

“Publish or Perish” – A Brighter Future for Scholarly Authors?

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Abstract

As content creators, authors arguably represent the most valuable asset in the journals publishing ecosystem, yet commonly they operate in an arduous and restrictive environment facing challenges from parent institutions and journal publishers. While significant professional rewards exist for authors in the current landscape, new technologies, evolving knowledge ecologies and shifts in the way content is disseminated and consumed offer opportunities to recalibrate an often asymmetrical industry. This paper will explore the environment of scholarly journals through the lens of its authors and discuss ways in which the journals’ landscape, such as changing technologies, shifts in knowledge dissemination and access, may offer opportunities to assuage this “publish or perish” ideology.

Keywords: Journal publishing; scholarly communication; “publish or perish”; academic authors.

Introduction: The haunting maxim in a contemporary context

In its topical usage “publish or perish” proposes the ideology that within academia particularly, to progress in one’s career one must publish (Linton 2011). This has deeper connotations, evoking thought pertaining to what it means to publish and how this is measured (in terms of quality, frequency and extent) and indeed what it means to “perish”. This ideological theory and the resulting constructs and economies produced are

particularly relevant within the area of scholarly journals publishing which traditionally form the elementary mechanism for scholarly communication.

In this unique ecosystem, which is defined by a myriad of key characteristics (Phillips 2014) is a landscape that largely operates autonomously from the wider publishing industry (Hall 2013; Tenopir and King 2014), where content generators are also content consumers (Thompson 2005). There are a range of propositions set forth as to why this is the case: Harnard (2014) argues that the key driver of all stakeholders from funding bodies to author and publisher in a journals environment is research impact. It is apparent that this is an industry based on need, whereby only published research that is relevant within a particular specialisation is being searched, used and shared by consumers operating in those fields.

Evidence suggests that the publishing of scholarly journals is undergoing epochal recalibration with a potential to result in a greater equilibrium of benefits and adjustments of sustainability. Cope and Kalantzis (2014) present a case for this based on a discussion of epistemic disruptions brought about by shifts in publishing technologies, economics and distribution and, in reaction to a series of rupturing breaking points including availability of knowledge, credibility design, and knowledge evaluation.

Despite of, and as a result of this recalibration, authors are presented with an array of journals publishers and publishing routes to choose from both locally and globally, although contention does exist regarding the extent of choice in the market (Stewart 2001). Journals vary greatly in nature and characteristics and therefore selections play a critical role in managing the success and preserving the original intent of the unit of knowledge being imparted, having significant potential on discovery, visibility and research impact. Author considerations on where to publish may be closely connected to the unique intent of the research to share; considerations such as journal impact factor, reach and subscription base, publisher location, access models, peer-review process and market share in the relevant discipline are likely to be important.

Also pertinent, but largely out of the control of authors are the significant and volatile array of academic, business, cultural, political and technological contexts in which the industry operates. Examination of key trends worldwide demonstrate significant increases in research and development funding which correlates to an increase in the number of journals in the market (Tenopir and King 2014). Conversely, reductions in library institution budgets following the 2008 recession coupled with a resistance against “big deal” bundling, cuts in government spending, increases in student fees and increased demand of services (Creaser 2014; Stewart 2004) has caused a notable strain in this area, in turn impacting publishers.

Finch (2012) suggests that operating within constant external political and social influence, is an evolving cultural context which is playing a significant role in shaping the journals industry, particularly prominent being the shifts in expectations on how content is discovered, accessed, delivered, shared and used. Central to the issue, and challenging the intrinsic nature of journals, are trends in the manner, timing and location of content publication.

Technological advancements and the shift to digital has had significant impacts on the industry (Hall 2013; Clark 2014). Changes in the production process have also generally brought about efficiencies resulting in reductions in production time and peer-review, costs in production and also delivery (Bullock 2012). It is estimated that over 90% of English language journals are now available online (Cox and Cox 2008) and journals providing digital-only products growing (Cope and Phillips 2014).

However, the debate surrounding open access and the key question “who pays” continues its evolution with perspectives of stakeholders throughout the industry varying. While seen by many as a public benefit enhancing “transparency, scientific integrity and rigour” (Tickell 2016) and viewed as a way to improve communication and mitigate the “financial stranglehold” of conventional publishers (Cohen, 2006) the costs of producing, providing and archiving content must be recouped somewhere. As a result of recommendations put forth by The Finch Group (Finch 2012) and resulting government mandates this expense is

now trending towards absorption by the parent-institution/author, the content providers, through article processing fees (APCs) placing authors in a difficult position, eased financially only by the option of Green Open Access which delivers its own set of issues.

Author research and reputation: The pressing issues

To understand the position of authors within the current scholarly journals environment, it is important to consider the relationship between authors and the generation of knowledge which is rooted in a variety of motivations and the impact of external forces, all of which is grounded in the wider context of scientific practice.

From the early beginnings of *Le Journal des Scavans*, of the 1600s (Houghton 1975) authors have sought to build the ‘scientific record’ to seek and share understanding. Proposed by Guedon (2014) is the idea that scientists are expected to act truthfully, “weaving refined and complex forms of discourse...by proposing their interpretation of reality as a challenge to their peers” and this being in essence the ‘Great Conversation’. Author motivations are complex and the context in which they sit ever-evolving, however “the relentless effort to approach reality according to the rules and methods that set scientific and scholarly knowledge apart” (Guedon 2014) has remained largely intact over the centuries.

The issues authors face in the modern day scholarly journal landscape relate almost entirely to three main areas: the author’s parent institution, the publisher, and the consumer who are often peers. Examining the issues associated with the affiliation between author and parent institution, a central theme relates to the systems applied to journal articles to gauge value and the productivity of the author/researcher. One author-level metric receiving ongoing debate are citations which have a long history in many areas of scientific study (Alder *et al.* 2009) and currently resting within the context of two key factors: a culture of measuring impact and value using numbers, and a rise in software for use in citations.

Citations have remained commonplace as a metric due to several key factors: the influence they have on decisions made by the author parent institution regarding promotion and

funding; as a way to trace research as it evolves and is used by other researchers; and for marketing purposes (Dowling 2014). Cope (2014) argues that citation metrics are “a very poor measure of epistemic impact and value” and as a proxy for knowledge value such should be entirely rethought. When considering citation metrics and their impact and value, reliability and validity are often called into question. Reliability issues include items that are incorrectly referenced (e.g. inability for databases to distinguish authors with same last name) and this may be as high as one-third, potentially reducing citation counts (Todd and Ladle 2008).

Regarding validity, it is often assumed that all citations are equal (e.g. 1 citation is equal to 1 knowledge value) however with system flaws including the counting of self-citation (which may be necessary in small disciplines), citation counts including retractions, negative citations (while completely valid should be separately recorded) and re-citation unconnected with an original source we see a system which has the potential to have dramatic impacts on the future of the authors involved (Cope 2014). In addition to fundamental flaws, the data presented within the several primary citation count software (Google Scholar, Scopus, Web of Science) frequently show discrepancies in numbers.

The author – publisher relationship is also subject to an array of pressing issues.

Transparency in the pre-publication process, particularly peer review, remains an ongoing challenge (Cope 2014) and is widely criticised (Campbell 2008). Peer-review has long represented a necessary and critical function in ensuring quality, evolving out of the need for objectivity and specialised knowledge (Burnham 1990). However, while peer-review is central to branding status and readership impact (Clark 2014) and indeed a primary function informing the distinction of high quality and prestige, evidence would suggest that peer-review is in decline and this may largely be attributed to the time it takes to complete (Bjork and Soloman 2013; Cowdrey 2016).

Throughout the peer-review process, authors may experience frustrations relating to clarity of communications, concern over reviewer motivation and expertise, and speed at which the process moves. In response to pressures from authors, a handful of publishers are

addressing some of these issues, for example Nature-branded journals are now offering authors the option of single or double blind review, which may work to break down biases and increase objectivity and anonymity (Page 2015), open peer review systems similar to post publication review are also in an experimental phase.

In traditional models of journal publishing, author involvement in the access, visibility and dissemination of their work is also limited. Post-publication business such as deals between publishers and subscribers are out of author control, and while this is unlikely to be an area of expertise for the author, the potential repercussions on research impact may be significant (e.g. delay, access). Several examples of authors boycotting journals based on subscription costs and access practices have occurred, notably in the case of Elsevier in 2012, generated by *The Cost of Knowledge* movement (Williams 2012).

It is worth considering that many of the current problems in journal publishing lie in the prevailing ways in which impact, performance, success, progression, prestige and engagement are defined. A collection of standardised mechanisms and metrics which are necessary in their ethos, but flawed and rudimentary for the ways in which content is discovered, consumed, engaged with, promulgated and transmitted in the 21st Century will continue to cause disruption within scholarly exchange and impact authors.

Key opportunities for authors

As content creators, authors are in a cogent position to recalibrate the nature and structure of the conception, exchange and dissemination of scholarly knowledge. The opportunities presented below are not devoid of problems, and during this transitional phase particularly, authors may need to consider issues such as financing, discoverability, competing with the branding and quality of prestigious journals (Guedon 2014), format and presentation, and sharing and storage.

From a big picture perspective, digital technologies generate scope for continuous conversation and immediate interactions between authors and readers, with the potential

to fuel the advent of living documents (Guedon 2014) challenging the restrictions still in place from the age of print-only. This in essence may form the modality for sustaining the ‘great conversation’ in a new contemporary reality that is rich in timely and relevant scholarly discourse, accessible to a range of audiences and institutions, and delivered across multiple media platforms in a variety of formats.

An area of opportunity worthy of exploration is in institutional and subject-based repositories, and the collaboration between institutions (Shreeves 2014). These digital or academic repositories are open access online environments whereby intellectual outputs may be collected, preserved and disseminated (Gherab Martin 2014) and have the potential to address issues relating to financing, access, and sustainable storage. Primarily of benefit for author and parent institutions, these repositories link together with the movement towards the dream of full open access via the ‘green road’ whereby authors self-archive work as the final step of a research project.

To address issues of speed and in some cases lowering journal rejection rates (Gherab Martin 2014), subject-based repositories can serve as a way to share pre-prints prior to journal submission fostering peer-dialogue as early as needed; this evolving practice is beginning to spread out into other disciplines from its beginnings in physics and recently mathematics (Gonzalez-Villa 2011).

Content sharing is not a new idea, however it has become increasingly more complex in the world of subscription journals (Page 2016). Ground breaking initiatives and trials launched by Nature Publishing Group (Onwumezi 2015; Page 2014; Page 2016) have demonstrated positive results in the area of peer-reviewed content sharing by making their entire journals portfolio freely shareable between subscribers and non-subscribers following a year-long trial.

Possessing capabilities for frictionless sharing in non-static formats with additional benefits of content annotation is a considerable and timely opportunity for authors and the wider research community, enabling collaborations and discussions, maximisation of access,

dissemination of knowledge with the potential to garner greater visibility of articles and increased impact and citations.

Also serving a range of research communities are Scholarly Collaboration Networks (SCNs) where researchers can freely share subscription content and receive feedback (Page 2014). SCNs are proliferating with Research Gate and Academia.edu being two of the most widely used. While a step in the right direction, this big issue of sharing has been highlighted by Derek Haank, CEO Springer Nature, who has criticised publishers for limited progress in this area, with a need for industry wide collaboration (Cowdrey 2016).

Proactivity in the areas of self-publishing may also offer opportunities for authors, particularly operating in the form of a consortium. While this area has been largely discussed with a focus on academic monograph publishing (Page 2013), there are potential applications here for authors of scholarly journals. Academic-run ventures (e.g. Alluvium Journal) have presented a space in which contributions can be made in the form of short non peer-reviewed articles which are then open for comment and linked with social media sites (Page 2013). Academics grappling with limited budgets, in addition to academic emeritus who are no longer receiving research funding, should consider working together to create more open publishing systems which are diverse and affordable.

While ‘social media’ is an ubiquitous term, the development of an open space and infrastructure similar to that of Facebook, and categorised by discipline or area of study, may catalyse the shift towards rethinking what the dissemination of knowledge really involves (e.g. incorporation of videos, narrated abstracts, databases and easily navigable graphs and images, immediate content sharing, along with comments, reactions and other forms of open peer-review). Academic spaces funded by relevant advertising could also be a viable consideration to ameliorate the cost of publication while also providing income to publishers or custodians.

Conclusion

Authors continue to be faced with numerous challenges when operating within the environment of scholarly journals’ publishing. Mechanisms formally conceived for printed journals to ensure quality, research impact and sustainability of scientific record now appear to be retrogressive, shrouded in formality and rigidity and in many ways incongruous and inhibitive for a digital age.

However, in the transitory and volatile landscape of journal publishing today many areas of opportunity are becoming exposed which may work to ameliorate the ‘publish or perish’ ideology. Proactivity particularly involving communication, discussion and cooperativity, between stakeholders concerned with content generation and storage (e.g. libraries and repositories) are likely to foster improvements in peer-discussion, content creation, dissemination, storage and access, all of which has the potential to lead to more sustainable models that are less dependent on the restrictions and constraints imposed by traditional publishing models.

References

Alder, R., Ewing, J., Taylor, P. 2009. Citation Statistics. *Statistical Science*, Vol. 24, No. 1, 1-14. Available at: <http://projecteuclid.org/euclid.ss/1255009002>. Accessed: July 14, 2016.

Bjork, B.C. & Soloman, D. 2013. The publishing delay in scholarly peer-reviewed journals. *Journal of Infometrics*. Vol 7, Issue 4, October 2013 pp 914-923. Available at: <http://www.sciencedirect.com/science/article/pii/S1751157713000734>. Accessed 3 July, 2016.

Bullock, A. 2012. *Book Production*. Routledge; Oxon.

Burnham, J.C. 1990. The evolution of editorial peer review. *The Journal of the American Medical Association*, 263.

Campbell, P. 2008. Escape from the impact factor. *Ethics in Science and Environmental Politics* 8:5-7

Clark, G & Phillips, A. 2014. *Inside Book Publishing*. 5th Edn. Routledge: Oxon.

Cohen, J. 2006. Publish or perish – is open access the only way forward? *International Journal of Infectious Diseases*. Vol 10, Issue 6, November 2006 Available at: <http://www.sciencedirect.com/science/article/pii/S120197120600155X>. Accessed 1 July, 2016.

Cope, B. & Kalantzis, M. 2014. Changing knowledge ecologies and the transformation of the scholarly journal. In: Cope, B. & Phillips, A. eds. *The future of the academic journal*. 2nd ed. Chandos Publishing: Oxon. pp. 9-83.

Cope, B. & Phillips, A. 2014. Introduction. In: Cope, B. & Phillips, A. eds. *The future of the academic journal*. 2nd ed. Chandos Publishing: Oxon. pp. 1-8.

Cowdrey, K. 2016. Haank: STM industry 'too slow' on content-sharing. *The Bookseller*, 13 April 2016. Available at: <http://www.thebookseller.com/news/haank-stm-industry-too-slow-content-sharing-327050>. Accessed 7 July, 2016.

Cox, J. & Cox, L. 2008. Scholarly publishing practice 2008, Third survey. Association of Learned and Professional Society Publishers.

Creaser, C. 2014. The role of the academic library. In: Cope, B. & Phillips, A. eds. *The future of the academic journal*. 2nd ed. Chandos Publishing: Oxon. pp. 317-329.

Dowling, G. 2014. Playing the citations game: From publish or perish to be cited or sidelined. *Australasian Marketing Journal (AMJ)* Volume 22, Issue 4, November 2014, Pages 280–287. Available at: <http://www.sciencedirect.com/science/article/pii/S1441358214000664>. Accessed 7 July, 2016.

Finch, A. 2012. Citation, bibliometrics and quality: assessing impact and usage. *Academic and professional publishing*. 2012, pp 243-267. Available at: <http://www.sciencedirect.com/science/article/pii/B978184334669250010X>. Accessed 10 June, 2016.

Gherab Martin, K, J. & Quiros, J. L.G. 2014. Academic journals in a context of distributed knowledge. In: Cope, B. & Phillips, A. eds. *The future of the academic journal*. 2nd ed. Chandos Publishing: Oxon. pp. 113-137.

Gonzalez-Villa, M. 2011. Evolving Publishing Practices in Mathematics: Wiles, Perelman, and arXiv. In: *Emerging Digital Spaces in Contemporary Society*. Palgrave Macmillan: Basingstoke.

Guedon, J.-C. 2014. Sustaining the ‘Great Conversation’: the future of scholarly and scientific journals. In: Cope, B. & Phillips, A. eds. *The future of the academic journal*. 2nd ed. Chandos Publishing: Oxon. pp. 85-112.

Hall, F. 2013. *The Business of Digital Publishing – An introduction to the digital book and journal industries*. Routledge: Oxon.

Houghton, B. 1975. *Scientific periodicals: Their historical development, characteristics and control*. Hamden, CT: Clive Bingley/Linnet books.

Linton, J. D., Tierney, R., & Walsh, S.T. 2011. Publish or Perish: How are Research and Reputation Related? *Serials Review*. Vol. 37. Issue 4. December 2011. Available at: <http://www.sciencedirect.com/science/article/pii/S0098791311001304>. Accessed 20 July, 2016.

Onwumezi, N. 2015. NPG's article-sharing trial a success. *The Bookseller*, December 15, 2015. <http://www.thebookseller.com/news/nature-publishings-research-paper-trial-continue-indefinitely-318373> Accessed 18 June, 2016.

Page, B. 2013. Academics urge peers to self-publish research. *The Bookseller*, November 1, 2013. Available at: <http://www.thebookseller.com/news/academics-urge-peers-self-publish-research>. Accessed 12 July, 2016.

Page, B. 2014. Nature.com research papers made freely shareable. *The Bookseller*, December 1, 2014. Available at: <http://www.thebookseller.com/news/naturecom-research-papers-made-freely-shareable>. Accessed 28 June, 2016.

Page, B. 2015. Nature journals introduce 'double-blind' review. *The Bookseller*, February 18 2015. Available at: <http://www.thebookseller.com/news/nature-journals-introduce-double-blind-review>. Accessed 18 June, 2016.

Page, B. 2016. Springer Nature to expand content sharing to all journals. *The Bookseller*, March 22, 2016. Available at: <http://www.thebookseller.com/news/springer-nature-expand-content-sharing-all-journals-324808>. Accessed 12 June, 2016.

Phillips, A. 2014. Business models in journals publishing. In: Cope, B. & Phillips, A. eds. *The future of the academic journal*. 2nd ed. Chandos Publishing: Oxon. pp. 139-158.

Shreeves, S. L. 2014. The role of repositories in the future of the journal. In: Cope, B. & Phillips, A. eds. *The future of the academic journal*. 2nd ed. Chandos Publishing: Oxon. pp. 299-315.

Stewart, R. 2001. PA defends STM journal publishers. *The Bookseller*, 17 September, 2001. Available at: <http://www.thebookseller.com/news/pa-defends-stm-journal-publishers>. Accessed 17 July, 2016.

Stewart, R. 2004. University budgets at breaking point. *The Bookseller*, 5th February, 2004. Available at: <http://www.thebookseller.com/news/university-budgets-breaking-point>. Accessed 12 July, 2016.

Tenopir, C & King, D. W. 2014. The growth of journals publishing. In: Cope, B. & Phillips, A. eds. *The future of the academic journal*. 2nd ed. Chandos Publishing: Oxon. pp. 159-178.

Thompson, J. B. 2005. Books in the digital age: The transformation of academic and higher education publishing in Britain and the United States. Polity Press: Cambridge.

Tickell, A. 2016. Open access to research publications – independent advice. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/499455/ind-16-3-open-access-report.pdf. Accessed 20 July, 2016.

Todd, P.A. & Ladle, R.J. 2008. Hidden dangers of a ‘citation culture’. *Ethics in Science and Environmental Politics* 8: 13-16. Available at: <http://www.int-res.com/abstracts/ese/v8/n1/p13-16/>. Accessed 26 July, 2016.

Williams, C. 2012. Academics call for boycott of Elsevier. *The Bookseller* January, 31, 2012. Available at: <http://www.thebookseller.com/news/academics-call-boycott-elsevier>. Accessed 12 June, 2016.