

## Open access publishing in the internet age

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Open access (OA) publishing has been the hottest topic in all areas of scholarly publishing in recent years. Currently, over 11,000 peer-reviewed journals are indexed in the Directory of Open Access Journals (DOAJ). Each year many new OA journals are being launched and some of them develop quickly into top-class journals with high impact factors. The main driving force behind this phenomenon is the spreading of the internet across the world. Nowadays, online journals are dominating print journals. In scientific fields, I think print journals have almost completely lost their meaning. In the case of print journals, publishers need to charge readers and libraries who buy print copies. In the case of online journals, in contrast, it is possible to charge all expenses to authors and make them free to readers. There has been much discussion about the problems of moral hazard and predatory journals associated with this kind of OA business model [1]. Politicians have taken notice of this issue, too. Recently, a forum discussion on the pros and cons of OA was held at the National Assembly of Korea.

In spite that there are some oppositions to OA, I think the rapid spreading and dominance of OA journals in the near future are inevitable, mainly because of the basic nature of the internet. For the first time in history, the internet has made it possible for an extremely large number of the general public to access a vast amount of information, which was previously available only to a restricted group of people. It is affecting the way scientific research is conducted in a fundamental manner. Until now, research in science has more or less been an exclusive activity of professionals in a small number of institutions in more advanced countries. I anticipate that this situation will be changed greatly thanks to the internet. The number of researchers and research papers, especially from developing countries, are already increasing rapidly. In the internet space, it is difficult for paid website services to maintain their business, simply because there always exist alternative websites which provide similar information for free. In addition, the internet users have a tendency to care more about speed and convenience rather than prestige. For analogous reasons, online journals which charge large amount of fees to subscribers may experience various difficulties in the future.

One important rationale for promoting OA is the recognition that scientific knowledge developed through publicly-funded research has to be considered as a public property, and therefore should be open to the public. This idea, especially regarding the medical research, was the first impetus to the OA movement. We may be in the middle of a paradigm change in scholarly journal publishing. Most scientific research papers are the outcome of publicly-funded research. Moreover, most research results are heavily dependent on previous works done by other researchers. I feel that those who are at the end of the publishing process and haven't

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contributed to the research results at all are not entitled to make huge profits from those papers.

I agree that there are problems with current business models for OA journals, though I think they are not very difficult to solve. One obvious problem is that the current article processing charges for many OA journals are too high. The publishers need to lower them substantially and find other ways to finance expenses. The way in which free websites are operating may provide some directions to OA journals. For instance, instead of relying exclusively on authors' article processing charges, they could generate revenues from online advertisements or public/government funding. Public funding for selected high-quality OA journals published by nonprofit organizations may be an efficient policy for solving the problem. Well-organized international efforts will be highly beneficial for this purpose.

I believe that OA publishing will be the dominant form of scholarly publishing in the near future. It may also provide

unique opportunities for late comers in scientific research such as developing countries to catch up more advanced countries. Establishing an international network and platform will be of a great help. The society needs to increase public funding for OA publishing and develop a strategy on how to make it work smoothly and best suit the public interests.

## Conflict of Interest

No potential conflict of interest relevant to this article was reported.

## Reference

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