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Is peer-review still the content industry's upper house?

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Key points

- Although 'peer review' has quasi-sacred status times are changing and peer review is not necessarily a single and uniformly reliable gold standard
- For publishers, peer review is a process not an outcome
- Academics understand peer review but are often ignorant about the quality checking mechanisms within wider publishing
- Self-publishing has led to the much wider availability of publishing services – these now being used by all stakeholders in publishing
- How should universities evaluate content and ideas that were first disseminated within a non-academic market?
- Rather than an upper house, is peer review today more of a galley kitchen?

In a world where ever-increasing amounts of content are made available, through a vastly expanded range of mechanisms, the concept of 'peer review' has quasi-sacred status. It's the stamp of quality control. *Learned Publishing's* imaginative decision to investigate how and why peer review is now being organised, and circulate a questionnaire on how the process works in practice, invites broader comment – on trends within both universities and the wider publishing industry.

For publishers, peer review is a process not an outcome; the process whereby journal editors seek manuscript appraisal from experts, consider their feedback and then decide whether the information provided supports the wider dissemination of content or not. The process relies on those with relevant expertise, and a willingness to give their time (the role remains mostly unpaid), and make themselves available.

Sanctified through long use, peer review serves as a filter, assisting the management of so much potential content, helping improve the quality of what is made available – and hence benefitting readers. Those offering peer review contribute to their discipline and build their academic community. Those receiving positive peer review have their research deemed worthy of publication and wider dissemination; they gain the seal of approval that distinguishes their contribution from more general content such as editorial matter or correspondence columns.

Choosing who will peer review within the time period available is part of the management role of the publication's editorial team; the 'filtering and amplifying and framing' (Bhaskar, 2013) through which a publisher adds value to raw content. However, it's not uncommon for peer review opinions to be sharply different, thus requiring the commissioning of further review(s) – which further slow the process. In addition to their subject expertise, reviewers may be chosen because they respond well to a requested quick turnaround, or may be sufficiently generous to act as a development editor to a

manuscript in need of support because it promotes wider/younger participation or makes a foray into an under-explored area. The process is however not equally shared: not everyone peer reviews the same quantity of material and this depends not only on how often papers of relevance to them crop up, but also on how much time and energy they are willing to spare.

While the process is widely adopted – and so one assumes generally workable – it is also often criticised for being unreliable and slow. In an excellent paper on peer review (Hirsch et al, 2015) the range of biases that may influence the process are outlined and the paper concludes 'For a process that is so fundamental to our speciality and academic activities, however, it is sobering to think how much is assumed and how little we actually know about the biases and limitations inherent to peer review.'

The motivation of the reviewer needs particular consideration. Development of, or service to, their discipline may be a strong motivating factor; others may be motivated by more personal goals. Being on a journal's database of reviewers, or taking a more active role such as becoming the book reviews editor, or correspondence editor, tends to be positively viewed within academic institutions, particularly when applying for promotion. It's also not unknown for reviewers to benefit from the general cloak of anonymity and add references to their own work – or trash theories that compromise their own.

Nor is the process infallible; peer review cannot ensure that submissions contain no mistakes. Research has shown that routine errors may not be spotted (Godlee et al, 1998). A system that relies on self-authentication and trust is also open to abuse. Many journals attempt to increase their database of potential reviewers as authors submit; it's common to ask those offering work to suggest who might review. This opportunity has sometimes been utilised to set up dummy accounts; enabling those submitting to review their own work. In an editorial discussing why a journal had to redact papers it had previously published:

'We at *Nature* have examined the reports about the two papers from our referees and our own editorial records. Before publishing, we had checked that the results had been independently replicated in the laboratories of the co-authors, and we regret that we did not capture the authors' assurances in the author-contributions statements. ... The referees' rigorous reports quite rightly took on trust what was presented in the papers. ...In short: although editors and referees could not have detected the fatal faults in this work, the episode has further highlighted flaws in *Nature's* procedures and in the procedures of institutions that publish with us.'
(Nature, 2014)

Various developments to improve the effectiveness of the peer review process can be outlined. Some journals (e.g. the *BMJ*) have developed a transparent open peer review process where reviewer and author names are disclosed to each other and the reviewer reports are published alongside the article, which they feel helps improve the fairness and the quality of review. This won't work in every discipline; where a field is very small a closed status may be necessary to protect individual identity, particularly when the career status of individuals commenting may influence views on the validity of what they have to say. Ironically the editor of one scholarly journal told me that those closest to their studies may however be most up to date on the relevant literature – some of his most rigorous and insightful peer reviews have come from PhD students either nearing completion or newly qualified.

Improved speed is desired by all, but does not necessarily improve the final outcome. A hugely experienced developmental editor commented to me that 'There is a sense that, in an electronic age, everything can be done more quickly – but this does not necessarily allow sufficient time for quality control and can lead to cutting corners.' For example,

quality control checks should be carried out before (manuscript) developmental work is done, but in the case of a recent project the quality control is being done at proof stage – when the momentum will be to get it finalised rather than do reworking, even if required. As publishers try to control their costs, the responsibility to pay for editorial interventions is increasingly being pushed towards the editor (do more for the same money) and the author (as there is so much competition, it's *your* responsibility to deliver perfection before we consider peer review).

So times are changing, everything is speeding up and peer review is not necessarily a single and uniformly reliable gold standard. But is it still, as one academic put it to me, 'The least worst option?' The debate is particularly interesting within the context of two other developments: firstly the quality assurance processes within publishing in general and secondly the much wider availability of publishing services to support manuscript development.

How quality checking works outside academic publishing

Academics often have odd notions about publishing. In my first week in a university, I remember a senior colleague informing me that 'Academics get books free'. While it may be true that certain academics teaching large classes (and who select the key text) or those whose cover endorsement may persuade others to purchase, may get *some* books free, it's not a general principle. The publishing industry is a business; give away more books than you can afford and you compromise your ability to publish in future.

Along similar lines, a view seems to have developed among academics that journals publishing is the only part of the publishing industry with effective quality checks; the rest of the industry being a bit of a free for all.

Whereas the despatch of papers received for peer review tends to take place at a predictable stage within the publishing process; what happens next is generally predicated on the responses received ('accept', 'accept with revisions', 'reject'). Within general publishing, the means by which content are evaluated are less staged and perhaps therefore less clear; they tend to be diffused within the publishing process as a whole rather than secured at a specific moment, but are designed to achieve the same outcome – high quality content, ready for dissemination to a wider market.

Within a traditional publishing house (and outside the journal article submission system), from the moment a proposal is received, it is submitted to a rigorous review of quality at which every aspect of what is suggested is critically appraised. The publishing process varies little from house to house and includes a series of meetings at which publishing experts (i.e. those who work there) consider the content, format and market acceptability of what has been proposed; drawing in external opinions to both examine and endorse a particular publication as being a valuable contribution to the field. They usually respond anonymously and payment often comprises free books from the publisher's list.

Once received these reports are interrogated and compared, before the publishing company takes a decision to *invest its own money*. These reports will be considered alongside any evidence the author can muster that their material is both interesting to its market and is a valuable contribution. And this can include charting the level of reader engagement in associated blogs, invitations issued by literary festivals or the media to contribute to the wider debate, coverage in the quality press – as well as evidence of relevant engagement on social media. All are evidence from the author's peers that their contribution is both interesting – and sought.

Alysoun Owen, editorial consultant, commented:

Traditional publishing works through a series of stages at which ideas are presented to colleagues (e.g. author to agent, agent to publisher, publisher to colleagues, publisher to sales force, sales force to retailer) and these collectively deliver an ongoing process of defining and clarifying the title proposed within its market and the author's right to position themselves as an expert. At the same time, there is a process of external evaluation with opinions being sought from experts to explore the wider value and usefulness of what is proposed. Finally authors like to authenticate their own work, and a glance at the acknowledgements will show the range of third party opinion drawn into supporting finalisation of text.

It's important to emphasise that these processes are managed by sector experts. Whereas the editor of an academic journal will have a strong overview of a field, and be aware of emerging areas, these areas are vast. A commissioning editor within a particular area within a publishing house will be a sector specialist, able to commission views from the circle of experts they have assembled over long involvement with that market; drawing a wider range of first-hand practitioners and other experts into consideration of both manuscript outline and what is submitted. Some of these checking processes may be informal (e.g. sending a completed manuscript to a colleague or industry commentator with particular experience for an overview late in the process; organising a focus group of teachers to consider material for children; arranging for a children's book to be read aloud in a classroom) and may also be applied at a wider range of stages within the publishing funnel – including being revisited later if questions arise.

The editorial director for non-fiction at a major publishing house commented similarly:

'I commission within popular science and history and we are absolutely rigorous in ensuring the value and effectiveness of the material in which we decide to invest and present for publication. This takes place through a series of stages. To take the example of history for a popular market, from the first proposal by the author (which outlines the scope and content of the proposed title and provides a sample of the approach) I commission reader reports from specialist historians looking at the case the author proposes, how widely known they are and how their proposed contribution sits within the context of what else is published, how valid is their argument, whether they have accessed the most relevant literature, what is their research methodology and whether their argument is likely to be controversial. We explore whether they are a valid authority to write on this subject and that what they submit has been properly checked. ... Our desk editors are similarly expert and they pass the material on to specialist copyeditors who have long experience in the sector and in addition to undertaking a rigorous editorial process can spot mistakes.

How these quality management processes work is now of increasing relevance inside universities. As they respond to both government imperatives about developing much closer links with industry, and a demand within the student body (and those funding them) for academic routes leading to employment, the spotlight falls on the role of profession-orientated disciplines within universities. It follows that new methods of evaluating the contribution of those active within these disciplines are needed, and with everyone looking for impact and wider engagement, the traditional processes of peer review may not be enough.

Profession-orientated disciplines offer a fusion of professional practice at the highest level with academic thinking; encouraging and enabling graduates not only to understand and deliver current industry processes, but also to develop the problem-solving skills that will ensure they can participate in future; managing issues that are unanticipated right now. While it follows that those who teach the disciplines will offer a

similar combination of practical skills and wider thinking, their key ideas may have been shared within professional forums rather than academic ones – and so the rigor of the associated peer review processes needs to be appreciated. For example, a lecturer in Journalism who has a piece on their specialist subject published in the *Guardian* has arguably been peer reviewed – because the newspaper’s editors made the decision to feature their views rather than someone else’s, and the content was rigorously checked before publication. Breaking the story in an academic journal first would not have had nearly the same impact (and taken vastly longer).

This issue crystallises neatly around PhD by Published Work, where a body of work may be presented that has been peer reviewed for a professional, rather than an academic audience; a process more relevant to its reputation than the esteem of a purely academic audience. PhD by Published Work relies on the availability of a body of work that has already been published and thus met both publishers’ and markets’ criteria for being worthy of wider dissemination.

Who are the peers? The impact of technology and publishing services

Technological developments, an immense pressure to publish, the rise of self-publishing and an increasing need to manage costs, have all led to the availability of new services for manuscript appraisal and development, which both severally and collectively impact on traditional processes of peer review, and with a range of consequences – some unexpected.

Technology is being harnessed to develop process efficiencies in peer reviewing. For example, BioMed Central supports ‘cascade review’, which aims to reduce inefficiency and speed up publication by sharing reviewer reports for rejected articles with other journals. Other journals are using post-publication review, and in addition to speeding the process up, this has been found to energise debate around contributions. Hosting a live discussion may also enable the capture of other metrics likely to influence future publishing strategies. For example, new methods for feedback (e.g. offering all readers a simple option to vote on the usefulness of each paper) enables the publishers to gauge levels of interest across different topics, and gather relevant feedback not only from academic and professional communities, but from the wider communities involved – perhaps patients in the case of medical journals and litigants for legal titles.

‘Portable peer review’ is another service that potentially speeds up the process, shedding further light on the frustration of those trying to access appropriate vehicles for publication, particularly when these are linked to metrics for establishing the usefulness of colleagues’ contribution to their field and their readiness for promotion. The process allows authors to pay (financially or by contribution) an independent third party – such as Rubriq or Peerage of Science – to have their papers reviewed, giving publishers the option to “buy” reviews from the provider. While there are questions about whether such processes are viable in the longer term, and why a journal editor would buy content that an author might make available to them directly (and free), the emergence of such processes does reveal the vast amount of content for which authors are seeking publication.

The growth of self-publishing has similarly fostered a range of new publishing services that can be relied upon to improve the outcome of what is created: the quality of the product; its positioning in the market and its presentation to others who may invest. Research into self-publishing published in this journal (Baverstock and Steinitz, 2013a and b) has undermined both industry and academia’s traditional confidence that those self-publishing were leaving editors out of the process. Rather it emerged that those taking the process seriously regularly relied on publishing services, and in particular the involvement of editors, to help them improve their content. Indeed Wendy Toole, former Chair of the Society for Editors and Proofreaders, commented that self-publishing

authors today regularly insist on standards of copyediting that are as high as the traditional industry, because it's their passion and they want it right.

There's quite a lot of help on offer. The range of publishing services available is broadening all the time, from mentoring and career development (how to get noticed, in which journals to seek publication?) and editorial development (is the argument clear, is it in the right order?) to textual correction (editing, proof-reading, 'language polishing' and layout development for ease of reading) and advice on submission (how best to write an accompanying email). Many agencies offer multiple services (e.g. Edanz). This is changing the previous order of process; peer review is becoming part of a much wider availability of comment, both pre-and post submission. Journal editors report receiving 'warm-up' pre-submission emails to discuss relevant ideas and how to shape them, long before the delivery a paper on which they can commission peer comment. Academics may find their institution offers significant support to their attempts to get published, from informal (the encouragement of collective research groups) to the paid involvement of experts to advise. Meanwhile, those approaching peer-reviewed journals for possible submission are regularly invited to improve their manuscript before submission through commissioning editorial support, and the same cohort of independent editors is servicing both pre-submission requests for editing services from authors and post-submission requests for editing services from publishers (Baverstock, Blackburn and Iskandarova, 2015a and b).

Given this wide availability of support, it's perhaps appropriate to ask whether it is the author or the reviewer/paid advisor/editor whose work is being peer reviewed and ultimately accepted by journal editors. At its most recent conference, members of the UK's Society for Editors and Proofreaders discussed self-imposed guidelines about how much revision should be made and who takes responsibility for the amendments that members suggest. There was general agreement that the client should work through the suggested corrections line by line rather accepting wholesale. Their client base however, short of time and often in a highly pressurised environment, tends to just want it done and is most likely to 'accept all'. (Craig, 2015).

Conclusions

In conclusion, while the term 'peer review' continues to have a strong resonance, it is one that is neither uniform nor consistently applied. It can be variously interpreted – depending on external pressures (e.g. the need to bring out a special edition, secure funding or respond to a particularly pressing issue that has arisen at short notice), and while it can still take place within the journal's reviewing processes, it is increasingly occurring outside the previous time-frame, before, during and after the dissemination of content. New methods of validating content, especially material originally created for a non-academic market, are impacting on the operation of peer review within scholarly journals, in particular the increasing emphasis placed on the opinions of investor and customer in helping shape what is disseminated. The wide range of paid services that now exist to support the process are being used by all stakeholders.

Peer review today can perhaps be viewed as an extensive service area, running alongside the entire publishing process, in which help can be sought and a range of colleagues and external professionals brought in to collectively or individually develop an evolving presentation. So rather than an upper house, is peer review today more of a galley kitchen?

References

Baverstock, A. Blackburn, R. and Iskandarova, M. (2015a) 'Who are the independent editors, how did they reach their role and what are their associated job satisfactions?' *Learned Publishing*, 28(1), pp.43-53.

Baverstock, A. Blackburn, R. and Iskandarova, M. (2015b) 'How is the role of the independent editor changing in relation to traditional and self-publishing models of publication?' *Learned Publishing* 28(2) pp. 123-131.

Baverstock, A. and Steinitz. J. (2013a) 'Who are the self-publishers?' *Learned Publishing* 26(3), pp.211-223.

Baverstock, A. and Steinitz, J. (2013b) 'What satisfactions do self-publishing authors gain from the process?' *Learned Publishing*, 26(4), pp.272-282.

Bhaskar, M (2013). *The content machine*. London: Anthem Press.

Craig, A. (2015) *The challenges and ethics of editing student theses and dissertations*, Society for Editors and Proofreaders conference. York, September 2015

Edanz Editing <http://www.edanzediting.com>

Godlee, F. Et al (1998) 'Effect on the quality of peer review of blinding reviewers and asking them to sign their reports: a randomised controlled trial.' *JAMA* 280:pp237-40.

Hirsch, J.A. et al (2015) J. 'The peer review process: a primer for JNIS readers. *J NeuroIntervent Surg* 0; pp.1-4

Nature. <http://www.nature.com/news/stap-retracted-1.15488> Accessed 13th November 2015

Peerage of Science <https://www.peerageofscience.org>

Rubriq <http://www.rubriq.com>

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