

Academic publishing in the modern era

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Abstract

This paper looks at a variety of issues surrounding current academic publishing and asks if they are contributing to the demise of what was once a respected and authoritative process.

It also looks at scam and predatory publishing in the context of the increasing commercialisation of education generally, including commercialisation of academic journals, universities, and research.

Key words: academic publishing, scam and predatory publishers, commercialisation, elitism.

History and Background

A scientific or medical journal is a serial publication intended to improve existing knowledge or processes, within a scientific, technical or medical discipline. These journals deal with a variety of academic endeavours, be they experimental, clinical investigations, case studies, Literature Reviews or reporting of new research.

Journals have existed for 3-4 centuries and an early 17th century example is the *Philosophical Transactions of the Royal Society*, which still exists in modern form and was originally created in the belief that science could only be properly advanced through an exchange of ideas backed by evidence. (1) This approach is followed today.

The history of academic publishing has seen some notable frauds, for example, articles on cold fusion, and articles using faked fossils, but there is no certain evidence as to whether the publishers of such articles were aware of these frauds. At the least they did not apply due process, sufficiently, to identify the fraud.

Initially journals were produced by medical and scientific societies purely for altruistic and educational purposes but commercial publishers began to acquire the most respected journals in the 1960's and 1970's and through various charges made them commercially successful. While commercialisation extended their reach, this was possibly also the start of the inevitable demise of academic publishing. Five such commercial publishers (Reed Elsevier, Springer, Wiley-Blackwell, Taylor & Francis, and Sage) still publish over 50% of current academic and scientific research. (1)

The remaining 50% is made up of journals produced by medical and scientific societies, universities, and other smaller publishers, with an increasing number of journals

becoming Open Access (OA) online. Open Access has mainly come about due to the inability of reputable publishers, to publish profitably on paper or at the least, cover their costs. Others have been born purely of what they see as economic opportunities connected to OA publishing and the needs of students and academics to meet their institutions' publishing requirements. A few have been established for purely altruistic reasons.

Currently academic publishing is meant to be definitive and authoritative and carefully vetted by the scientific and academic community through peer review. Plagiarism and false research still persists to some degree however.

Is the Current System Helping to Cause the Problem?

While there have always been private universities and private academic publishers, symptomatic of the lowering of standards in many aspects of modern life, predatory and scam publishing is proliferating.

Universities themselves are relying increasingly on industry funding of research and in many countries all levels of the education system are accepting sponsorship. The problem is multi-faceted and we explore some of the issues involved, however the acceptance of sponsorship in primary, secondary and tertiary education is mostly due to government inability or unwillingness to financially support and value the integrity of educational systems and sectors.

Research is mostly about big business these days. Big business is about market share or market domination. There are few people, apart from government based organisations, that part with research dollars for altruistic reasons.

At tertiary level there is pressure and requirement on students and academics to fulfil annual quotas of articles published and the first and obvious issue is there are likely more articles in need of being published than there are reputable and indexed journals. This sheer volume of articles coming out of academic institutions is at unprecedented levels and academic publishing may now be an unrealistic expectation of academic institutions and as such may have contributed in part to this new era of 'convenience publishing' and scam and predatory publishing.

This pressure to publish can also lead to plagiarism, and articles of little merit. Perhaps universities should look at their systems and processes and turn the focus to quality of research articles and not quantity.

At the same time the cost of producing paper based journals, the traditional journal, has become increasingly expensive and prohibitive and many long established academic journals are now issued solely online, for example, the British Medical Journal (BMJ). Electronic forms of publication also address a vital global problem, that of the increasing destruction of the environment, and with the universal availability of the internet, this is, or

should be, a worthy and egalitarian improvement in many regards, however the internet has also facilitated a wide range of fraudulent and criminal activity, such as scam and predatory publishing.

Additionally many publishers with a good track record who are still adhering to paper based publishing are seeking to ally or monopolise, while others are indulging in unprofessional and questionable tactics to maintain profitability and market share when in fact the market may no longer be capable of the great financial returns these publishers once enjoyed.

There are new and established reputable open access publishers and journals eking out their viability in a reduced marketplace along with those with no merits or standards whatsoever that have proliferated to meet the publishing demands of students and academics.

Quality of academic research and publication also greatly depends upon the quality of the academic staff and funding of the relevant university.

Commercialisation, Protectionism, Elitism and Prejudice

Unfortunately protectionism, prejudice and elitism have become the survival focus and method for some traditional and long standing publishers and academic databases.

The author pay system while resisted by most reputable publishers for a long while has become one of the few means that reputable publishers have had to cover costs, especially for those publishers who won't or don't take advertising on websites or paper publications. Perhaps those not charging processing fees have become more prone to outside influence and commercial pursuits because of this.

Once many medical colleges and scientific societies subsidised or published their own journals, but soaring costs have largely now prevented this. They now resort to commercial academic publishers but they expect their journals to be included in the major established academic databases accordingly. From what can seem to be protectionism, prejudice, commercialism, elitism or poor processes on behalf of some databases, such outside parties are too often refused access or inclusion on prejudicial criteria while at the same time the databases still claim to be academic, global and representative of all quality material published.

In the case of third world countries, places where medicine for example is practised where modern drugs or diagnostic equipment are not necessarily available, articles catering to their specific needs and suiting those conditions should be as worthy as those on more expensive so called modern medicine, but rarely do such appear in the journals of major commercial publishers. This suggests elitism in evaluative criteria. On whose criteria is a paper from a multinational drug company's latest trials of a slightly new formula of say, a cardiovascular drug formulated solely to qualify for a new commercially protective patent, deemed more important

than a case study on a rare complaint that only affects some children in an underdeveloped and impoverished African country? In a world where there is a great divide between the richest and the poorest, academic publishing can often exacerbate the effects of poverty, inequality and deprivation.

Issues of protectionism have not only led to predatory and scam publishing on the one hand they have also caused the rise of new scholar and academic self-archiving databases. While these entities have universal access they do not tend to follow formal academic standards and requirements such as peer review. While they may assist in egalitarianism some listed articles may not meet the definition of the term 'scholarly'; rather they may also contribute to legitimisation of substandard work and scam publishing. All of this has led to a degree of bankruptcy in what was once a reputable system, which could essentially be relied upon.

It has however also caused the rise of new reputable journals (usually open access) with their aims or the necessity, to bypass these protectionist systems and databases where country of origin seems to be more important than content. Protectionism may be destroying the very publications they set out to protect. Freer access provided for reliable publishers and authors among their competitors could have saved the industry of academic publishing. Holding onto market share can often seem their main criteria.

A commercial entity need not support the products of another organisation, commercial or philanthropic, but nor should they then claim to be representative of all meaningful academic publishing and research in their sector.

Where is the justification for outdated criteria and processes that are not born of the modern world and the world of ready communications for all? All medical articles needing to be in English may be a practical and expedient measure, but it is hardly fair practice. It can rightly be seen as elitist, and prejudicial.

If authors are to be kept at the mercy of outdated practises and some prejudicial databases maybe the entire process needs to be reviewed. Otherwise it will increasingly fall into the hands of the disreputable; the rot is often within the decaying establishment and the protectionist trying to maintain their advantage.

If papers are self-archived on online databases that offer no review of content and process we find ourselves not really able to trust any part of the system even if such self-archived articles are of high quality. Do we just abandon the system or do we look for a new non time-consuming, reliable formula or grading system that can be applied across the board to all academic research and publications without fear or favour and preferably without additional cost, to allow the reader to pre-judge the value of the article.

Currently, a researcher has to search a number of databases, often user-pay databases, to ensure adequate

coverage of knowledge on a topic. Once humanity advanced on the back of the thinking and endeavours of all humans but now it seems the commercial world has to some degree devalued this age old egalitarianism and means of general advancement.

Scam and Predatory Publishers

Ethical publishers and authors are increasingly having their journals scoured by parasitical and predatory organisations masquerading as publishers, purely to exploit the authors or the publishers themselves. They are just another example of the disreputable elements that swarm over the internet looking to make 'quick money', from what can be a well disguised unethical process to blatant outright theft. In doing so they harm all parties concerned; the authors who believe they are having their work issued in what seems to be a reputable and read academic journal, to the ethical and professional publishers who invest time, money and reputation into their literary products. They also harm scientific societies and organizations plus the progress of science itself by wasting effort and money into which the various parties involved have invested to produce their manuscript (2).

While the intent of these scams is always the same, the modus operandi can vary.

Some scam or predatory publishers may approach a published author and ask them to 'sign a contract', to produce a certain number of articles. Eventually the authors realise they are working with frauds and try to withdraw from these contracts, or find they do not have the time to meet their demands. Then such authors find themselves threatened with implied legal action causing both personal distress and professional embarrassment in front of their peers and fellows or academic institutions. Such authors find these contracts are cleverly worded and always falling on the side of the fraudulent organisation.

We distinguish between scam or sham publishers, where there is no intent or effort to publish any such journal or magazine they have described to authors, and predatory publishers who will issue the work but without the necessary professional, review, copyright or other due diligence employed by reputable publishers. Let it fall on the heads of the authors if they have inadvertently slandered, plagiarised, or even accidentally typed an extra zero on some vital medical or scientific algorithm.

A further method is inviting authors to write for what seems to be a fit and proper publication with no mention at all that there is a fee involved until the author has committed and or approved and even signed a copyright release form. Again they can be personally or legally threatened until they part with their money.

With the proliferation of material on the internet it is difficult for the average person, particularly the young starting out in their careers, to distinguish between long established or authoritative organisations and those with flashy websites

and many buzz words but no substance or integrity. Indeed there seems to be a deliberate targeting of the young author, the author who does not speak English as a first language, those authors not acquainted with acceptable cultures of publishing and those authors who may be naive or unaware of their legal rights (2).

Spotting the Predatory, Scam or Unethical Publisher

Sometimes these publications name distinguished professors, scientists or practitioners as a member of their editorial board without seeking their permission. Conversely they may also ask less reputable or less knowledgeable colleagues to pay to appear on their Editorial and other Boards. Presumably the purchasers of these positions buy the 'implication that they are experts in their field' and are, for their fee, complicit in assisting to mislead naive authors as to the standard and standing of the journal.

A reputable publisher usually has a reasonably long track record and their journals have the same.

A reputable publisher issues under International Copyright law and has an ISSN (for print and or online). Copyright Law protects authors just as much as publishers, and disallows any further use misuse or 'selective use' of the authors' material without their written consent and knowledge.

A reputable publisher usually has their own or accepted database distribution channels and contributes author's work to various academic indexes.

Predatory and scam publishers often state that they will publish an article in a very short period of time. This obviously suggests to the wary author that they do not go through a rigid review process. While it may seem flattering why would a major publisher approach an author when in reality they should have more submissions than they can publish? Authors should be even more wary if such publisher suggests their manuscript will be approved prior to sighting it.

Authors should check the displayed Author information carefully and completely. Messages the predatory publisher may not wish authors to notice are usually at the very end of Instructions to Authors, for example, any hidden fees.

Check the quality of the language on the website of the publisher approaching you. It should be both perfect in grammar and language and be of high academic standard in content.

Read the fine print of any offers and if unsure, obtain legal or professional advice.

Check if the publication has an Editorial Board of reputable members. Contact one of those people if you wish to check. Disreputable publishers have been known to list names and reviewers that may have not agreed to appear on those boards, or who may even be fictional.

Scam or predatory publishers can often select a journal or publication title that is similar or even identical to a reputable publisher.

There are worthy academic websites around that peers and colleagues recommend you consult. A well recommended website is that of Jeffrey Beall, Associate Professor Scholarly Communications Librarian, Auraria Library, University of Colorado, and Denver, USA.

Professor Beall advises "The world of scholarly publishing has changed greatly in the past ten years. In the past, researchers generally did not have to pay to publish, and most journals were high quality and respected. Now with the advent of open-access journals, authors - rather than libraries - are the ones financing scholarly publishing, through payments charged to them upon acceptance of their articles for publication in open-access journals. This change has led to the appearance of many fake journals and publishers, and they exist only to earn as much money from authors as possible. These "predatory publishers" do little or no peer review and quickly accept most or all submissions, sending a bill to the author. I am the author of a blog that lists many of these predatory publishers. You'll find the blog, Scholarly Open Access, located at: <http://scholarlyoa.com>. The lists serve as blacklists, and my recommendation is that researchers avoid submitting their work to all the journals from all the publishers on the publisher list, and all the journals on the standalone journal list." (3)

Or you can simply type in the Publisher's or Organisation's name and the word fraud or scam beside it in your search engine and if they are not reputable a string of angry correspondence will usually appear.

If you do come across a sham or predatory publisher let your peers and colleagues know about them, whether you are a student or an academic.

Young postgraduate students or the novice author unsure about a particular publisher should ask a librarian or academic supervisors or advisors.

Most scams can be avoided with a little common sense and a little general research.

Recommendations

Academia as a whole needs to look at these issues and find a cost effective means of both protecting the quality and standards of research, universities, academics and students and their various publications in a globally friendly system that ensures quality and integrity. This is still the case in many countries, however the rot is setting in and more than ever vigilance needs to be maintained.

It is also up to governments, those that can afford to, to fund quality education but within an egalitarian approach and with proper integrity, standards, balances and checks.

A standard universal grading system for all academic publications, along the lines of a quick electronic checklist may help alleviate some of the problems for authors and readers alike.

Taking a further step back from this, what is the reason for listing the world's research and academic endeavour and do we need for it to be guaranteed as reliable? If human society is to advance at all in a fair and proper way and overcome the many current impediments to pursuit of excellence, social justice, and parity and not fall into the general decay we see around us, it is vital.

References

1. Wikipedia https://en.wikipedia.org/wiki/Academic_publishing#History
2. Rezaeian, M. Disadvantages of publishing biomedical research articles in English for non-native speakers of English. *Epidemiology Health*. 2015; 37:e2015021
3. Jeffrey Beall, Scholarly Open Access. <http://scholarlyoa.com>.