

## Opportunities and Difficulties of Open-Access Journals

Joachim Schummer

Editor of *Hyle: International Journal for Philosophy of Chemistry* (since 1995)

[www.hyle.org](http://www.hyle.org)

[editor@hyle.org](mailto:editor@hyle.org)

The emergence of the World Wide Web since the 1990s has the potential of totally reconfiguring the structure of scholarly publication, the core of the academic activity. The traditional division of labor, which has been developed since the 17th century, between content production by scholars, multiplication and distribution in the form of printed matter by publishers, and archiving by libraries has become obsolete. Because the Internet is a publicly available digital storage system, the distribution and archiving of content fall together, such that publishers and libraries could take over much the business of one another. Moreover, owing to increasingly powerful computer text editors, many scholars are able, frequently even required by publishers, to produce "camera ready copies" of their research results in the form of digital documents. Rather than sending their files to publishers, they could also send them to libraries, or upload them to online storage and publication systems managed by their own academic societies.

Some actually did so already in the 1990s, particularly mathematicians, but the vast majority of academia has missed the opportunity. Because also university libraries have failed to recognize the novel role they could play, commercial publishers – the most obsolete players under the new conditions – have become the biggest winners of the technological change through a global process of mergers and monopoly building. Nowadays a handful of big publishing houses dominate the global academic journal market. Each has built its own "intranet" of hyperlinked papers and journals within certain fields, the online access to which is – despite drastically fallen production, distribution, and archiving costs – sold at tremendously increasing prices. Libraries of smaller universities and less rich countries can no longer handle these costs, at the expense of scholars who are frequently unable to read even their own publications.

Why did academia miss the unique opportunity and instead run into severe trouble? The answer I suggest can be found in history of the first generation of open-access (OA) journals. In the 1990s, many young scholars in their early career actually recognized the new opportunity of the Internet and enthusiastically launched OA journals. However, most of these journals died within a few years because of various reasons: (1) If they launched general journals in their disciplines, they underestimated the competition with established journals that had built their own reputation on content rather than on media type. Thus, many journals were founded, or survived longer, in new subspecialties for which the international distribution via Internet promised to find the critical masses that were lacking on the national level. (2) If they did so, they often wrongly assumed that their discipline was as international as the new publication medium, whereas most of the humanities still exist largely as national entities – which in part explains the particular failure in the humanities, including history and philosophy of science. (3) They vastly overestimated the importance of the Internet at a time when most of the older, influential generation still had only second-hand knowledge of the Internet. (4) They considered scholarly publication media only a means of communication rather than an instrument of power which, in the view of the older generation, they unjustly tried to assume. (5) Therefore, they frequently failed to involve established scholars in their endeavor if only as members of an editorial board. (6) They were unable, unwilling, or

unsuccessful in finding financial and moral support from scholarly societies, universities, or libraries. (7) They did not catch up with the technical development of the Internet which quickly changed from simple HTML text editing to content managing to issues of international standardization. (8) Largely copying the print journal model, they did not sufficiently or convincingly explore and try out the new options that online publication provides, such as the flexible organization, searchability, and retrievability of content by public search engines. (9) They failed to organize themselves in order to learn from each other, to lobby for their common idea, and to define quality standards. (10) Due to the inexperience of their editors, many OA journals indeed missed establishing crucial standards of quality managements and transparency, which reinforced general skepticism. (11) The growing demand for "quality publications" by hiring and promotion committees has further marginalized OA journals, absurdly including journals run by their own academic societies. (12) Because quality management is the essential contribution of journal editing, OA journals have failed to distinguish themselves from open text archives, which libraries, lately recognizing their opportunity in the new game, operate without quality management. (13) As financial support has more recently come up for "undergraduate online journals", as an educational exercise in academic activities, the general reputation of OA journals has been lowered even more.

And yet, academia has never lost its autonomy for both content production and quality assessment. If they eventually become aware of that, rather than catering to monopoly publishers as the alleged guarantees of quality, they can partner with academic libraries, their own technically versed service institutions, to launch a new generation of respected OA journals. That will certainly require a collective effort which avoids the problems and mistakes of the first generation of OA journals.