

Scholarly publishing in South Africa: Facing reality

Most people have no quarrel with claims made for the significance and value of publishing scholarly (research) journals. The realities in an editorial office, however, are very different from the theoretical perspectives of the academic outsider.

Professionals on the inside know that successful scholarly publishing is all about teamwork, which, in the contemporary biological idiom, can be likened to the practical functioning of an ecosystem. It can operate on a small or large scale, within the huge, dynamic and constantly evolving global industry. Individual components (journals) engage in a struggle for survival; without the right access to resources, technology and energy (finance), they wither; fierce competition requires sustained adaptation if the organism is to flourish and perpetuate itself (publishing and management). The right mix of cooperation and individuality is needed. Feedback is necessary to judge whether or not you are on the right path. The absence of key elements of the right kind can prove fatal.

The common belief is that South African journals should be doing far better than they are, given the productivity of our best researchers and the exceptionally rich material available in so many fields in the 'unique South African laboratory'. Why do so many publications struggle? and can anything be done about it?

For a start, top researchers seek exposure for their work in well-edited, professionally produced, high-impact journals. The great majority of these scientists therefore publish abroad—and are encouraged or required to do so by funding agencies concerned with the ISI-type rankings of the journals in which the articles appear.

Top journals employ full-time professional editors and enjoy skilled and effective marketing. (The CSIRO in Australia used this model when they launched their suite of national research journals.) In South Africa, limited budgets permit such luxuries in very few cases. Some part-time editors, therefore, with day jobs as university teachers and researchers, are unable to spend precious time editing and proof-reading the manuscripts that come to them. Others (as their 'editor' title implies) consider this practice to be a core function, as it maintains standards and consistency, brings their experience and knowledge to bear on the service they provide, and builds relationships with authors—editing and seeing a manuscript through to

reliable error-free publication is part of editorial best practice.

For a journal to remain internationally respected and competitive, in fact, someone must take responsibility for detail, and this is normally the most time-consuming part of the operation. Some editorial offices provide such a service; others just offer authors a list of copy-editors (increasingly, today, in India and China) who, for a fee, will tidy up the manuscript as best they can. At the bottom of the heap are those that leave it to the production house to fix the worst horrors of text and illustrations.

Even in rich countries, budgetary pressures encourage publishers to flirt with short-cuts, on the grounds that the author's byline relieves the journal of the obligation to offer much more than the administrative functions of reviewing, production and distribution. Increasingly, authors have to watch not just the quality of their research, but also the quality of the editing.

In the less sophisticated developing world, researchers struggle with the new pressures. The South African reality is that young researchers, working towards a master's or doctoral degree (and often inadequately supervised even where a co-author is a senior member of staff), submit poorly presented papers that are in danger of falling by the wayside, even when the scientific results are publishable. These conditions help to widen the north-south divide. To keep up with competitors abroad, the editorial office must help to bridge the gap between unsatisfactory initial submissions and the final articles in polished published form with which the authors and the journal are proud to be associated, and which good scientists are happy to cite.

Statistics: playing the numbers game

Journals are assaulted by statistics, or requests for them—rejection rates, impact factors, citation numbers, turnaround time. To boost impact, therefore, editors welcome outstanding review papers (especially those referring generously to their own journal's articles) in the hope of their being well cited later. The modest contribution of a competent and original piece of work from a junior researcher, however, may be put aside for being less citable, and more demanding of serious editorial pre-publication hours.

The SAJS has seen help given to junior

researchers as part of the job. But should we in fact discourage them on account of their limited appeal, and encourage just those papers that look most citable—knowing that this could affect the impact factor? How much effort does one spend on extracting the originality and significance of a paper after acceptance by reviewers if its importance was not sufficiently clearly stated in the first place? Is it right to dismiss a core study in plant taxonomy that is unlikely to be cited in the near future yet makes an essential contribution to the record? High rejection rates mean little if the papers that are published are potboilers. A long turnaround time may mean that a paper needed extensive reworking (with better-presented manuscripts being given precedence) because authors did not know how to fix it themselves.

An indigenous publishing industry?

It does not help that too many publishing interests in this country work in isolation, despite occasional attempts to join forces. But ostensibly respectable models for integration have had variable success. Two cases in particular illustrate the contrast between successful implementation and ultimate failure.

The Bureau for Scientific Publications (BSP), established in the late 1970s, was an attempt to provide a centralized production and marketing operation, funded by the taxpayer. What set out as the basis for some 6 titles serving the natural sciences and mathematics became 20 or so journals, mainly representing the social sciences, with each periodical served in-house by a so-called publishing editor (who did the actual setting and layout as well as some of the editing, and saw each issue through the press). Two full-length reports in the past decade have examined the state of research journals in South Africa.^{1,2} That by Pouris and Richter in 1998 focused on the BSP and found its performance as a publisher generally unsatisfactory (the impact factors of virtually all the periodicals it supported were less than the median in their respective ISI subject categories). As a result, state support fell away and the bureau collapsed, unmourned for the most part by those involved with it.

The model should, in theory, have worked well. It offered economies of scale, with full-time staff providing administrative, editorial, production, and dissemination services. The professional societies involved as partners appointed editors-in-chief and associates to look after the academic content. So why did the bureau fail? The answer lies mainly in the area of

hands-on specialist publishing skills and competent management. The BSP was run by people with no experience of a successful publishing operation, nor had most of them experience even of academic teaching. As a result, publication standards were disappointingly uneven. A combination of poor direction and high staff turnover administered the final death-blow. With the demise of the bureau, the journals it once supported were obliged to seek other arrangements, with greater or lesser success.

A number of groups have, in the meantime, formed publication nodes, and their efforts are worth applauding. One such initiative is the deliberately small-scale, highly skilled operation, Isteg Scientific Publications, in Irene, run by Nico Dippenaar, a former researcher with a doctorate in zoology. Its efficiency, commitment, and meticulous attention to detail, have given the SAJS a decade of smooth and seamless production. Another noteworthy success is the National Inquiry Services Centre (NISC), in Grahamstown.

NISC represents another way of being a publisher, initially of databases and scholarly books. Since 2000, it has also become responsible for 10 academic journals, mainly through steady acquisition, eight of which are ISI-listed and all accredited by the Department of Education for subsidy purposes. In the main, its practice has been to upgrade journals acquired from professional societies, using handpicked full-time, in-house editors who are also subject specialists. Their staff of 22 include production and marketing personnel. With no external subsidies, the journals have to be financially viable. This has been achieved through subscription sales of print and electronic products in partnership with overseas operators. The affiliated societies do not pay for the work that NISC does on their behalf but, instead, cede copyright and income from sales to the company. NISC correctly defines publishing as a profession in its own right, requiring experts to run it, rather than as an exercise managed by academic part-timers.

In the vacuum created by the demise of the BSP, foreign publishers (such as Elsevier and Springer, which are responsible for many hundreds of titles) have been looking for possible acquisitions or partnerships in South Africa. Another body that is seeking to position itself as a player in publishing is the Academy of Science of South Africa, which took responsibility for the SAJS in 2002. Its mandate includes the

dissemination of policy advice and analysis, and provision of services that help organizations wishing to support South African science (see www.assaf.org.za). The activities of ASSAf have not, to date, led to direct assistance to other bodies, nor has it facilitated the diversion of funds to any non-ASSAf publication. It has contributed a 2006 *Report on a Strategic Approach to Research Publishing in South Africa*,^{2,3} offering a suite of broad recommendations but scant mention of the realities on the ground, or of the financial practicalities with which the country's journals have to grapple.³ These are issues that the Academy still needs to attend to, in terms of its mandate from government to address matters of common concern.

The bottom line

Governments in developed countries traditionally offer only limited, if any, funding to research journals, although such financial backing is thought appropriate for poorer nations. Hence the BSP and the Department of Science and Technology's generous support to ASSAf.

What has neither clearly, nor even approximately, been assessed is what state support is actually needed or desirable. The picture is complicated. Some journals have formed partnerships with foreign commercial academic publishers, with more in the offing. What principles should govern the choice of titles to support is an important question. There was talk, once, of comprehensive support for a stable of South African journals, but this looks unlikely in practice.

Since the BSP closed down, the SAJS, *Water SA*, and journals published under the overall aegis of the Department of Environmental Affairs and Tourism have benefited from government funding. Periodicals dependent on professional societies struggle financially, have a small subscriber base and society membership, and have needed to introduce page charges (which can discriminate against authors on economic rather than scholarly grounds). Their circulations have generally seen little movement in recent years. Annual or bi-annual congresses help swell society funds to subsidise publication, but there has been no progress in taking forward the notion that a proportion of the subsidy paid by the Department of Education to an author's academic institution be diverted to the journal that has published the relevant paper.

A further complication is the unresolved issue amongst international publishers around open online access (OA). In the absence of practical financial or other support from any local agency or the state, a growing number of South African journals have joined hands with journals and commercial publishers abroad, and this trend seems set to continue. It gives them ready access to an OA portal and possibly an electronic manuscript tracking system (such as ScholarOne), as well as an international platform for exposure.

Sabinet is the largest South African disseminator of Web-based, independently produced journals. It imposes financial conditions on access. Although in the views of some it could be more discriminating in its selection of titles, it has provided a greatly needed service for many years to the benefit of local publishers and their clients.

In principle, OA is a superb way to use the technology that has most spectacularly been developed. But it can come at a cost that not all journals can afford. The question is which portal should they use? Ingenta, BioOne and African Journals Online are among those preferred. ASSAf appears to favour the Brazilian SciELO model, and intends to use the SAJS as an example to work with. Back at the office, however, someone has to pay—be it the journal, for the access that boosts citation, or the author, whose work thereby gains wider exposure. In the meantime, the costs associated with editing and production still have to be covered.

Conditions in the ecosystem of scholarly publishing keep changing. And as with any ecosystem, when one segment adjusts, everything else is affected, and organisms have to find the right ways to adapt if they want to survive. This is no time for experimentation on the basis of fine-sounding theory. What's needed is to tackle the realities, to maintain the strengths, and, with foresight based on practical experience, to create a future of safety and stability for South Africa's best scholarly journals in an unsafe and ever-competitive world.

Graham Baker

1. Pouris A. and Richter L. (1998). *Investigation into the future of state-funded research journals in South Africa*, 2 vols. Report prepared for the Department of Arts, Culture, Science & Technology, Pretoria, by Science Consultancy Enterprises.
2. *Report on a strategic approach to research publishing in South Africa*. Academy of Science of South Africa, Pretoria; 2006. Online at: www.assaf.org.za
3. Anon. (2006). A new strategy for journals. *S. Afr. J. Sci.* 102, 2.