

RESEARCH ARTICLE

Open+: Versioning Open Social Scholarship

Alyssa Arbuckle University of Victoria, CA alyssaa@uvic.ca

Advocates of the Open Access (OA) movement have been fighting for free and unfettered access to research output since the early 1990s. Open access is a crucial element of a fair, efficient scholarly communication system where all are able to find, interpret, and use the results of publicly-funded research. Universal open access is more possible now than ever before, thanks to networked technologies and the development of open scholarship policies. But what happens after access to research is provided? In this paper I argue that versioning scholarship across varying modes and formats would move scholarly communication from a straightforward open access system to a more engaging environment for multiple communities.

Keywords: open scholarship; open access; community engagement; public humanities; digital scholarship

Near-ubiquitous computing, an increasingly digitized scholarly record, and the emergence of progressive open scholarship policies like the Tri-Agency Open Access Policy on Publications (Government of Canada 2015) have rendered universal open access more possible now than ever before. Open access advocates claim that it will create a more equitable and just society, as people around the world will be able to find, read, and put to use academic research, as long as they have access to a device and Internet connection (Eve 2014; Harnad 2011; Suber 2012; Willinsky 2006). But what happens after open access to research materials is granted? If research is presented in forms and formats that are unfindable, obscure, or opaque, does this truly meet the ethical imperative of open access-that is, opening up research to all-that librarians and scholars have worked so tirelessly for? In this paper, I suggest that we need to reconsider the afterlife of open access materials. Straightforward access does not suffice for all readers-how can we present research in ways that our colleagues across disciplines and institutions, as well as other members of the general public, can find, understand, and use? Reconsidering the true meaning of "access" does not have to come at the cost of scholarly rigour. Rather, we might look at the possibilities that versioning holds for facilitating social knowledge creation, public engagement, and broad collaboration—for moving from open access to open, social scholarship. Further, a multiplatform approach to knowledge mobilization may in fact strengthen one's understanding of their research inquiry by engaging with and considering multiple perspectives.

What is 'Open'?

Prior to exploring possibilities for more socially engaged scholarship predicated on the foundation of open access, we must develop an understanding of what open scholarship is. Open scholarship comprises a number of interrelated movements in higher education, most notably Open Access, Open Data, Open Education, and Open Science. These movements span different topics, but they share an overall premise: knowledge, and especially publicly funded research, should be publicly available. Open advocates generally put forth a variation of the "public good" argument as evidence of the necessity for open access. For instance, John Willinsky (2006) writes in *The Access Principle: The Case for Open Access to Research and Scholarship:*

What makes research and scholarship such a natural topic for thinking about setting up knowledge commons and publishing cooperatives devoted to providing open access is this work's standing as a *public good.* A public good, in economic terms, is something that is regarded as beneficial and can be provided to everyone who seeks it, without their use of it diminishing its value. (9)

Open access to research is a public good because it benefits many, and one's use of online research does not prohibit anyone else's access to that research. Knowledge, and online information in particular, is a 'nonrivalrous' resource (Suber 2012, 45). Many researchers also consider the purpose of academic work to be the development and sharing of knowledge. As Rajiv S. Jhangiani writes in the concluding chapter of the co-edited collection *Open: The Philosophy and Practices that are Revolutionizing Education and Science,* 'both education and science are about service through creation, sharing, and application of knowledge' (2017, 276). If access to research is a public good, and one of the goals of academia is to facilitate such a public good, then it follows that all should have equal access to knowledge as articulated by those working in higher education.

Beyond the ethical arguments for open scholarship, advocates also point out the significant efficiencies and quantifiable benefits of this mode of knowledge production. Scientists risk duplicating experiments unnecessarily if they are unable to find and review their colleagues' results, even if there are technically many experiments published. Governments are in danger of making under-informed policy decisions without access to the full range of researched arguments and findings on a topic. Members of the larger public develop assumptions and misunderstandings about larger systems and their historical precedents if they can only view an incomplete picture of scientific and humanistic research. Universities and their libraries could divert the millions of dollars spent annually on journal subscriptions to other expenditures. The benefits to authors are also notable: open access journal articles are read, downloaded, and cited more frequently than print or toll access articles (Gargouri et al. 2010; Willinsky 2006). Rightly or wrongly, in an institutional environment increasingly focused on measuring quantifiable impact in order to make decisions around hiring and promotion, as well as to make the case to governments and funding bodies for increased financial support, a system that augments measurable research uptake is key.

If open access to research output is both a more ethical and more efficient choice for knowledge production than conventional print or toll access publishing, and if it benefits scholars, libraries, institutions, governments, and the public alike, why has open access not become the norm? There are many disciplineor context-specific issues that have hindered the progression of the Open Access movement on a global scale, including concerns about academic freedom, unequal access to technology, misconstrued notions of prestige, and the expense inherent to monograph publishing, to name a few. But we can focus on three more universal factors that uphold the current illogical state of affairs in scholarly communication: commercial academic publishing, resistance to change, and institutional reward systems.

Higher education institutions do not, by and large, control the means of their own knowledge production. Large, profit-driven commercial academic publishers like Reed Elsevier or Springer run the majority of "prestige" journals, and thus set the terms of how research is shared and accessed. To oversimplify the issue, universities are, in a sense, double-paying for research: a university hires a faculty member and pays their salary, under the agreement that they will publish; then, when the author does publish with a toll access publication, universities must pay again to secure access to the research, often via a journal subscription. Journal subscription costs have grown at a staggering rate; as Martin Paul Eve reports, 'Various studies based on statistics from the Association of Research Libraries show that the cost to academic libraries of subscribing to journals has outstripped inflation by over 300% since 1986' (2014, 13). This has created an untenable financial situation for university libraries, many of whom are forced to reduce other budget lines dramatically in order to meet the research needs of their faculty and students. Eve provides some perspective on the degree of profit accrued by large academic publishers: '[Reed Elsevier] reported a 37% profit with "a revenue stream of £2.06 billion and a profit level of £780 million" in 2012' (2014, 34). As he goes on to explain, large oil companies' profit margins usually fall around 6.5% (2014, 34).

Resistance to change is also prevalent across higher education. Academics have communicated their research in specific ways for centuries, and institutional change can occur at an astoundingly slow pace. This is in part due to the high level of bureaucracy ingrained in higher education (and indeed in any sector that is publicly accountable for their expenditures). But, it is also because researchers are overworked and have limited time to revise or reinvent their workflows. As the aphorism goes, academics have flexible work hours: they are free to work any 60 hours per week of their choosing. This poses a significant hindrance, as researcher buy-in and participation is key to open scholarship. There are other reasons for limited faculty uptake of open access as well, including misunderstandings about what open scholarship policies entail, the difference between commercial and institutional or subject repositories, and the benefits of publishing open access (Lovett et al. 2017). Especially when exaggerated or misinformed, these apprehensions inhibit researchers from committing more fully to open scholarship. The myths about open scholarship—for instance, that publishing in an open way hinders academic freedom to choose where to publish, or that

open licensing means an author gives up their intellectual property rights—need to be eradicated, and this can only be done through further education of faculty on the realities of open access. Peter Suber attempts to do just that in the 'What OA is Not' section of his summative primer *Open Access* (2012, 20–27), where he tackles both positive and negative assumptions. Allyson Rodriguez (2017) further argues that scholarly communication librarians need to actively engage their faculty colleagues on the topic in order to normalize open access, and so far, libraries have led solutions to this issue by putting policies and systems into place that encourage easy, supported, open access publishing.

Finally, the current institutional reward system, at least in the North American context, is not set up to support open access publishing. Although promotion guidelines are evolving as more administrators and faculty members become aware of the importance of open access and the implications of toll access publishing, there are many instances where emerging scholars and junior faculty are still encouraged to avoid publishing open access until they have received tenure. As Suber writes, 'Most publishing scholars will choose prestige over OA if they have to choose' (2012, 55). Since hiring and promotion committees do not have the time (or the subfield-specific expertise) to read through applicants' publication lists and gauge their value to the field, the prestige attached to a well-established journal or publisher is often used as a proxy for quality. Suber suggests that toll access journals are often only more prestigious than open access journals because of longevity, and the attraction of established authors and editors over time (55–6). With time, he argues, open access journals will inevitably reach this stage as well (2010). Prestige is ingrained within the academy, and is reinforced by old-fashioned tenure and promotion guidelines that do not consider online and open access publishing to be as valuable as their toll access alternatives. As more journals switch to open access, and newer fields like the digital humanities boast majority open access publications, this barrier will be overcome.

Open Scholarship and the Digital

The development of networked technologies and practices in the late twentieth century opened up knowledge sharing to many more people than previously possible, and created the conditions for open access to emerge. Suber defines the term open access as follows: "Open access (OA) literature is *digital, online,* free of charge, and free of most copyright and licensing restrictions" (2012, 4; *emphasis mine*). Open access depends on the Internet, in particular, because it enables nonrivalrous access to resources for those who are geographically dispersed around the world. There are caveats here: it is important to acknowledge that complete global connectivity has yet to be achieved, and this is a significant hindrance for knowledge dissemination more generally and the Open Access movement in particular (Ahmed 2007). Moreover, some countries have regimented Internet access more than others. Regardless, digital technologies are still capable of transmitting information more widely, and more quickly, than any other mode of communication, and many people rely heavily on the Internet for information access and communication. Digital literacy rates do vary across national, social, and generational lines; regardless, Internet usage is increasing globally, with 3.2 billion people online as of 2015 (ITU 2017).¹ The prevalence of social media in daily media creation and consumption has also helped to break down barriers and build communities around similar interests.

The emergence of the Internet and its global reach has created a platform for knowledge sharing at hitherto unimaginable proportions. Open scholarship is facilitated by this increasingly networked state of information access and communication. Not only does such a generic information sharing network allow for wider audience reach, it also accelerates the speed at which researchers can share output and circulate ideas. Digital technology is a foundational mechanism for open scholarship.

Different Versions for Different Ends

Open access advocates have presented and published extensively on the pressing importance of open access. But others suggest that just because a resource is open—just because it is free to use—does not mean that it will necessary see broad uptake. For instance, Heidi McGregor and Kevin Guthrie (2015) acknowledge the flaw in considering open access an end unto itself, and suggest that the focus should shift to the 'productive use' of research materials. John Maxwell (2015) takes up this argument in 'Beyond Open Access to Open Publication and Open Scholarship', as do Maxwell and I in a paper for the 2017 Implementing New Knowledge Environments (INKE) Victoria gathering (2018). Public Humanities scholars like Wendy F. Hsu (2016) and Sheila Brennan (2016) have critiqued the digital humanities for assuming that simply putting

¹ Of course, this is still a far cry from global literacy rates for traditional reading, which are cited to be at 86.3% for all people aged 15 and above, according to Wikipedia (https://en.wikipedia.org/wiki/List_of_countries_by_literacy_rate).

research online constitutes public engagement. To engage with the public, they argue, one must consider these communities at the inception of a research project, not as an afterthought or, worse, as mute subjects of examination.

I suggest that we might look to alternative scholarly communication practices that allow one to undertake the long-form thinking and writing that is so crucial to scholarship, but also encourage reiteration and collaboration with other community groups. In *Planned Obsolescence: Publishing, Technology, and the Future of the Academy,* Kathleen Fitzpatrick reminds her audience of the importance of long-form writing in academia: "there's a kind of large-scale synthetic work done in the form of the book that's still important to the development of scholarly thought' (2011, 7). I agree with Fitzpatrick that we need to resist the urge to throw away all conventional practices when it comes to revisioning scholarly communication; I align with her even more when she suggests throughout *Planned Obsolescence* that academics must fundamentally rethink the ways they are communicating their output if they want to take advantage of networked technologies, and thus remain relevant and of credible service to the rest of society.

Here is my suggestion for simultaneously upholding important traditions of humanistic scholarship (e.g. peer review, long-form writing), as well as taking advantage of digital technologies, while committing to open scholarship as a de facto public good and ethical imperative of higher education: *versioning*. Ideas gain depth and traction as they are brought to light, discussed, reviewed, and refuted. This process of refinement is how we develop convincing arguments. Instead of thinking of "lowbrow" or popular communication mechanisms as outside of the scholarly communication process, or else as a public record or starting point for an idea, what if we considered multiple versions of an argument as equally important and requiring of our sustained effort and attention? The germ of any research output is the main argument or theory—what if that germ was sprouted in various venues and forms? One could simultaneously or sequentially publish a long-form argument via open access academic journal article; work with a journalist or writer colleague to explore the same argument in a more public, online venue—revised as appropriate for such a modality; post a truncated version of the argument as well. Each mode of engagement will engender different reactions and feedback, as different audiences will collaborate and create knowledge at each interaction point (Arbuckle & Stewart 2017).

Versioning pushes against the academic notion that all published output should be original, and should exist in one manifestation only. By taking a page from data preservation studies and initiatives like LOCKSS (Lots of Copies Keep Stuff Safe), we can begin to appreciate the value of copies and versions—they ensure that material can be found, accessed, and preserved in different ways. A 20-page open access research article may be freely available on an institutional library's website, but that does not mean that a community member searching for credible research on health sciences, climate change, urban planning, or any other topic, will be able to locate this material and decipher it without highly specialized, field-specific training. Even those of us who are academically trained struggle to decode and fully comprehend the research output of other fields—we are all guilty of writing for our colleagues in shorthand jargon that assumes a shared, prior knowledge. The shorthand is useful to those working within a discipline, as Laura Mandell (2015) explains:

It is most evident in science, but true in the humanities as well, that specialization leads to greater discovery. If one has to explain everything from scratch, it seems, you cannot get as far in deliberations. On the contrary, if addressing a specialized audience, shorthand can be used to indicate ideas upon which one builds. It is amazing, really, how little one can actually accomplish in one book, and so all the shortcuts that can be taken through gestures and shared specialized languages pave the way to accomplishing more. (29)

But shorthand is less useful for anyone not versed in the historical precedents, theoretical angles, and current arguments of a field, and Mandell herself questions the value of specialization that serves to barricade others from accessing and participating in certain intellectual debates (2015, 28–29).

As such, there is a pressing need for translation work. Not a "dumbing down" of academic content, but a presentation of scholarly ideas in different, purpose-built forms. Moreover, if all of these versioned outputs are linked to each other, they can offer long- or short-form options for different audiences based on the amount of time readers have, and what their reasons are for accessing the research argument. Although it would be presumptuous to assume what every individual's purpose for accessing scholarly research is, it is feasible to consider some possible reasons, as well as suggested versions dedicated to that purpose. For

instance, a fellow colleague in my field may want to carefully scrutinize how I build my argument, confirm that I am well versed in the research literature, and trace my sources for their own intellectual exploration this is the most common academic mode of engagement, and the journal article and the monograph best serve such a purpose. A colleague in another field may be interested in a one-line synopsis on Twitter, in order to receive a quick update on a trend or idea. By contrast, an administrator may be looking for a paragraph-length, high-level summary on a professionally-geared website, in order to advocate for a purpose that they might not have the time to research in its entirety on their own. A community member might latch on to a publicly accessible piece written in a more journalistic tone and found in an online news source, like *The Conversation* or *The Globe & Mail.* These brief examples of cases and responsive research outputs demonstrate that not all scholarship is accessed and used by the same people for the same purposes. It is high time that we respond to the needs of larger society in a collaboration-ready mode that allows us to share our research widely, and to embrace the true ethos of access—beyond the simple removal of paywalls.

Conclusion: Open+

"Open" has become a buzzword in academia, and the argument for open scholarship is well-established, rooted as it is in the ethical imperative to share knowledge as widely as possible. Open scholarship is considered to be a more efficient method for research and development, since sharing results and output leads to less duplication of efforts. Now that open practices are more widely accepted, and even heralded in some corners, the next hurdle for the academic community is creative and effective implementation. Versioning output is one of the ways in which open social scholarship can facilitate further academic and public engagement—because simple access is not always enough.

Competing Interests

The author has no competing interests to declare.

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How to cite this article: Arbuckle, Alyssa. 2019. Open+: Versioning Open Social Scholarship. *KULA: knowledge creation, dissemination, and preservation studies* 3(1): 18. DOI: https://doi.org/10.5334/kula.39

Submitted: 11 May 2018

018 Accepted: 04 September 2018

Published: 27 February 2019

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