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Working paper version

Open Access: A Cause, but not the Cause

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This paper joins the debate on OA publishing by providing some critical notions on open access in information systems because it seems that IS scholars are not at the forefront of OA publishing. In what follows, I describe the OA situation in IS (2013) and then comment on the arguments put forward in the paper. Towards the end of the paper, I discuss how we can move forward.

I. INTRODUCTION

“Hi,

Thank you for the invitation [to review a paper]. Based on the abstract it indeed appears that this paper falls within my field of expertise. However, I boycott paywall journals due to their exorbitant pricing schemes, and the way they exploit the unpaid work of authors and reviewers. I believe the proliferation of the Internet has made commercial paywall journals obsolete, and these days their existence is in fact detrimental to the entire academia.

Best Regards, -[Removed]”

This is a Facebook post and a letter to an academic journal’s editor by someone who had declined to review a paper. The reason, as stated above, was that the journal relied on paywalls. This answer is not possible or suitable for many academics, but it is a strong statement on the issues related to paywalls and academic publishing and on whether we should move towards gold open access (OA) or green OA (see Section 2 for definitions).

Before discussing that in detail, we need to know what the current situation is regarding OA publishing in IS. The daunting question is: are we, as IS scholars, open to new technologies as many of us like to think, and are we embracing OA or not? If we aren’t, then the question is: shouldn’t we be eating our dog food?

Kingsley and Kennan (forthcoming) makes a strong contribution by asking some fundamental questions about the relationship between developing technology and the current scientific publishing system. In their paper, they richly describe OA’s current situation and argue what the problems related to OA and its role(s) are. Primarily, they claim that OA is used as a scapegoat for a set of problems inherent in the current scientific publishing system.

These are indeed the arguments we as IS scholars should be engaged in, and I hope Kingsley and Kennan (forthcoming) will succeed in their stated goal of stimulating discussion. Hopefully, these discussions also require some change in publishing practices.

Based on earlier literature, the paper states that different academic fields are moving at different paces towards OA. One estimate in the paper is that 17 percent of papers are golden OA and over 20 percent are green OA. But there seems to be a gap concerning IS. Björk and Paetau (2012) found that, in 2009, in IS the green OA share was about 20 percent and gold OA was under 1 percent. How are we doing in comparison now?

One would expect at the outset that IS would be at the forefront of electronic publishing and OA since IS scholars are knowledgeable about novel technologies and probably curious

about their impacts when organizations adapt, users accept and technologies distribute. IS scholars also quite often promote using information technologies to others, the latter of whom expect the former to solve issues inherent in organizations and society.

In the commentary that follows, I address some of the issues raised and address how we are in IS doing in terms of OA and what could—and should—IS scholars do about it.

II. OPEN ACCESS

Kingsley and Kennan (ref) (see also, Kling & Callahan, 2003) have stated that electronic publications goals are to:

- Make research papers available to readers 24 hours a day.
- Ensure that costs are lower because hardcopies are not required and because storing electronic materials is cheaper than storing paper.
- Assist publication to be more timely as communications improve.
- Enable papers to include a wide variety of document formats and other media.

One can easily argue agree that these expectations have generally been met, at least for those researchers who work in universities that have an access to quality library systems. Universal access to all of the latest research papers (Budapest Open Access Initiative, 2002) is, however, a goal that has not been reached.

To discuss why, I use the following OA terminology. Golden OA means a publisher releases the copies (journal-mediated OA) (Laakso, 2014). I use the typology that Laakso (2014) provides: full journal immediate OA, hybrid OA, delayed OA, and promotional OA. I do not consider whether promotional OA or hybrid OA counts as “real” OA.

Table1: Golden OA Mechanisms Table (Laakso, 2014)

Type	Definition & Example
Full journal immediate OA	Journals that make the full journal content open access immediately on publication. Example: <i>BMC Medicine</i> (APC funded)
Hybrid OA	Individual papers in subscription-based journals are open access on the publisher’s website after the author(s) make a payment. Example: <i>Journal of Informetrics</i>
Delayed OA	Subscriptions-based journals that make papers’ content open access after a set embargo period. Example: <i>New England Journal of Medicine</i>
Promotional OA	Sporadic and temporary occurrence by definition, however, some publishers have been noted to have systemic approaches in place (e.g., the first issue of the last years volume available for free on a rolling schedule). Example: <i>Advanced Engineering Materials</i>

Green OA means that papers are available across the Web (Laakso, 2014). The three most popular locations are institutional repositories, subject repositories, and academics’ personal websites. The varieties of green open access include: working papers, submitted manuscripts, accepted manuscripts, and published papers (See Table 2).

Stage	Definition	Terms used	
Working paper	A working paper uploaded to an e-print repository		Preprint
Submitted manuscript	The version of the manuscript submitted to the journal	Preprint, author's original draft	
Accepted manuscript	The accepted version, after peer review, but prior the final copy-editing and layout	Postprint, personal version, accepted author manuscript, final author version	Postprint
Published paper	An exact digital replicate of the published paper	Version of record, publisher's version, published journal paper	

In Section 3, we use this terminology to describe the OA situation in IS.

III. OPEN ACCESS IN INFORMATION SYSTEMS

Many classic IS papers assume that distributing or accepting technologies can change organizations, society, and people's lives for the better. Some also incorporate the idea that, even if there would be risks, it is unfruitful or even impossible to try to isolate from developing technology.

I was unable to carry out a larger study on papers and journals in IS journals or academics practices given this paper's timeframe, but I do think this would be a worthwhile effort to carry out in the future. Thus, what follows is more of anecdotal review that provides a rough estimate on where we are in IS (or were in the beginning of 2013).

I conducted a small literature search focusing (somewhat arbitrarily) on the Senior Scholars' basket of journals, which contains eight high-end IS journals field: *European Journal of Information Systems (EJIS)*, *Information Systems Journal (ISJ)*, *Information Systems Research (ISR)*, *Journal of AIS (JAIS)*, *Journal of Information Technology (JIT)*, *Journal of MIS (JMIS)*, *Journal of Strategic Information Systems (JSIS)*, and *MIS Quarterly (MISQ)*.

I went through the publication policies in the webpages of the journals as of August 2014 and divided the journals' policies by their golden OA policies (see Table 3).

Type	Definition & Example
Full journal immediate OA	None
Hybrid OA	<i>EJIS, ISJ, ISR, JIT, JSIS, MISQ</i>
Delayed OA	None
Promotional OA	<i>EJIS, ISJ</i>
No Golden OA	<i>JAIS</i> ¹ (freely available to AIS members), <i>JMIS</i>

To summarize: most of the journals offer a hybrid open access option where the author pays the APC. This would hint that IS journals are actually quite up to date on golden OA publishing, but further analyses are needed on how many authors actually opt for hybrid OA or use green OA practices for their publications.

I examined this by (randomly) taking the first issue each journal in 2013¹. I chose 2013 to allow time for papers to be uploaded the Internet and to create a little distance from the situation. Then, I analyzed all the papers in each journal's first issue in 2013 to determine whether the authors actually 1) paid for the open access version, 2) opted for the green road (working paper, submitted manuscript, accepted manuscript, published paper, or 3) seemed content with paywall release only (no OA)¹.

I used Google and Google Scholar to identify whether a paper under the same name as one in the journal was available on the open Internet. This might lead to a situation where not all

the green OA publications would be found (e.g., if the name changed), but it should be enough to give us a rough estimate of the current situation.

Table 4 reports my findings.

Table 4: All OA Papers Issue 1, 2013 of Different Journals						
Journal	Golden OA Hybrid or Promotional OA	Green OA Working paper	Green OA Submitted Manuscript	Green OA Accepted Manuscript	Green OA Published Paper	Total OA
<i>EJIS</i>	0/8	0/8	0/8	3/8	0/8	3/8
<i>ISJ</i>	1/5	0/5	0/5	1/5	0/5	2/5
<i>ISR</i>	0/11	0/11	1/11	3/11	1/11	5/11
<i>JASIS</i>	0/2	1/2	0/2	0/2	0/2	1/2
<i>JIT</i>	2/6	1/6	0/6	0/6	0/6	3/6
<i>JMIS</i>	0/10	0/10	1/10	1/10	0/10	2/10
<i>JSIS</i>	0/7	0/7	0/7	0/7	1/7	1/7
<i>MISQ</i>	0/14	0/14	1/14	1/14	2/14	4/14

Note that the amount of authors who chose a golden OA approach is large (at least in 2013). This would hint towards a need to provide more funds for institutions and authors to pay for the APCs of golden OA. On the other hand, in many of these cases, versions of the papers were uploaded as green OA, so maybe the authors thought it better to release a version of the paper as green OA (in different repositories) rather than paying the APC for hybrid OA¹.

While this measurement method is anecdotal since choosing one issue at random is not the best way to generalize on the entire field, a more thorough analysis would require analyzing entire volumes or several years worth of publications. Some journals in the sample include special issues, which might or might not follow slightly different rules regarding OA.

I make no argument here about any individual journal or paper or author, but instead gives us a general picture of IS. A little less than half of the papers of each journal's first issue in 2013 are available (as of September 2014) as either gold or green OA. This seems to be in-line with earlier literature even though I only analyzed eight journals. In 2009, the OA statistics were similar in the top eight journals and in a larger sample (Björk & Paetau, 2012).

There has been a strong interest in OA, so I speculate that these numbers will increase in 2014. Still, half of the papers were not universally available on the Internet.

IV. SUMMARY AND DISCUSSION

So are we eating our own dog food? Based on the brief literature review, about half of us were in 2013. The amount of gold OA has increased from 2009 significantly, but the green OA seems to have stayed about the same.

I am willing to accept that individual situations exist in which golden OA is not possible (especially hybrid or promotional OA) or even some situations exist in which all OA would be impossible. But I am not willing to accept that this would be true for more than 20 percent of the published papers, and surely not for the current situation of more than 50 percent.

Kingsley and Kennan (forthcoming) put forward at least two relevant arguments to this discussion: that OA is too expensive and that OA collapses the entire publishing system. I think this is a key question: are these the reasons why IS authors hesitate to publish as OA or are there other reasons?

If these two lines of argumentation (e.g., 1) price and 2) maintaining the incumbent publication system) are responsible for less than 50% OA, then I put forward some rhetorical questions to us as a field:

- 1) Are we as IS scholars anymore up to date? Are we credible proponents of technological change?¹
- 2) Do we use the best of tools and practices to advance our field? Aren't we the late majority or even the laggards in diffusing innovation?
- 3) How can we propose any other open technologies (open source, open data, etc) to other fields?

If we were willing to support OA, then we have several different avenues to move it forward. For example:

- **For all IS scholars:** the most important issue of all: continue the debate to advance our field. In this case, IS can bring a lot to the table when discussing advances in other sciences. For example, how digital technologies are used and what institutional arrangements are needed to support such use.

There is also a clear call for more research on OA's good and bad sides and on the situation in our own field. On it's own, OA also offers many interesting avenues of research that are beneficial to IS, such as what kind of technologies are useful in OA.

- **For authors:** authors can follow the green OA road and publish their own research in, for example, institutional repositories or their own webpages. There is also an increasing number of institutional arrangements for authors that allow them to pay for the APC for the publication of their research as hybrid OA.

As for submission boycotts, the current academic reward system in universities almost universally favors publishing in international scientific journals, most of which in IS have paywalls (many of which luckily support hybrid OA as I show here). Boycotting all submissions to these journals and remaining in academia seems currently difficult if not impossible.

- **For editors:** those senior academics that have editorial or managerial responsibilities in journals can push for golden OA in their journals. Furthermore, advanced journals can build incentive schemes to offer discounts or even waive the APCs for authors that have for example come from developing countries. Editors can also make the rules for green OA publishing clearer.
- **For reviewers:** as I note in the paper, in the current system of academic publishing, the quality reviews and the integrity of the editorial process are of key importance. A large scale reviewer boycott directed at one journal would likely compromise the journal's review processes. The key issue on answering whether review boycotts would be appropriate is: how bad is the situation in the journal or the field in question? I would first push reviewer boycotts to those journals that have predatory practices.

However, if there is no movement towards OA in a certain field or in a certain journal, I do think that it will lead to increasing risk of reviewer boycotts.

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