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Immediate Open Access Is Welcome But... [President's Message]

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Immediate Open Access Is Welcome but ...



In this message, I am going to share my *personal* views on some important issues (this should not be taken as the view of the IEEE Computational Intelligence Society). There cannot be any debate that scientific results should be accessible to everyone. Then only it can be subjected to test by many, more people can benefit out of it, and science and technology can evolve faster. Conducting research requires fund, fund is also required for publishing and maintaining the data base of scientific literature. There are at least three cost components: cost of producing the results, cost of publishing and maintaining, and cost of open access (OA). The last two are related in some sense. Someone needs to pay for the research and its dissemination. Typically, either the researcher's organization or some agency provides the financial support for it. For publications, there are different journals with different models of publication. As per 2016 statistics, only about 15% journals make all articles immediately open access [1]. The remaining are: delayed OA (about 2%), subscription only (about 38%), and hybrid (about 45%) [1]. So there are about 83% of journals where an author can publish without any publication fee and in 45% of them an author can optionally make his/her articles OA by paying the Article Processing Charge (APC). However, for non-OA articles, the readers (usually readers' organization) need to pay the subscription fee for accessing them. This mix of different modes of publications has been catering to everyone's need quite satisfactorily and has stood the test of time. The subscription only and hybrid journals provide researchers some venues to publish their research outcomes irrespective of researcher's financial strength or the sources of funding.

If we could make our publication OA, it certainly reaches a bigger community and will have a bigger impact. But OA articles cannot generate revenues for the publisher. So, for the sustainability of the publisher, someone has to pay the APC (this should include not only the cost of publication, but also the associated cost of maintaining it). Who should pay for this? An immediate answer that comes to my mind is: it should not be the author who has toiled for months and spent many sleepless nights in the laboratory to obtain the results, unless there is an agency (funding agency or author's organization) who can pay. If there is no such agency, who should pay – the publisher or the readers? If the publisher pays, there has to be a business model. The typical business model is that either the readers buy access to individual articles directly or through their organizations, often by subscribing to a large collection. If a researcher pays the APC, the researcher would expect the article to be OA. If the research is funded by an agency, the agency may want the research outcome to be available to everyone without any paywall. This is also natural. But then we expect the agency to pay for the OA charges. This may sound a bit paradoxical that a funding agency, which has paid for the research needs to “buy” the results. In my view, it should not be seen this way as the funding was not for publishing and it is not “buying back” but making

the results accessible to everyone for a greater good.

The related issues here are more complex than they appear. One has to understand that the infrastructure and financial support needed to conduct a piece of research in an affluent (high income) country may be substantially higher than those needed to conduct the same research in a low income/lower middle income country (high income, low income may be defined as per the World Bank's ranking [2]). Consequently, the APC should be somehow related to the country the lead author is from, although the actual processing charge remains the same. It is worth noting that different OA journals provide different levels of waiver depending on various conditions, but there is no uniform policy.

But why am I discussing these issues? Science Europe, a European Association of Research Funding Organizations and Research Performing Organizations, on 11 July 2018 released a radical proposal called Plan-S, which is going to change the scholarly publishing landscape [3]. The "cOALition S", an international consortium of research funding agencies, supports the Plan S and is committed to realize it [4]. The key principle of Plan S is: "After 1 January 2020 scientific publications on the results from research funded by public grants provided by national and European research councils and funding bodies, must be published in compliant Open Access Journals or on compliant Open Access Platforms." [5]. This policy will exclude authors from publishing in about 85% of journals including Nature and Science [1]. Authors retain copyright of their articles with no restrictions, if published in compliant Open Access Platforms. The same document [5] states two more interesting things: If such high quality OA journals/platforms are not available, funders in a coordinated way will provide incentive to establish them. The other interesting point is: "Where applicable, Open Access publication fees are covered by the Funders or universities,

not by individual researchers; it is acknowledged that all scientists should be able to publish their work Open Access even if their institutions have limited means;" – it is not clear how to ensure "all scientists should be able to publish their work Open Access even if their institutions have limited means" unless there is at least a transparent and hardship-dependent waiver policy. If this can be realized then this would be a win-win situation.

The Plan S will give accessibility of the published results to everyone, which is a wonderful thing, but unless guarded properly, there may be an unnoticed serious side effect- a substantial amount of research work may never see the light because of the APC. Many research results will never be published and this in turn may slowly kill scientific endeavors in some areas. In my personal view, a hybrid model of journal can serve everyone's need – does not prevent any funded research outcome from becoming OA. But as per cOALition's guidelines, publishing in hybrid journals will not be Plan-S complainant [5].

Consider a scenario where all publications are immediate open access and the publication of an article requires USD 1000-3000 (this may be more than the cost of many research projects in some disciplines [6]). Certainly, like everyone, I shall be able to read all published articles, but would I be able to publish all my research results in respectable journals? Probably not! This may be true for many researchers in several countries. I am afraid, unless monitored properly, this may lead to a situation where in the public domain there will be less number of research results than it could have been. Because some researchers like me would not be able to publish much in reputed journals, which in turn would hinder their ability to secure even small grants for research. Others have also expressed similar concerns, for example, John Measey said [3]: "But as knowledge producers, I fear that many more scientists around the globe

are likely to be disenfranchised by richer nations, institutions and funding bodies." In a Plan-S compliant publishing world, we need uniform mandatory and transparent rules for at least reduced OA fees depending on the authors' financial status or the country the primary author of an article is from. The governments, funders and researchers need to pay the due attention to these issues to minimize the derogatory impacts, if any, on science and technology. Making the hybrid model non-compliant with Plan-S has posed a serious challenge to both publishers and researchers. Publishers are looking for alternative (possibly untested) solutions – at this point we do not know what would be those solutions and what would be their impact in the long run on science and technology. I hope, irrespective of the solutions that evolve, the ability of a researcher to conduct research and publish its outcomes should not be too strongly dependent on how affluent is the researcher, his/her institute, or the country the researcher belongs to.

The good thing is that IEEE along with its societies including the Computational Intelligence Society, are working hard to find solutions so that we can cater to all authors and no good research remains unpublished/unnoticed because of any paywall.

References

- [1] H. Else, "Radical open-access plan could spell end to journal subscriptions," *Nature*, vol. 561, no. 7721, pp. 17–18, 2018.
- [2] World Bank Country and Lending Groups. Accessed on: 2019. [Online]. Available: <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>
- [3] Communication on 'Plan S'. Accessed on: 2019. [Online]. Available: https://www.scienceeurope.org/wp-content/uploads/2018/07/Plan_S_Communication_110718.pdf
- [4] What is cOALition S? Accessed on: 2019. [Online]. Available: <https://www.coalition-s.org/about/>
- [5] Plan S: Accelerating the Transition to Full and Immediate Open Access to Scientific Publications. Accessed on: 2019. [Online]. Available: https://www.scienceeurope.org/wp-content/uploads/2018/09/Plan_S.pdf
- [6] J. Measey, "Europe's plan S could raise everyone else's publication payroll," *Nature*, vol. 562, no. 7728, p. 494, Oct. 2018.

