. Emmett pointed to a report from The Scholarly Publishing and Academic Resources Coalition (SPARC) that indicates libraries pay the majority of the fees associated with the scholarly publishing endeavor -- $15 billion per year in the U.S. alone. Open Access publication may provide a viable solution, but will require collective debate and a very long, patient view.

While many assume that “article processing charges” (presumably paid by the author or the author’s sponsor) fund most Open Access journals, a 2012 study determined only 26% of Open Access journals charge such fees (D. J. Solomon and B.-C. Björk, A study of open access journals using article processing charges, *Journal of the American Society of Information Sciences*, 63, 1485–1495, dx.doi.org/10.1002/asi.22673). For the Open Access journals that charge neither authors nor readers, the costs are borne by alternative sources. Popular funding models usually rely on subsidies for the journal itself from a source that is invested in the success of the publication and is therefore likely to provide long-term support. These subsidies may come from private foundations, individuals, or even academic institutions that are trying to alter traditional models for funding both research and publications. A foundation can support publication fees directly, establish a publication grant that authors could apply for, or work directly with an institution to develop an open access publication model. There is a trend, however, of foundations supporting a new venture but encouraging that publication to find ways to support itself once it is firmly established, so funding models may be shifting.

One important aspect of funding Open Access journals is to keep the costs as low as possible. Eliminating the printing costs or transferring them to individual readers (via print-on-demand) is standard for the Open Access model. In addition, many Open Access journals are non-profit organizations, so the cost is reduced by eliminating the profit margin that would be culled by traditional for-profit publishers. Lastly, many editors and most peer reviewers do their work for free as part of their service to the profession. Publishing activities that still require payment include:

- copy-editing
- manuscript management software
- design and layout for the online version
- advertising and marketing (if any)
- hosting and maintaining the access website; ensuring sufficient bandwidth
- preservation of the digital content in perpetuity

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AIC Perspective on Open Access and Sharing Research

Most open access journals are subsidized by a larger organization, whether a university, a governmental body, or an learned society. While AIC provides the JAIC as a part of membership, AIC is not large enough to subsidize JAIC publication and still maintain a wide reach to the broader conservation and scientific communities. AIC wants conservation research to reach as many people as possible without raising dues and, subscription-based publication best meets that goal. In the last year, JAIC’s new publisher Maney Publishing has been able to extend the reach of our journal through large marketing campaigns, journal of the month (JAIC’s was one of their most successful months), bundling packages with similar journals, and showcasing JAIC at many conferences and trade shows.

AIC supports providing wide access to the research published in JAIC. The majority of the journal’s articles are available on CoOL and JSTOR, though we maintain a three-year moving wall to protect the member benefit. This is because JAIC is an AIC publication, paid for with dues for the benefit of its members. However, authors are not prevented from continuing to expand their research and sharing with colleagues when they publish in JAIC.

With Maney, authors have the option of making their articles freely available to all through two methods. MORE OpenChoice is Maney’s gold open access (immediate availability to all). It costs $800 per article and is required by some research funders such as NIH, so the expenses can be written into the grant proposal. Green Open Access (www.maneyonline.com/page/openaccess/green) allows wider sharing of original versions of research and has no fees associated with it. Typically, a publisher is protecting the final product or the value they add to the process, not the research itself.

AIC requested that Maney accept our three-year moving wall for public access to the final articles, instead of the five-year wall they typically require for allowing articles to be shared with JSTOR and other sites like CoOL. Maney requires that the issues are available only on their site, Maney Online, for the three-year period. Individual articles can be posted according to the chart from their website below. Thus, AIC can post the articles to CoOL once the three years have passed, providing unfettered access to the work published in JAIC. In any case, authors are welcome to share effies of the final articles with family, friends, and colleagues. Additionally, researchers can also share their work in conferences, in workshops and courses, as well as freely use and distribute their original manuscript (before layout and final polishing) as long as it is not done commercially. The primary difference is that an author cannot post the peer-reviewed article in an institutional repository for two years, nor share the peer-reviewed article freely online.

Maney’s “Green OA” terms are copied below.

Green OA – Terms of Reuse

The following table shows what rights authors retain to reuse their articles. These rights apply for Maney authors who publish their article in a subscription journal. A full acknowledgment and link to the final published version should always be included.

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(www.maneyonline.com/page/openaccess/green)

Definitions:
Pre-print: original manuscript before peer-review and editing
Post-print: final accepted version (i.e. after peer-review but without Maney editing and typesetting)
Eprint: final paginated version published in the journal
Embargo period: 24 months for HSS (humanities and social science) journals

For more details on Maney’s position on permissions and copyright, see Maney Publishing: Copyright and Permissions at www.maneyonline.com/page/authors/copyrightpermissions.

—Bonnie Naugle, AIC Communications Director, bnaugle@conservation-us.org

Suber reported that these days some government research grant proposals include payment of Open Access fees as one of the budget line items. While the practice has not yet extended fully to the humanities, it is feasible to imagine that eventually it will, since one can argue that government-funded research should be available to all of its citizens. Private foundations also do not want to pay twice for the research, so one could envision Open Access requirements being included in privately funded grants as well (both as a requirement of grant project completion, and as a line item in the budget). For grant- and/ or government-funded conservation research, how would we conservators fulfill requirements to publish our results in an Open Access environment?

Copyright and Fair Use

The U.S. Copyright Office provides a complex definition and description of copyright, which may be paraphrased as “a form of protection... to the authors of “original works...” that gives the owner of copyright the exclusive right to do and to authorize others to do the following: reproduce the work, prepare derivative works, distribute copies, or perform or display the work publicly.” (www.copyright.gov/circs/circ01.pdf) Legal re-use is governed by the Copyright Law’s doctrine of Fair Use, which is described as the various purposes for which the reproduction of a particular work may be considered fair, and thus do not require written permission of the copyright holder. Such uses include criticism, comment, news reporting, teaching, scholarship, and research. Reuse that is outside of those uses (such as income-generating use, or use that compromises the potential market for the work), requires explicit permission from the copyright holder, either through a letter granting such permission to a specific user, or a license granting that permission to all. (Note that the Copyright Office also states that “Acknowledging the source of the copyrighted material does not substitute for obtaining permission.”) See www.copyright.gov/fls/fl102.html.

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Permissions And Creative Commons Licenses

Re-using content is an important consideration when comparing Open Access to traditional publishing models, particularly in light of copyright law. In a traditional subscription publication model, copyright is often transferred to the publisher or professional society (e.g., AIC retains copyright for JAIC articles). Unless authors receive written permission from the copyright holder, they cannot legally re-use their own content in any way outside of Fair Use, which basically restricts commercial reuse of the material. Emmet states that while both Open Access and subscription journals allow Fair Use, some Open Access journals now go further to include a Creative Commons license (CCL)—giving advance permission for all readers to do far more with the content than what Fair Use allows. Suber dispels another myth, stating that Open Access does not imply “public domain” (in which nobody holds any use rights). Rather, all Open Access journals permit Fair Use, and some extend the re-use permissions beyond Fair Use with Creative Commons licenses.

In a publication with a CCL (https://creativecommons.org/licenses/), the author often retains copyright of the intellectual property but publishes a statement that allows others to publish, distribute, build upon, create derivatives, and/or use commercially without written permission, as long as proper attribution is given. There are six types of Creative Commons licenses to choose from when publishing in this manner, giving the author flexibility in deciding how others can re-use the work. Publication with a CCL benefits the author by potentially broadening the impact of the work and disseminating research into the public realm more quickly. Since the author retains the copyright, the research and data can be re-used at any time in any way the author finds useful.

Conclusion

In addition to laying out the broad attributes of Open Access publishing, this article articulates a number of questions that will hopefully inspire discussion within the conservation community, particularly around the issues of interdisciplinary collaboration, author impact, and re-use. While there are many likely benefits that could encourage academic publishing to move towards an Open Access model, there are still some significant barriers that would need to be resolved. Most will support the notion that everyone’s research would improve if all publications were freely available, but resolving who pays for publication is a significant hurdle. We would like to see the research/publishing world develop an approach that balances the role professional societies like AIC play in facilitating research with the rights of the authors and researcher needs for access to scholarly works. There are no easy answers, but the hope is that the AIC membership will consider these questions in light of urgent outreach needs that have been articulated throughout the organization.