



The Scandal of Academic Publishing

Stuart Macdonald¹ 

Accepted: 19 August 2025 / Published online: 9 September 2025
© The Author(s) 2025

Abstract

Much is rotten in academic publishing, but it is easier to hold noses than do anything more fundamental about the stench. The five companies dominating the industry have grown fat on the backs of free academic labour. Why do academics (and so their research funders, their employers and the taxpayer) continue to subsidise the Big Five? Perhaps because one needs, and the other supplies, the publication indicators of academic performance on which rankings and the distribution of resources in higher education are largely based. Many of those with vested interests in academic publishing and higher education share a faith that publication indicators indicate something other than an ability to game, that academic papers will be read rather than merely counted, and that scholarship is mysteriously protected by a peer review system that is often little more than hollow ritual. The incursion of “predatory” publishers – publishers simply selling authors what they want – cheap, instant performance indicators, no questions asked, no need for gaming or peer review – might have been expected to have shaken this faith. Instead, established academic publishers have not hesitated to emulate the predators in their rush to make money, whatever the cost. This paper argues that the cost may be to scholarship.

Key words Academic publishing · Scholarship · Citability · Performance indicators · Gaming · Predatory publishers · Eugene Garfield · Journal impact factor

Introduction

Five commercial publishers – Elsevier, Springer, Taylor and Francis, Wiley and Sage – dominate the academic journal market. The growth of the Big Five has been prodigious: 20% of the world market in 1973, 30% in 1996, 50% in 2006 and 53% in 2013 (Larivière et al. 2015; see also McGuigan and Russell 2008; Monbiot 2011). No other academic publisher has more than 3% of the market. With profit margins ranging from 28 to 40%, the Big Five are among the most lucrative companies in

✉ Stuart Macdonald
s.macdonald@sheffield.ac.uk

¹ School of Management, University of Leicester, Leicester, UK

any industry anywhere (Hagve 2020), which may contribute to their determination and ability to retain their dominance (Björk 2017).

Contributing substantially to the wealth of academic publishers is the free labour provided by the academic community. This peculiar arrangement is a relic of the days when academics accepted a collegial responsibility to produce and distribute knowledge. Subsidising hugely profitable publishers with free academic labour makes little sense – except to academic publishers (Bergstrom 2001). The more generous critics observe that the university pays twice for academic journals – once in the cost of producing journal papers (research costs and salaries), and then again in the cost of library subscriptions paid to publishers to acquire the journals containing the very same papers (McGuigan and Russell 2008). Less generous observers argue that the taxpayer pays not twice but thrice: first, in that governments (and so taxpayers) cover most university costs; second, through specific government grants for academic research; and third, through direct payment to the publisher for access to the journals publishing the research. “Rather elegantly labelled the ‘triple-pay’ model by some commentators, this business model has long looked bizarre without ever changing” (Braley 2005, 16). About 15% of the largest academic publishers’ costs are direct publication costs and about 30% profits, leaving 55% in other categories, such as lobbying to maintain this extraordinary situation (Grossman and Brembs 2021).

In the UK, the remorseless expansion of higher education from the 1960s had encouraged commercial publishers, energised by Robert Maxwell, to enter academic publication, long the preserve of genteel learned societies and university presses hopeful of covering costs rather than of making profits. Learned societies and university presses saw scientific knowledge as a public good: Robert Maxwell, “who turned scientific journals into a spectacular money-making machine that bankrolled his rise in British society” (Buranyi 2017), did not.

The Big Five came to dominate academic publishing by following Maxwell’s lead and acquiring thousands of the best journals that learned societies, university presses and small publishers had to offer (Bergstrom and Bergstrom 2001; Office of Fair Trading 2002; Dewatripont et al. 2007; Harvie et al. 2013):

... the big publishers have rounded up the journals with the highest academic impact factors, in which publication is essential for researchers trying to secure grants and advance their careers. (Monbiot 2011).

The essence of the academic publishing business is often said to be selling academics their own work (e.g., Braley 2005). Universities and other captive customers have paid whatever publishers demanded for academic journals, generally bundled into “Big Deal” portfolios, a tactical mix of journals vital for the customer’s research leavened with others surely nice to have.

Measuring Academic Performance

Higher education is no longer a finishing school for the privileged. A modern economy may expect something like 40% of those entering the workforce to have degrees

(cf. under 5% in the UK in 1960). Many more students require many more universities and higher education has become big business (Olivieri 2003). The modern university may still portray itself as a cloistered community of scholars, but it is actually a large multinational competing with many other such universities in selling a product. There is little of the collegial in the higher education business; professionalism has surrendered unconditionally to managerialism and performance measured in large part by publication of papers in journals (Willmott 1995; Tienari 2012). Journals are ranked, largely by journal impact factor (JIF), determined mainly by citation.

Based on the convenient but fanciful notion that the more cited a paper, the higher its quality (see Alvesson and Sandberg 2013), the JIF is calculated from how often a journal's papers have been cited in the years immediately following their publication (Ashkanasy 2007). Citations are the numerator, valid papers the denominator. The larger the numerator and the smaller the denominator, the higher the JIF and so the better – and more valuable – the journal (Brown 2007). There is little of greater moment in academic publishing than the journal impact factor.

You have to understand that there are some people in [academic publishing] for whom, when Impact Factors are published, it's their life ... it's what they've been waiting for all year. It's bigger than Christmas. And people will do their utmost to get the highest Impact Factor possible. (David Tempest of Elsevier quoted in Burbules 2015, 722).

New computing power facilitated citation analysis to advise institutional librarians what journals to order (Price 1964). Knowing who was citing whom also shed new light on information networks and the provenance of ideas (Zukerman 2018). But citation analysis revealed which academics were being cited most, of particular interest to a commercially astute Eugene Garfield (2004). Though a colleague of Robert Merton at Columbia, very much a believer in information as a public good (Merton 1968), Garfield saw academic collegiality as an artificial construct, predicting it would collapse when academics learnt to compete (see Hagstrom 1974). Much of it has. In 1956, Garfield established the Institute for Scientific Information (ISI) in Philadelphia, selling bibliographic database services, including impact factor calculation and authorization.¹ He remained chairman of Thomson Reuters ISI until his death in 2017, for more than half a century marketing a product that has cast a pall over academic life throughout the world.

The domination of the JIF in higher education has had unintended consequences (Neveda et al. 2012; Aguinis et al. 2020). Managers and administrators in both publishing and higher education could now pronounce with authority on the quality of thousands of academic journals without ever opening any of them (Gingras 2020): “Prices [of journals] are positively correlated with quality measured by the number of citations they receive ...” (Dewatripont et al. 2007, 409).

¹ ISI was acquired by Thomson Scientific & Healthcare in 1992, and became known as Thomson ISI, later Thomson Reuters ISI. It was sold in 2016, becoming Clarivate Analytics. ISI, Garfield's original creation was revived as a division within Clarivate Analytics in 2018.

All too soon, the JIF, of no value in itself, was being attached to people and organisations to add to their value:

As an author, I can “trade” articles with certain impact factors into a job, and the institution that employs me can then “trade” those publications into a better national or global ranking, which may be subsequently traded into more students, donors, contracts, and so on. (Biagioli and Lippman 2020, 7)

But when a measure of performance becomes more valuable (and much easier to determine) than the performance itself, Goodhart’s law decrees that effort switches from producing the performance to producing the measure of the performance instead. Gaming – working the system to generate improved indicators of performance – flourished. Some journals have increased their JIF enormously. COVID-19 made possible growth in the *Lancet*’s JIF from 79.3 in 2021 to 202.7 the following year, a leap in quality of 255% (Kincaid 2022). This when the JIF of top journals in the arts and humanities might be 1 or perhaps even 2. Eventually, academic publishing would be disrupted by a new breed of publisher, one serving the market for performance indicators directly. Until then, the pretence survived that the JIF was an impartial measure of quality because peer review guarded against abuse. In fact, peer review did little to discourage gaming and may actually have encouraged it.

Peer Review in the Age of the Journal Impact Factor

At least in theory, the referee (reviewer in American parlance) provides the journal editor with advice on whether a submission is sound in terms of current knowledge, what it adds to this knowledge, if and how it might be improved before publication, and whether the result will be strong enough to bear the weight of further research. Exacting requirements indeed and the peer review system has probably always fallen short (Hojat et al. 2003; Berenbaum 2023). There is little unequivocal evidence that peer review improves papers (Altman 1994; Campanario 1998; Jefferson et al. 2007; Smith 2014; Baker 2022), and some that it is quite capable of making half-decent papers really rotten. When performance indicators are what counts and what a paper says is not, desperate authors will make any changes referees require, no matter how absurd (Bedeian 1996, 2003; Robergs 2003; Necker 2014; Shibayama and Baba 2015; Macdonald 2015a; Fong and Wilhite 2017).

The reviewer knows that you’re lying [and] you know that the reviewer knows that you’re lying, so it becomes a charade. (author quoted in Butler and Spoelstra 2023, 1269)

Alternatively, authors simply accept rejection as part of the publication process, re-submitting an unchanged paper down a cascade of journals in descending order of JIF until it encounters more obliging referees (Martin 2013).

Eugene Garfield had argued that the best papers were published in the best journals, meaning those with the highest impact factors (Garfield 2006). Even in high IF journals there are some poorly cited papers. But even these poorly cited papers are usually good, professional papers. They went through the sieve of thorough refereeing and editing. (Garfield and Pudovkin 2015, 10–11).

Garfield presented his JIF as measuring the academic standard of the journal, but it was peer review of the journal's individual papers that insured they were scholarly. This was always disingenuous, especially as journal quality has come to be whatever boosts JIF and the referee's task is often confined to assessing a paper's contribution to JIF.

The journal below [*Human Relations*], with which you have been involved as a Reviewer ... increased in Impact Factor. This increase is testament to the commitment and expertise of our ... Reviewers and highlights the increasing quality of the articles the journal publishes. (email to author from Sage August 2013)

For Garfield faith in the value of peer review was convenient, as was ignoring unease about its scholarly value:

The mistake, of course, is to have thought that peer review was any more than a crude means of discovering the acceptability – not the validity – of a new finding. (Horton 2000, 148)

Scholarly research that has passed the gauntlet of peer review, therefore, appears in publications perhaps less to convey new information than to declare that such research carries the seal of approval from academic gatekeepers. (Schwartzman 1997, 69)

The editor does not expect the referee to scour submissions for hints of brilliance. The screening process works the other way round: it eliminates papers. Desk review first weeds out submissions that do not fit (Braley 2005; Hochberg et al. 2009). Out go submissions from unknown authors and undistinguished institutions (Ceci and Peters 1982; Armstrong 1984; Wennerås and Wold 1997; van Rooyen et al. 1998; Andersen 2017; Grove 2021; Scanff et al. 2021; see also Stöckelová and Vostal 2017), those on unfamiliar subjects (van Teijlingen and Hundley 2002; Waters 2004; Heinze et al. 2009). Until recently, desk rejection in the journals of the political sciences was almost unknown (Merriman 2021), but JIF has changed everything and now some 40% of submissions is desk rejected (Garand and Harman 2021). Out go submissions that will not contribute sufficiently to the journal's impact factor: papers that do not cite other papers in the journal (Pearson and Sharma 2015), papers with few co-authors, papers with short reference lists (see Corbyn 2010; Harzing 2013). None of these actions requires the expertise of a referee or editor; most are routine and can be carried out by junior members of the editorial team. Submissions that survive desk review go on to peer review, but this is often no more than internal review by the editorial board. Only a small and diminishing minority of submissions is ever sent to external

referees and some 30%–50% of these is accepted (Lawrence 2007), which rather gives the lie to claims that top journals have a high rejection rate because of their rigorous peer review. The vast majority of their submissions goes nowhere near an external referee. What is published is what there is least reason to reject, and the more that is rejected the better:

I would like to thank you for your ongoing support of *EMJ* [the *European Management Journal*], and update you on how well the journal is going . . . The rejection rate has raised [sic] from 80% to 86%. (email from editor of *EMJ* to author, November 2010)

Editors of top journals now boast rejection rates above 95%. Yet, decades ago, an 80% rejection rate was thought too high for peer review to make much sense, simply because of random error (Ceci and Peters 1982). At 90%, the system was considered just too noisy to work (Miner 2003). It did not. A survey of those refereeing papers for the *Journal of General Internal Medicine* in the early 1990s found the best referees were “just like us”:

... when a reviewer was younger than 40 years, from a top academic institution, well known to the editor commissioning the reviewer, and masked to the identity of the manuscript’s authors, the probability that he or she would produce a good review was 87%. When a reviewer had none of these characteristics, the probability was 7%. (Lock 1994, 61)

The Reluctant Referee

Journal editors now have enormous difficulty enlisting expert referees (Trumbore 2024):

The editor of a major Europe-based journal recently noted that on average nine or ten scholars are contacted before three are found ... (Tienari 2012, 253)
My most dismal record ... contacting 13 potentials to obtain a single review (editor quoted in Karabag and Berggren 2016)

Journal editors sometimes give up hope of ever finding expert reviewers and settle for anyone who can spot citation of classic papers:

These are scholarly pieces that self-described IB [international business] scholars typically know well and that are foundational to the field. Reviewers of IB research manuscripts should actually know such classic pieces well, and mostly do. (Verbeke et al. 2017, 2)

I cannot judge from the citations how strongly (or weakly) they support the arguments being made, as I am unfamiliar with almost all of them, and I don’t plan to read them. (referee of paper submitted to *Journal of Information Science*, September 2006).

Authors oblige, citing major works not for their relevance (Drivas and Kremmydas 2020), but to signal their own respectability and allegiance to established

thinking (Hussain et al. 2020), which may be why so many citations of the classics are crammed into the first few paragraphs of papers, where they need not relate to anything in particular. Only 15% of citation in marketing journals serves any intellectual purpose at all (Stremersch et al. 2015). A single paper by one prominent author is cited in a third of all papers ever published in the *Journal of Informetrics* (Hu et al. 2013).

Reluctance to referee is hardly surprising. At the best of times, refereeing is no mean task; assessing a single paper may occupy several hours, a total global cost estimated at US\$1.9 billion annually in academic time (Johnson et al. 2018). Not that there are many hours to spare in an academic world where teaching loads, research expectations and administrative responsibilities have all expanded. For academics – and referees are generally from their ranks – the returns to writing for publication, and the penalties for not publishing, have become so great that doing anything else (especially anything anonymous) carries a hefty opportunity cost (Honig et al. 2014). It follows that universities may frown on their staff refereeing (Lindebaum and Jordan 2021). Such is the disinclination to referee that senior academics may well delegate the task to their juniors, arguing that a spot of refereeing is good practice, but leaving the editor wondering just who has written the referee's report (Stossel 1985). Authors submitting to journals suspect that willingness to referee other submissions has become a condition of publication. Even the most prestigious journals can be reduced to finding referees through keywords, a procedure which can easily send an author his own submission to assess (see Macdonald 2015b).

Arranging peer review is coming to be seen as the publisher's, rather than the editor's, responsibility (e.g., House of Commons 2011; Pells 2019; Allen et al. 2019). Elsevier has recently been reprimanded by the UK Information Commissioner for covertly constructing a universal database of potential peer reviewers from academics submitting to any of its journals.² For many years, established publishers have supplied editors with manuscript submission systems (Jackson et al. 2018), which may have made life simpler for the editor, but perhaps at the cost of applying a tick-box approach to peer review (see Goodman and Fletcher 1994). Manuscript submission systems are quite capable of “unsubmitting” submissions on grounds as trivial as “references should use ‘&’ not ‘and’”. The publisher's imposition of a standard, mechanistic format has non-trivial intellectual consequences: some arguments just cannot be presented as research questions and hypotheses; some papers are quite unsuited to a neat parade of introduction, literature review, methodology, discussion, conclusion, limitations and suggestions for future research (Willmott 2011).

Peer Review as Ritual

Established publishers peddle the unlikely notion that academics fight to referee so that they may be first to spot ground-breaking research and identify promising new

² Letter from UK Information Commissioner's Office to Elsevier, January 2022.

scholars. The chairman of the Publishing Research Consortium, for example, is of the opinion that altruism is rife among academics:

Most researchers give up time to review papers for no charge ... Why do they do it? ... [They] quite simply do it because they enjoy being able to improve papers. (Robert Campbell as quoted in Sense About Science 2009).

Springer Nature has devised metrics for the academic to demonstrate service as a referee. This, thinks someone at Springer, will “strengthen ... job and funding applications for career advancement or even tenure.”³ Publons, an organisation calculating publishing performance, has been presenting outstanding referees with its Sentinel of Science awards and a small payment.⁴ The most prolific Sentinel of all, one Jonas Ranstam, completed 661 reviews in a single year,⁵ and was paid 38 cents (US) per review (Teixeira da Silva and Al-Khatib 2019).

In defiance of the mass of evidence, and oblivious of the vast and venerable literature on how to improve peer review, the science establishment insists that peer review already works well.

The high international reputation of UK research ... is based on the rigour with which peer review is used, and the care with which practical decisions to fund or publish are based on it. (Onora O’Neill in British Academy 2007, iii)
The peer review of scientific manuscripts is a cornerstone of modern science and medicine. (Rockwell 2014, 1)

Much is made of the provenance of peer review in this establishment fantasy: peer review is promoted as the bulwark of the Enlightenment, for centuries the champion of scientific thinking, the *primum mobile* of academic publishing:

From their beginnings in the mid-seventeenth century scientific journals were subjected to criticism ... The result was an institutionalised mechanism for the application of standards to scientific work, which has changed little in the ensuing centuries. (Wilson 1978, 1697).

From these early efforts gradually emerged the process of independent review of scientific reports by acknowledged experts that persists to this day. (Lee et al. 2013, 3).

All a concoction, of course. What little peer review there was before World War II was ramshackle and informal, hardly a system at all. For centuries, journals had adopted and adapted their own systems as required. For much of the twentieth century, the editors of—for instance – *Science*, the *Journal of the American Medical Association* and the *American Journal of Medicine* published whatever took their fancy without benefit of peer review (Knoll 1990; Burnham 1990). Not until 1976

³ Email to author from Springer Nature recognising refereeing service for *Social Justice Research*, February 2020.

⁴ Publons was taken over by Clarivate Analytics in June 2017.

⁵ <https://upskill.researcher.life/instructor/jonas-ranstam/70>.

did *Nature* (Triaridis and Kyrgidis 2010) and the *Lancet* (Benos et al. 2007) bother with referees.

Author demand is not for peer review at all, but for publication in a peer-reviewed journal – a nice distinction, but important: desperate authors need not an opinion of their paper, but the removal of an obstacle to publication (Horrobin 2001; Tipler 2003). Hammarfelt and Rushforth (2017) talk of the author “overcoming” peer review. Peer review is not, as many would have it, the least bad system, much like democracy (Smith 2006). Peer review is actually a very bad system indeed if it is used to lends respectability to questionable practices – as Garfield had done: “The journal editor says: what’s wrong with publishing an industry-funded editorial or review article as long as it gets appropriate peer review?” (Elliott 2004, 21).

Business school authors have come to see peer review as absolving authors of personal responsibility for misbehaviour; whatever gets past the referee and the editor must be acceptable (Butler et al. 2017). Ritual peer review purifies even the most fetid misconduct, and there is much of that in the gaming of citations (Karabag and Berggren 2013; Hájek et al. 2016; van Bevern et al. 2016).

Gaming Citation

A much-cited paper is not necessarily a “good” paper (Teplitskiy et al. 2018), and a “good” paper is not necessarily much cited. A paper may be wildly wrong or spectacularly bad and yet highly cited. Merely appearing in a top journal increases the citability of a paper (Rushforth and de Rijcke 2015) and having been cited further increases the citability of a paper. This matters: citation is right at the heart of the measurement of academic performance; it largely determines JIF and thus research quality and the allocation of resources in higher education. It is far and away the primary target of gaming.

Gaming techniques to increase citability can be as unsophisticated as authors agreeing to cite each other, avoiding long hyphenated titles (Zhou et al. 2019), adding honorary authors and encapsulating everything of moment in the title and abstract, often all that is ever read. Most effective is self-citation (Smeyers and Burbules 2011): citing oneself counts just as much as being cited by others and “the more one cites oneself the more one is cited by other scholars” (Fowler and Aksnes 2007, 433). Self-citation is responsible for more than half of all citation 10 years after publication. Just as papers now attach many more references (Macdonald and Kam 2010), so they also have many more authors, exploiting each author’s tendency to self-cite (Seeber et al. 2019). A survey of many thousands of Norwegian scientific papers reveals direct correlation between number of authors of a paper and the number of citations it attracts (Aksnes 2003). Single-authored papers have become rare, co-authored papers normal, and over-authored papers unexceptional (King 2007). The list of the 2068 authors of one physics paper is substantially longer than the paper itself (Khachatryan et al. 2010).

The more a paper sticks to the blindingly obvious and the universally applicable, the more likely it is to be cited and so published (Lawrence, 2003). Editors

crave “water is wet” papers that can be cited almost anywhere in support of almost anything:

They actually used the expression “dumb down”, they did not use “simplify” ... I never thought you would actually get that ... (editor’s report to submitting author quoted in Butler and Spoelstra 2014, 544–45)

Papers containing negative results are to be avoided, but so too is cutting edge research, challenging established beliefs, and anything smacking of brilliance (see Ayoubi et al. 2021). The paper announcing the discovery of the double helix – probably the most important paper in biology for a century (Lawrence 2007) – was far too complicated and was rarely cited for more than a decade. Authors soon discover that journal editors, ever mindful of citability and the JIF, dislike clever papers (see Gannon 2005).

Gaming is just about universal among academics; those who do not game are much less likely to be published than those who do. Editors and publishers are both enthusiastic about gaming (Falagas and Alexiou 2008; Martin 2016). Where submissions contain too few citations to a journal’s own papers, the editor may make publication contingent on the authors adding more, a repugnant practice known as “coercive citation” and especially prevalent among the most prestigious management and science journals (Wilhite and Fong 2012; see also Petersen 2019).

Papers reflecting on a journal’s activities offer a regular opportunity for hyper citation of its own papers, which has a wondrous effect on the JIF. The “Highlights of the Year” for 2011 produced by the editor of the *Journal of the American College of Cardiology*, come with 292 citations, 272 of them to that very journal, increasing its JIF by 250%. Publishers may even bribe authors to cite papers in their journals. \$US6 per citation is the going rate from Innoscience Research:

I have published an article entitled ... There are six citations of your journals in my article. The citations are as follows. Please see the paper as the attachment. I want to claim the rewards from you. (email from an author claiming payment, Oransky 2021).

Putting accepted papers on a journal’s website (often many dozens of them with years to wait for publication) is a popular ploy (Wilhite et al. 2019). In JIF calculations, citations to these papers count, but not the papers themselves, so up goes the JIF.

Implications for Scholarship

Gaming is now embedded in academic performance measurement: academics who do not game rapidly become uncompetitive and perish. Producing indicators of performance is easier than producing the performance itself, and is also less intellectually onerous. Gaming is not unskilled – far from it – but the skills required are not necessarily academic skills (Rolfe 2016; Oravec 2017), and the result of their application is unlikely to be scholarship.

From an instrumental position, [the paper] gave me my professorship. But as a scholarship piece, it's disgusting. Yeah, it was really, really awful. (author quoted in Butler and Spoelstra 2014, 544).

... it doesn't matter what the fuck you publish, only where you publish it. (academic quoted in Butler and Spoelstra 2014, 542).

The skills required to game citations are not unlike those needed to play games in other contexts. Gaming, perhaps especially online gaming, can be compulsive, players driven by the urge to attain an ever-higher score, a number that acquires purpose in itself. This is certainly evident in the academic obsession with metric competition. Academic *curricula vitae* proudly express research performance in a profusion of numbers, themselves reliant on gaming (van Bevern et al. 2016; Wren and Georgescu 2020) and quite detached from any research context:

H-index: 29; total citations: 2962 (2505 without self-citations); citing articles: 1953 (1852 without self-citations). Average citations per item: 25.18. The most highly cited paper has received 442 citations. From Google Scholar: H-index: 35 (22 since 2012); i-10 index: 88 (53 since 2012), total citations 4377 (2398 since 2012). (cited in Wood 2021, 13).

So compulsive is the gaming of academic performance metrics that the collegiality of the common room has been replaced by the sort of triumph and despair characteristic of the betting shop. Discussion and development of ideas have been replaced by boasting about metric achievements and consequent ranking:

Where the place of publication becomes more important than scholarly content, academic discourse is increasingly devoted to rankings talk. Our time is consumed in sterile speculations and dizzying debates about the rank assigned to a particular journal ... (Willmott 2011, 437–38).

Nothing in the traditional scholarly canon was sacred:

... many scholars consider authorship and citation to be fungible attributes, components of a project one can alter to improve their publication and funding record or to increase journal impact factors. (Fong and Wilhite 2017).

Citation was gamed to increase the JIF and need have nothing to do with supporting the argument in the paper's text. A paper's citations need even appear in the paper: Besançon et al. (2024) find that 9% of references are in only the paper's metadata, where they still contribute to JIF even though they are inaccessible to readers. Authorship was fungible in the sense that it has become an entitlement and need have nothing to do with creating an academic paper. With sufficient gaming, even non-existent papers and authors can become highly ranked (see López-Cózar et al. 2014; Harzing 2016). Ike Antkare had 102 publications and an h-index of 94 in April 2010, making him the world's 21st most cited scientist. There is no Ike Antkare and there never has been (Labbé 2020), though he continues to publish (e.g., Antkare 2020). Even Larry the cat has 144 citations and an h-index of 12 (Richardson 2024).

The possibility has been aired that the gaming that increases performance measures might actually be damaging scholarship. Gaming, according to Jeanes et al. (2019, 1547, 53), results in a “reduction in scholarship, quality, originality and novelty” and the “ascent of the opportunistic, career-driven scholar.” It reduced the academic to little more than a commodity, incapable of creative thinking:

... there appears to be a link between an incessant desire for self-improvement on the one hand, and academics’ attempts to game themselves into a more appealing *commodity* on the other. (emphasis in original, Hammarfelt et al. 2016).

Even reading was seen as squandering good writing time:

Based on your entire viewing history, you could have saved 19,610 min by using Summaries. (email to author from Academia.edu, August 2023).

As Walls (2018) notes, everybody writing while nobody is reading rather suggests that everybody is writing for nobody. Alvesson et al. (2017, 3) concur: “never before in the history of humanity have so many social scientists written so much with so little effect or of benefit to anyone.”

Gaming has distracted attention from a paper’s contents. Judicious citation is rewarded, but not careful reading. Papers need not be read beyond title and abstract. Gaming seems even to absolve authors of reading what they cite – only 20% bother (Simkin and Roychowdhury 2003). Authors are only slightly familiar with 40% of their citation, and 60% has little influence on their papers (Teplitskiy et al. 2018). When Elsevier made up a sample reference to demonstrate favoured submission style, this totally fictional reference had been cited nearly 400 times by 2017 and 500 by 2023 (Harzing 2023).

Gaming allows citations to be nonsense: scholarship does not. Scholarship does little to boost the JIF and is a problem to measure and manage. Managers like to cultivate an image of a university workforce replete with scholars and scholarship, but the reality is workers controlled through publication indicators and journal rankings. Gaming performance metrics does not complement scholarship, rather it replaces scholarship (Dougherty and Horne 2022). Scholarship makes no contribution to this gaming and gains nothing from it (Smaldino and McElreath 2016).

Open Access and Predatory Journals

Established academic publishers have been turning from their traditional subscription model with all its paywalls towards an open access system making academic papers freely accessible to all. With open access, authors pay publishers article processing charges (APCs) from their research funds. There have been objections (Macdonald 2013); for example, on the grounds that not all authors have research funds. Open access has made publication easier for elite academics with grants, and harder for others (Ellingson et al. 2021), particularly evident where established publishers have created a two-tier hybrid system offering rich authors all the benefits of open

access and the poor all the delay of a traditional subscription model. But the basic argument that the findings of academic research should be as public as the funding that paid for them has been persuasive – so persuasive that some of the disadvantages of open access (particularly those arising from the author-pays principle) have been overlooked (Kember and Brand 2023).

Focused on preserving their lucrative oligopoly, established publishers used to be less enthusiastic about open access than a new breed of publisher anxious to seize likely opportunities. In brief, open access allowed this new breed to sell performance indicators direct to authors with only minimal concern for paper content.

New innovative publishers repositioned themselves as service providers to the authors, publishing with them, rather than seeing themselves as content providers to readers. (Shen and Björk 2015).

It is easy to confuse the APC of open access journals from established publishers with the fees these new publishers charge their own authors (Beall 2017). The confusion inspired Jeffrey Beall, a librarian from the University of Colorado, to declare the newcomers “predatory” and to compile a blacklist to make the distinction clear (Basken 2017). Begun in 2010, listing ended suddenly and somewhat mysteriously in 2017 (Beall 2017). It would appear that Beall, weary of harassment and fearful of losing his university job (Straumsheim 2017; Chawla 2018), had simply had enough. Versions of Beall’s list of predatory publishers are still available and Beall’s efforts are as prominent as ever in discussions of predatory publishing.

Shen and Björk (2015) estimate that there were some 8,000 predatory journals in 2015, and that they published half a million papers in 2014 alone. Cabells, an analyser of publishing data, has recently discovered 17,000 predatory journals.⁶ Entry to the predatory sector is particularly cheap and easy, requiring little more than IT resources, bank accounts and clerical labour (Siler et al. 2021). But what is a predatory publisher? A ready definition is everything an established publisher is not, in business only for the money – but then established publishers are not averse to making lots of money. Predatory journals will publish just about anything – but then so will many established journals: when John Bohannon (2013) submitted his spoof paper on the use of lichen to cure cancer, it was acceptable to established journals as well as predatory ones.

As predatory publishers publish entirely online, there is no limit to the number of papers each issue can carry, the publisher charging the author a fee for each paper. But the very same strategy has also been adopted by established journals. For example, *Scientometrics*, a Springer journal, published 40 papers in 1985 and 355 papers in 2022, Springer demanding an APC for each one. Predatory publishers do their best to ape the journals of established publishers; their titles and covers are often remarkably similar. But established publishers also seem to copy from predatory publishers. One strategy recently adopted by established publishers is associating the brand of their leading journals with lesser journals, often with automatic transfer of submissions rejected by the leading journal. In name and cover design, these

⁶ <https://www.youtube.com/watch?v=9qc0mlO3vIM>

derivatives mimic such prominent journals as *Nature*, *Science* and the *Lancet* – a practice not so very different from that followed by many a predatory journal (Khelifaoui and Gingras 2020). Increasingly, established and predatory publishers share what is worst in academic publishing: common to both is the practice of arranging conferences and then directing conference papers to their own journals. Editorial board members have been known to resign *en masse* rather than collude with established publishers in the erosion of scholarly standards (e.g., Upton 2023).

The lengthy description of peer review on so many predatory websites (often stolen from established publishers) is usually no more than mantra. With few exceptions, predatory journals provide only nominal peer review (Basken 2017), but thus it is with many an established publisher, and perhaps especially those producing mega-journals containing hundreds of papers in each issue (Ioannidis et al. 2023). In devising criteria to identify predatory journals for its *Predatory Report*, Cabells struggles to find characteristics that are peculiar to predatory journals.⁷ An almost random selection of Cabells' indicators of a predatory journal include:

- no way to contact the journal
- authors have published several times in the same journal
- authors have published papers with similar titles in other journals, and
- journal publishes papers intended to increase citations.

These are all characteristics of established journals too. A characteristic common to both predatory and established journals can be described as underhand in predatory journals and a sign of merit in established journals. So, while rapid peer review indicates corruption in a predatory journal, it is a mark of efficiency in an established one. Established publishers may reduce their APCs for authors from the developing world, but for other publishers to make such concessions is a sure sign of predation. Established publishers publish lots more papers per issue because authors like quick publication, but predatory publishers produce lots of papers per issue because they want to make money. An unsophisticated website and poor English indicate a predatory journal, not simply a journal lacking resources. Having a Western business address is a sign of a predatory journal, but so too is not having one. And so Cabells' digs itself ever deeper in its desperation to distinguish established publishers from predatory publishers.

The Predatory Narrative

Despite the evidence, a simple narrative proclaiming the evils of predatory publishers is now ubiquitous (Inouye and Mills 2021) – predatory publishers are exploitative, greedy and grasping. Demonising predatory publishers deflects attention from the equally questionable behaviour of established publishers

⁷ See “The Source/Cabells Predatory Reports criteria v 1.1”, available at <https://blog.cabells.com/2019/03/20/predatoryreport-criteria-v1-1/>. See also Anderson (2017).

(Sovacool 2008; Reynolds 2016). Is predatory publishing really as black as the narrative paints it? The International Academy of Nursing Editors (INANE, appropriately) does not question the narrative: “with profit as the driving force, these ‘predatory’ publishers engage in a range of disturbingly unethical and unscholarly practices” (INANE 2015, 88).

Similarly, a mob-handed paper in *Nature* roundly denounces predatory journals for their avarice and lack of transparency (Grudniewicz et al. 2019). This despite *Nature* charging \$US11,200 to publish an open access paper (many, many times the fee charged to publish in a predatory journal), and *Nature* declining to disclose how this APC is calculated (Krauskopf 2021). The APC of an established journal, it would seem, is adjusted by its JIF: the higher the JIF, the more the APC. In the established publishing sector, quality pays so it is well worth manipulating the indicators of quality.

[*Nature*] aims at increasing APCs by increasing the value we offer to authors through improving the impact factor. (Siler and Frenken 2020, 31).

Are the real predators those that charge excessive APCs or is this difference in price considered a premium for publishing in a “quality” journal via impact factors that can be manipulated by the so called “legitimate” journals? (Teixeira da Silva et al. 2019).

Commercial secrets easily trump transparency in academic publishing. Of the many papers now being retracted by established publishers – up 1,900% in medical journals between 2001 and 2010 (Zietman 2013) – half are retracted without explanation (Cox et al. 2018). Clarivate, the direct descendant of Garfield’s commercial creation, is still at the heart of academic publishing, still using journal publication to measure academic performance and still registering journals considered sufficiently respectable to have their JIF calculated. On what basis is a mystery to all but insiders; Clarivate keeps secret the algorithms it uses to calculate the impact factor of journals. This matters: in 2017, the *Lancet* published 1,595 papers, but Clarivate counted only 302 of them towards the journal’s impact factor (Grossman and Brembs 2021). The classification of papers to be included in the denominator, though crucial in JIF calculations, is another commercial secret (PloS Medicine Editors 2006; see also Metze 2010). Clarivate forbids even the listing of journal impact factors, this being the company’s own intellectual property. Dissatisfied editors of top journals can always negotiate with Clarivate – confidentially, of course – for a higher ranking. It has never seen any commercial advantage in distinguishing and eliminating self-citation in its calculations of JIF, though the blow to gaming would be considerable. Thus it is that gaming is facilitated and rife in established academic publishing while gaming plays little part in predatory publishing. As PloS Medicine Editors (2006, 0708) note, “... Science is currently rated by a process that is itself unscientific, subjective, and secretive.” In this same tradition, Cabells’ new “Predatory Report” is a commercial product with a “behind the scenes scoring rubric that assigns different weights to different violations” (Anderson 2017).

Sporting titles not unlike those of the most respectable journals, many predatory journals defeat the search engines used by Clarivate – and also reveal their

weaknesses. The *African Journal of Business Management*, a predatory journal publishing over 1,200 papers in 2011, had no difficulty obtaining ISI listing (Harzing 2016; Petrișor 2016) and became one of the world's most prominent management journals. Where Clarivate declines to give a journal an impact factor, one may be purchased from another ISI. Jalalian (2015) calls this fake ISI the Institute *for* Scientific Information and the genuine ISI the Institute *of* Scientific Information (but gets them the wrong way round). Meanwhile, impact factors can be created and purchased from yet another ISI, International Scientific Indexing (<https://isindexing.com/isi/>). Predatory journals, even those on Beall's list, have little trouble gaining whatever respectability is still associated with approval by Scopus and ANVUR (Bagues et al. 2019; Frandsen 2022).

A perfect example is Impact Factor Services for International journals, an Indian-based organisation that operates an indexing and impact-factor measuring service for international journals. For an annual fee of \$US40, “predatory” journals can have their impact factor evaluated according to IFSIJ's method and list it on their website. ... these kinds of organisations arguably reveal the impact factor for precisely what it is: a fetishized and vacuous number. (Bell 2017, 659).

The truth is further stretched when the predatory narrative warns authors that predatory journals maintain no archive and their papers will be lost forever: free from the paywalls and replication restrictions of established publishers, papers are available on a range of servers. And the accusation that naive academics (a strange concept amidst universal gaming) are hoodwinked and abused by predatory publishers (e.g., Manca et al. 2017), rings a little hollow in the light of their mistreatment by established publishers, publishers that have long exploited academic labour on their production line on the grounds that collegial effort is an integral part of academic publishing rather than a thinly disguised form of modern slavery.

The predatory narrative claims that the ownership and location of predatory publishers are uncertain, though the accusation holds just as true for established publishers. Like academics everywhere, academics in developing countries are expected to present their employers with evidence of performance in the form of publishing metrics. The APCs of established publishers are quite beyond them. For these academics, predatory journals often offer the only route to publication. Take a single example: universities in developing countries have long expected their academics to publish in established journals their libraries could never afford to purchase. Current demands for indicators of performance are equally unreasonable in that academics in developing countries lack the influence and gaming skills to publish in top journals (Krauskopf 2021). Predatory journals sell these academics whatever indicators they need to graduate, to retain their job, to be promoted; they give these academics probably their only chance of international recognition:

... my institution officially wanted me to publish an international paper. I had very little time and I wittingly submitted it to a [predatory] journal. If I

had not submitted it to that journal, I would have been fined. (cited in Demir 2018, 1305).

When one considers the vast problems that beset established academic publishing – the gaming, the self-interest, the worthless papers published in some top journals (Smith 2014) – “shady journals ready to publish anything for \$200 do not seem like the most urgent problem to solve ...” (Krawczyk and Kulczycki 2021, 9; see also Hanson et al. 2023).

Most seriously, the predatory narrative neglects to mention the developing symbiosis between predatory and established publishers (Brockington et al. 2023). Some established publishers are even joining forces with predatory publishers (Spears 2014). Wiley recently purchased Hindawi, despite Hindawi’s predatory reputation, to increase its penetration of the Asian market (Zhang 2023). Established publishers are all too aware that the value of their own journals – especially their top journals – depends on gaming citations. Increasing the citation of papers is particularly effective when carried out in tandem with predatory journals. For example, there is no restriction on self-citation in a predatory journal; a reference list can sport hundreds of references to the author’s own papers, all counting towards the h-index, the Altmetrics (social media) score, and many towards the citation index and ultimately the journal impact factor. And they will probably all count again when the same paper is self-plagiarised in another predatory journal. The author’s institutional affiliation helps determine whether a paper survives the desk review of established top journals (Wennerås and Wold 1997; van Rooyen et al. 1998; Andersen 2017; see Lutmar and Reingewertz 2021). The predatory journal allows the author to acquire whatever affiliations she likes and so helps pave the way to peer review stage in established journals (Stetka 2018).

Conclusion – Whatever Next?

Which, then, is the major miscreant, the predatory journal that offers academics, particularly academics in the developing world, their only realistic opportunity of publishing, or huge international publishers (see Aguinis et al. 2020; Grossman and Brembs 2021)?

... if the essential features of predatory publishing are unethical behavior and a focus on profit, then many publishers using the subscription model are even bigger predators than some new OA publishers. (Krawczyk and Kulczycki 2021, 8)

And while it is true that predatory journals publish some really terrible papers, so do established journals (Bohannon 2013), though they are often much cited (Callaham et al. 2002).

Predatory journals may be derided for their poor English, but academic papers are now written to be counted rather than read; indeed, the less readable, the more likely a paper is to be cited and therefore counted (Ante 2022; Wang et al. 2022). Advice

on what makes papers less readable – for, example, peppering them with adjectives and adverbs (Wen and Lei 2022) – is readily available. Many editors, even of top journals, no longer edit what will probably never be read even if it were readable. This from *Research Policy*: “It also would avoid that authors feel as if they were coerced ... But such ideas yield may well high returns [sic] ...” (Osterloh and Frey 2020, 6).

Established publishers have developed a sideline for authors who still want their papers to be read rather than just counted. They will provide “paper preparation” services, charging the author to put a submission into the form the publisher prefers:

English language editing (8,000 words, 6 days, Premium rate) – \$US0.09 per word

Translation with editing (Portuguese to English) – \$US0.11 per word

Manuscript formatting (3-day service) – \$US125

Artwork preparation – \$US20 per image

Technical review (7-day service) – \$US500⁸

The journals of established publishers, and especially the top journals, are hotbeds of gaming (Honig et al. 2014). Between 1987 and 2006, over half of all citation in the respected *Administrative Science Quarterly* was to papers in the *Administrative Science Quarterly* (Macdonald and Kam 2010). The nastier forms of gaming, such as coercive citation, are common in established publishing – and especially among the most prestigious journals, which have a standing to maintain (Wilhite and Fong 2012; Chorus and Waltman 2016) – but not in predatory publishing. The Academy of Management’s journals top the list of social science journals coercing citations from authors. Some 25% of papers presented at the 2009 conference of the Academy of Management were plagiarised papers (Honig and Bedi 2012). In a predatory journal, there is no entitlement and no coercion; the author simply pays to be published.

There is much that is rotten in academic publishing, most has nothing to do with predatory publishing and everything to do with the expansion of higher education. Inspired by Robert Maxwell, the academic publishing industry, and especially its Big Five, grew rich by espousing scholarly values while exploiting academics, not so much to provide the world with knowledge, as to supply the higher education industry with the performance indicators and rankings its managers required. Publish or perish served the requirements of both higher education and established publishers, but science and society have paid a price. Both suffer when citability and JIF guide authors in what research to tackle, how to report the results and where to publish them.

When performance indicators are all that count, and performance itself scarcely matters, there is no building on the shoulders of giants. When indicators of performance are so ubiquitous and so ruthlessly gamed, there is no telling what actual performance has been achieved.

⁸ Editing services supporting Taylor & Francis authors available at <https://www.tandfeditingservices.com/services/>.

I have little time for the “top journal” fetish. More than that, I consider it one of the most damaging, dysfunctional and pernicious trends in research culture. It damages wise research, interdisciplinary research and the most innovative research. (academic quoted in Neveda et al. 2012, 357–58)

Few appreciated – as Beall did – the opportunity open access would offer to a new sort of academic publisher. Predatory publishers would allow authors to buy whatever performance indicators they wanted, which is not so very different from the arrangements those in the know have been reaching with established publishers for decades (Houghton 2022). There is a fundamental honesty to predatory publishing. If the author as customer wants performance indicators, then performance indicators the author shall have – and without the relentless gaming required by established academic publishing. And if those further up the academic food chain than the author fail to appreciate the difference between a prestigious journal and a predatory one with a very similar name, that instant publication is incompatible with thorough peer review and journal editing, and that an international journal may reflect only the location of its bank accounts, then *caveat emptor*.

In contrast, there is a fundamental cynicism in established publishing. All its participants – authors, editors, publishers, funders, managers and administrators – have been content to be part of a system producing papers of little value to society in favour of metrics of very great value to themselves. Institutions of higher education would prefer to look the other way when faced with anything smacking of misconduct in academic publishing (Long et al. 2009; Allison 2016), not perhaps surprising when many actively encourage such behaviour. Western universities have been paying bonuses to academics for publishing in the right journals for decades (Macdonald and Kam 2007). Over a decade, cash bonuses explained an increase of nearly 50% in submissions to top journals (Franzoni et al. 2011). Many Chinese universities have simply followed suit: bonus incentives to a first author at Zhejiang University range from 2,000 RMB for a paper in a journal with a JIF between 1 and 3 up to 14,000 RMB for a paper in a journal with an impact factor above 20 (Shao and Shen 2011). Payments for publication in such journals as *Nature* and *Science* can be worth 20 times a Chinese academic’s annual salary (Quan et al. 2017). Academics everywhere can now buy authorship to papers that have already been accepted in prestigious journals (Hvistendahl 2013; Jalalian 2015).

Predatory publishing is cheap and meets a very real demand for performance indicators, not scholarship. In contrast, established publishers and their journals promise a scholarly product, as if performance indicators were no more than a by-product of this scholarship. This is the promise that has been made ever since Garfield devised the JIF, and it is just as empty now as it was then. Established publishers and their journals supply performance indicators every bit as much as predatory journals – but at the expense of content.

Every university is pushing publishing so hard that this results in significantly lower quality research in total ... the vast majority of work is derivative, or makes observations that amount to “this tiny square of the sky is blue ...

unlike the sky over there which is blue.” (editor quoted in Karabag and Berggren 2016)

In Russia, the poison has spread through the wholesale gaming of academic publishing indicators via “systems designed by the leading citation databases and global ranking organisations” to universities and governments, themselves now regarded as predatory (Trubnikov and Trubnikova 2023).

The system is absurd, as is toleration of its continuance. In a refreshingly original analysis, Kirsten Bell (2017) suggests that predatory journals parody both themselves and established journals. Because they deliberately mimic established journals, they must signal to the market that they offer something established journals do not. Their style of signalling has become notorious, its cynicism almost lyrical:

Dear Iconic Professor ... being overwhelmed by your eminence work ... pleased to invite all of you to send you upcoming paper ... in all fields of Social Science and Business... focuses on interesting phenomena, deep mechanisms, advanced structures, brilliant properties.

Self-parody to be sure, but also parody of the whole academic publishing industry of which predatory publishers are but a part. Predatory publishers are a nonsense, but that they have so readily been accommodated in academic publishing exposes the disgrace that academic publishing as a whole has become.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Aguinis, H., Cummings, C., Ramani, R. and Cummings, T. 2020. “‘An A is an A’: The New Bottom Line for Valuing Academic Research.” *Academy of Management Perspectives* 34 (1): 135–54. <https://doi.org/10.5465/amp.2017.0193>.
- Allen, H., Cury, A., Gaston, T., Graf, C., Wakley, H. and Willis, M. 2019. “What Does Better Peer Review Look Like? Underlying Principles and Recommendations for Better Practice.” *Learned Publishing* 32: 163–75. <https://doi.org/10.1002/leap.1222>.
- Allison, D., Brown, A., George, B. and Kaiser, K. 2016. “A Tragedy of Errors.” *Nature* 530: 7588, 27–9. <https://doi.org/10.1038/530027a>.
- Altman, D. 1994. “The Scandal of Poor Medical Research.” *BMJ* 29 January, 308: 283–84. <https://doi.org/10.1136/bmj.308.6924.283>.
- Alvesson, M., Gabriel, Y. and Paulsen, R. 2017. *Return to Meaning: A Social Science with Something to Say*, Oxford: Oxford University Press. <https://doi.org/10.1093/oso/9780198787099.001.0001>.
- Alvesson, M. and Sandberg, J. 2013. “Has Management Studies Lost Its Way? Ideas for More Imaginative and Innovative Research.” *Journal of Management Studies* 50: 128–52. <https://doi.org/10.1111/j.1467-6486.2012.01070.x>.

- Andersen, L. 2017. "On the Nature and Role of Peer Review in Mathematics." *Accountability in Research* 24 (3): 177–92. <https://doi.org/10.1080/08989621.2016.1274885>
- Anderson, R. 2017. "'Cabells' New Predatory Journal Blacklist: A Review." *Scholarly Kitchen*, 25 July. <https://scholarlykitchen.sspnet.org/2017/07/25/cabells-new-predatory-journal-blacklist-review/>.
- Antkare, I. 2020. "Ike Antkare, His Publications, and Those of His Disciples." In *Gaming the Metrics: Misconduct and Manipulation in Academic Research*. Biagioli, M. and Lippman, A. eds, 177–200. Cambridge MA: MIT Press. <https://doi.org/10.7551/mitpress/11087.003.0018>.
- Ante, L. 2022. "The Relationship Between Readability and Scientific Impact: Evidence from Emerging Technology Discourses." *Journal of Informetrics* 16: 101252. <https://doi.org/10.1016/j.joi.2022.101252>.
- Armstrong, S. 1984. "Peer Review of Scientific Papers." *Journal of Biological Response Modifiers* 3: 10–14.
- Ashkanasy, N. 2007. "Playing the Citations Game." *Journal of Organizational Behavior* 28: 643–45. <https://doi.org/10.1002/job.476>.
- Aksnes, D. 2003. "Characteristics of Highly Cited Papers." *Research Evaluation* 12 (3): 159–70. <https://doi.org/10.3152/147154403781776645>.
- Ayoubi, C., Pezzoni, M. and Visentin, F. 2021. "Does It Pay to Do Novel Science? The Selectivity Patterns in Science Funding." *Science and Public Policy* 48 (5): 635–48. <https://doi.org/10.1093/scipol/scab031>.
- Bagues, M., Sylos-Labini, M. and Zinovyeva, N. 2019. "A Walk on the Wild Side: 'Predatory' Journals and Information Asymmetries in Scientific Evaluations." *Research Policy* 48: 462–77. <https://doi.org/10.1016/j.respol.2018.04.013>.
- Baker, S. 2022. "Preprints 'Largely Unchanged' by Peer Review, Even During Covid." *Times Higher Education*, 2 February.
- Basken, P. 2017. "Why Beall's List Died – and What It Left Unresolved about Open Access." *Chronicle of Higher Education*, 12 September.
- Beall, J. 2017. "Research Integrity Corner: Special Issue on Predatory Journals What I Learned from Predatory Publishers." *Biochemia Medica* 27(2): 273–278
- Bedeian, A. 1996. "Improving the Journal Review Process: The Question of Ghostwriting." *American Psychologist* 51 (11): 1189.
- Bedeian, A. 2003. "The Manuscript Review Process: The Proper Roles of Authors, Referees, and Editors." *Journal of Management Inquiry* 12: 331–38. <https://doi.org/10.1177/1056492603258974>.
- Bell, K. 2017. "Predatory Open Access Journals as Parody: Exposing the Limitations of 'Legitimate' Academic Publishing." *TripleC* 15: 2. <https://doi.org/10.31269/triplec.v15i2.870>.
- Benos, D., Bashari, E., Chaves, J., Gaggari, A. et al. 2007. "The Ups and Downs of Peer Review." *Advances in Physiology Education* 31: 145–52. <https://doi.org/10.1152/advan.00104.2006>.
- Berenbaum, M. 2023. "On Peer Review – Then, Now, and Soon to Be?" *Proceedings of the National Academy of Science* 120 (11): e2302593120, 8 March. <https://doi.org/10.1073/pnas.2302593120>.
- Bergstrom, C. and T. Bergstrom. 2001. "The Economics of Scholarly Journal Publishing." Working Paper, University of Washington.
- Bergstrom, T. 2001. "Free Labour for Costly Journals?" *Journal of Economic Perspectives* 15 (3): 183–98. <https://doi.org/10.1257/jep.15.4.183>.
- Besançon, L., G. Cabanac, and T. 2024. "When Scientific Citations Go Rogue: Uncovering 'Sneaked References'." *Conversation*, 9 July, <https://theconversation.com/when-scientific-citations-go-rogue-uncovering-sneaked-references-233858>.
- Biagioli, M. and Lippman, A. 2020. *Gaming the Metrics* Cambridge MA: MIT Press. <https://doi.org/10.7551/mitpress/11087.001.0001>.
- Björk, B.-C. 2017. "Scholarly Journal Publishing in Transition – From Restricted to Open Access." *Electronic Markets* 27: 101–9. <https://doi.org/10.1007/s12525-017-0249-2>.
- Bohannon, J. 2013. "Who's Afraid of Peer Review?" *Science* 342 (6154): 60–65. https://doi.org/10.1126/science.2013.342.6154.342_60.
- Brale, M. 2005. *Reed Elsevier. Moving the Supertanker Deutsche Bank*, 11 January.
- British Academy 2007. *Peer Review: The Challenges for the Humanities and Social Sciences*, London.
- Brockington, D., P. Crosetto, P. Barreiro, and M. Hanson. 2023. "The Strain on Academic Publishing." *LSE Blog* 23 October, <https://blogs.lse.ac.uk/impactofsocialsciences/2023/10/23/the-strain-on-academic-publishing/>.

- Brown, H. 2007. "How Impact Factors Changed Medical Publishing – And Science." *BMJ* 334 (17 March): 561–64. <https://doi.org/10.1136/bmj.39142.454086.AD>.
- Buranyi, S. 2017. "Is the Staggeringly Profitable Business of Scientific Publishing Bad for Science?" *Guardian*, 27 June.
- Burbules, N. 2015. "The Changing Functions of Citation: From Knowledge Networking to Academic Cash Value." *Paedagogica Historica* 51 (6): 716–26. <https://doi.org/10.1080/00309230.2015.1051553>.
- Burnham, J. 1990. "The Evolution of Editorial Peer Review." *Journal of the American Medical Association* 263 (10): 1323–29. <https://doi.org/10.1001/jama.1990.03440100023003>.
- Butler, N. and Spoelstra, S. 2014. "The Regime of Excellence and the Erosion of Ethos in Critical Management Studies." *British Journal of Management* 25: 538–50. <https://doi.org/10.1111/1467-8551.12053>.
- Butler, N. and Spoelstra, S. 2023. "What Is the Point of Method Sections?" *Organization* 30 (6): 1266–72. <https://doi.org/10.1177/13505084231183078>.
- Butler, N., Delaney, H. and Spoelstra, S. 2017. "The Gray Zone: Questionable Research Practices in the Business School." *Academy of Management Learning & Education* 16 (1): 94–109. <https://doi.org/10.5465/amle.2015.0201>.
- Callahan, M., Wears, R. and Weber, E. 2002. "Journal Prestige, Publication Bias, and Other Characteristics Associated with Citation of Published Studies in Peer-Reviewed Journals." *JAMA* 287 (21): 2847–50. <https://doi.org/10.1001/jama.287.21.2847>.
- Campanario, J. 1998. "Peer Review for Journals as It Stands Today – Part 2." *Science Communication* 19 (4): 277–306. <https://doi.org/10.1177/1075547098019004002>.
- Ceci, S. and Peters, D. 1982. "Peer Review: A Study of Reliability." *Change: The Magazine of Higher Education* 14 (6): 44–48. <https://doi.org/10.1080/00091383.1982.10569910>.
- Chawla, D. 2018. "Sites Warn Against 'Predatory' Journals." *Nature* 555 (22 March): 422–23. <https://doi.org/10.1038/d41586-018-02921-2>.
- Chorus, C. and Waltman, L. 2016. "A Large-Scale Analysis of Impact Factors Biased Journal Self-Citations." *PLoS ONE* 11 (8): e0161021. <https://doi.org/10.1371/journal.pone.0161021>.
- Corbyn, Z. 2010. "An Easy Way to Boost a Paper's Citations." *Nature* 13 August. <https://doi.org/10.1038/news.2010.406>.
- Cox, A., Craig, R. and Tourish, D. 2018. "Retraction Statements and Research Malpractice in Economics." *Research Policy* 47: 924–35. <https://doi.org/10.1016/j.respol.2018.02.016>.
- Demir, S. 2018. "Predatory Journals: Who Publishes in Them and Why?" *Journal of Informetrics* 12: 1296–1311. <https://doi.org/10.1016/j.joi.2018.10.008>.
- Dewatripont, M., Ginsburgh, V., Legros, P. and Walckiers, A. 2007. "Pricing of Scientific Journals and Market Power." *Journal of the European Economic Association* 5 (2/3): 400–10. <https://doi.org/10.1162/jeea.2007.5.2-3.400>.
- Dougherty, M. and Horne, Z. 2022. "Citation Counts and Journal Impact Factors Do Not Capture Some Indicators of Research Quality in the Behavioural and Brain Sciences." *Royal Society Open Science* 9: 220334. <https://doi.org/10.1098/rsos.220334>.
- Drivas, K. and Kremmydas, D. 2020. "The Matthew Effect of a Journal's Ranking." *Research Policy* 49: 103951. <https://doi.org/10.1016/j.respol.2020.103951>.
- Ellingson, M., Shi, X., Skydel, J., Nyhan, K., Lehman, R., Ross, J. and Wallach, J. 2021. "Publishing at Any Cost: A Cross-Sectional Study of the Amount That Medical Researchers Spend on Open Access Publishing Each Year." *BMJ Open* 11: e047107. <https://doi.org/10.1136/bmjop-2020-047107>.
- Elliott, C. 2004. "Pharma Goes to the Laundry: Public Relations and the Business of Medical Education." *Hastings Center Report* 34 (5): 18–23. <https://doi.org/10.2307/3527586>.
- Falagas, M. and Alexiou, V. 2008. "The Top-Ten in Journal Impact Factor Manipulation." *Archivum Immunologiae et Therapiae Experimentalis* 56: 223–26. <https://doi.org/10.1007/s00005-008-0024-5>.
- Fong, E. and Wilhite, A. 2017. "Authorship and Citation Manipulation in Academic Research." *PLoS ONE* 12: 12. <https://doi.org/10.1371/journal.pone.0187394>.
- Fowler, J. and Aksnes, D. 2007. "Does Self-Citation Pay?" *Scientometrics* 72 (3): 427–37. <https://doi.org/10.1007/s11192-007-1777-2>.
- Frandsen, T. 2022. "Authors Publishing Repeatedly in Predatory Journals: An Analysis of Scopus Articles." *Learned Publishing* 35 (4): 598–604. <https://doi.org/10.1002/leap.1489>.

- Franzoni, C., Scellato, G. and Stephan, P. 2011. "Changing Incentives to Publish." *Science* 333 (5 August): 702–3. <https://doi.org/10.1126/science.1197286>.
- Gannon, F. 2005. "Is the System Dumbing Down Research?" *European Molecular Biology Organization Reports* 6 (5): 387. <https://doi.org/10.1038/sj.embor.7400407>.
- Garand, J. and Harman, M. 2021. "Journal Desk-Rejection Practices in Political Science: Bringing Data to Bear on What Journals Do." *Political Science and Politics* 54 (4): 676–81. <https://doi.org/10.1017/S1049096521000573>.
- Garfield, E. 2004. "The Intended Consequences of Robert K. Merton." *Scientometrics* 60 (1): 51–61. <https://doi.org/10.1023/B:SCIE.0000027308.27185.30>.
- Garfield, E. 2006. "The History and Meaning of the Journal Impact Factor." *Journal of the American Medical Association* 295: 90–93. <https://doi.org/10.1001/jama.295.1.90>.
- Garfield, E. and Pudovkin, A. 2015. "Journal Impact Factor Strongly Correlates with the Citedness of The Median Journal Paper". *Collnet Journal of Scientometrics and Information Management* 9 (1): 5–14. <https://doi.org/10.1080/09737766.2015.1027099>.
- Gingras, Y. 2020. "The Transformation of the Scientific Paper: From Knowledge to Accounting Unit." In *Gaming the Metrics. Misconduct and Manipulation in Academic Research*, eds Biagioli, M. and Lippman A., 43–55. Cambridge MA, MIT Press <https://doi.org/10.7551/mitpress/11087.003.0004>.
- Goodman, S. and Fletcher, R. 1994. "Manuscript Quality Before and after Peer Review and Editing at Annals of Internal Medicine." *Annals of Internal Medicine* 121: 11–21. <https://doi.org/10.7326/0003-4819-121-1-199407010-00003>.
- Grossman, A. and Brems, B. 2021. "Current Market Rates for Scholarly Publishing Services." *F1000Research* 10: 20. <https://f1000research.com/articles/10-20>.
- Grove, J. 2021 "'Nepotistic' Journals Fast-Track Hyperprolific Authors." *Times Higher Education* 25 November: 9.
- Grudniewicz, A., Moher, D. and Cobney, K. (and 32 more authors) 2019. "Predatory Journals: No Definition, No Defence." *Nature* 576 (12 December): 210–12. <https://doi.org/10.1038/d41586-019-03759-y>.
- Hagstrom, W. 1974 Competition in science. *American Sociological Review* 39: 1, 1-18. <https://doi.org/10.2307/2094272>.
- Hagve, M. 2020. "The Money Behind Academic Publishing." *Tidsskriftet for Den Norske Legeforening* 17 August.
- Hájek, R., R. Hladík, J. Prodník, I. Reifová, J. Šmejkalová, V. Štětka, J. Švelch, and L. Vochocová. 2016. "Facts About the Critique of Questionable Publishing Practices at the Institute of Communication Studies and Journalism, Faculty of Social Sciences at Charles University, Prague." <https://zaeti.ckepublikace.wordpress.com/2015/11/17/facts-about-the-critique-of-questionable-publishing-practices-at-the-institute-of-communication-studies-and-journalism-faculty-of-social-sciences-at-charles-university-prague/>.
- Hammarfelt, B. and Rushforth, A. 2017. "Indicators as Judgment Devices: An Empirical Study of Citizen Bibliometrics in Research Evaluation." *Research Evaluation* 26 (3): 169–80. <https://doi.org/10.1093/reseval/rvx018>.
- Hammarfelt, B., de Rijcke, S. and Rushforth, A. 2016. "Quantified Academic Selves: The Gamification of Research Through Social Networking Services." *Informationresearch* 21: 2. http://www.informationr.net/ir/21-2/SM1.html#_YT8-MX0o_cs.
- Hanson, M., Barreiro, P., Crosetto, P. and Brockington, D. 2023. "The Strain on Scientific Publishing." *ResearchGate* September. https://www.researchgate.net/publication/374291000_The_strain_on_scientific_publishing.
- Harvie, D., Lightfoot, G., Lilley, S. and Weir K. 2013. "Publisher, Be Damned! From Price Gouging to the Open Road. *Prometheus* 31 (3): 229–39. <https://doi.org/10.1080/08109028.2014.891710>.
- Harzing, A.-W. 2013. "Document Categories in the ISI Web of Knowledge: Misunderstanding the Social Sciences?" *Scientometrics* 94: 23–34. <https://doi.org/10.1007/s11192-012-0738-1>.
- Harzing, A.-W. 2016. "How to Become an Author of ESI Highly Cited Papers?" 2 February, <https://harzing.com/publications/white-papers/authoring-esi-highly-cited-papers>.
- Harzing, A.-W. 2023. "The Mystery of the Phantom Reference." <https://harzing.com/publications/white-papers/the-mystery-of-the-phantom-reference>.
- Heinze, T., Shapira, P., Rogers, J. and Senker, J. 2009. "Organizational and Institutional Influences on Creativity in Scientific Research." *Research Policy* 38: 610–23. <https://doi.org/10.1016/j.respol.2009.01.014>.

- Hochberg, M., Chase, J., Gotelli, N., Hastings, A. and Naeem, S. 2009. "The tragedy of the Reviewer Commons." *Ecology Letters* 12: 2–4. <https://doi.org/10.1111/j.1461-0248.2008.01276.x>.
- Hojat, M., Gonnella, J. and Caelleigh, A. 2003. "Impartial Judgment by the 'Gatekeepers' of Science: Fallibility and Accountability in the Peer Review Process." *Advances in Health Sciences Education* 8: 75–96. <https://doi.org/10.1023/A:1022670432373>.
- Honig, B. and Bedi, A. 2012. "The Fox in the Hen House: A Critical Examination of Plagiarism Among Members of the Academy of Management." *Academy of Management Learning & Education* 11 (1): 101–23. <https://doi.org/10.5465/amle.2010.0084>.
- Honig, B., Lampel, J., Siegel, D. and Drnevich, P. 2014. "Ethics in the Production and Dissemination of Management Research: Institutional Failure or Individual Fallibility?" *Journal of Management Studies* 51 (1): 118–42. <https://doi.org/10.1111/joms.12056>.
- Horrobin, D. 2001. "Something Rotten at the Core of Science?" *Trends in Pharmacological Sciences* 22: 51–52. [https://doi.org/10.1016/S0165-6147\(00\)01618-7](https://doi.org/10.1016/S0165-6147(00)01618-7).
- Horton, R. 2000. "Genetically Modified Food: Consternation, Confusion, and Crack-Up." *Medical Journal of Australia* 172 (4): 148–49. <https://doi.org/10.5694/j.1326-5377.2000.tb125533.x>.
- Houghton, F. 2022. "Keep Calm and Carry on: Moral Panic, Predatory Publishers, Peer Review, and the Emperor's New Clothes." *Journal of the Medical Library Association* 110 (2): 233–39. <https://doi.org/10.5195/jmla.2022.1441>.
- House of Commons. 2011. *Peer Review in Scientific Publications*, Science and Technology Committee, Stationery Office, London, 28 July.
- Hu, Z., Chen, C. and Liu, Z. 2013. "Where Are Citations Located in the Body of Scientific Articles? A Study of the Distribution of Citation Locations." *Journal of Informetrics* 7: 887–96. <https://doi.org/10.1016/j.joi.2013.08.005>.
- Hussain, S., Liu, L. and Miller, A. 2020. "Accounting as a Dichotomised Discipline: An Analysis of the Source Materials Used in the Construction of Accounting Articles." *Critical Perspectives on Accounting* 66: 102086. <https://doi.org/10.1016/j.cpa.2019.04.007>.
- Hvistendahl, M. 2013. "China's Publication Bazaar." *Science* 342 (29 November): 1035–39. <https://doi.org/10.1126/science.342.6162.1035>.
- Ioannidis, J., Pezzullo, A. and Boccia, S. 2023. "The Rapid Growth of Mega-Journals: Threats and Opportunities." *JAMA* 329 (15): 1253–54. <https://doi.org/10.1001/jama.2023.3212>.
- INANE 2015. "Predatory Publishers: What the Nursing Community Needs to Know." *Journal of Perianesthesia Nursing* 30 (2): 87–90. <https://doi.org/10.1016/j.jopan.2015.02.002>.
- Inouye, K. and Mills, D. 2021. "Fear of the Academic Fake? Journal Editorials and the Amplification of the 'Predatory Publishing' Discourse." *Learned Publishing*, 34 (3): 396–406. <https://doi.org/10.1002/leap.1377>.
- Jackson, L., Peters, M., Benade, L. et al. 2018. "Is Peer Review In Academic Publishing Still Working?" *Open Review of Educational Research* 5 (1): 95–112. <https://doi.org/10.1080/23265507.2018.1479139>.
- Jalalian, M. 2015. "The Story of Fake Impact Factor Companies and How We Detected Them." *Electronic Physician* 7 (2): 1069–72.
- Jeanes, E., Loacker, B. and Sliwa, M. 2019. "Complexities, Challenges and Implications of Collaborative Work Within a Regime of Performance Measurement: The Case of Management and Organisation Studies." *Studies in Higher Education* 44 (9): 1539–53. <https://doi.org/10.1080/03075079.2018.1453793>.
- Jefferson, T., Rudin, M., Brodney Folse, S. and Davidoff, F. 2007. "Editorial Peer Review for Improving the Quality of Reports of Biomedical Studies." *Cochrane Database of Systemic Reviews* 2: MR000016. <https://doi.org/10.1002/14651858.MR000016.pub2>.
- Johnson, R., Watkinson, A. and Mabe, M. 2018. *The STM Report: An Overview of Scientific and Scholarly Publishing*, The Hague, International Association of Scientific Technical and Medical Publishers.
- Karabag, S., and C. Berggren. 2013. "Back to Merton Ideas? Corporate Fraud, Scientific Dishonesty, and the Need to Reform Academic Institutions and Identity." Barcelona, paper presented at the 35th DRUID celebration conference, June.
- Karabag, S. and Berggren, C. 2016. "Misconduct, Marginality and Editorial Practices in Management, Business and Economics Journals." *PLoS ONE* 11 (7): e0159492. <https://doi.org/10.1371/journal.pone.0159492>.
- Kember, S. and Brand, A. 2023. "The Corporate Capture of Open-Access Publishing." *Chronicle of Higher Education*, 16 August.

- Khachatryan, V., Sirunyan, A., Tumasyan, A., Adam, W. et al. 2010. "First Measurement of Bose-Einstein Correlations in Proton-Proton Collisions at $\sqrt{s}=0.9$ and 2.36 TeV at the LHC." *Physical Review Letters*, 16 July: 105 <https://journals.aps.org/prl/abstract/https://doi.org/10.1103/PhysRevLett.105.032001>.
- Khelfaoui, M., and Y. Gingras. 2020. *Branding Scholarly Journals: Transmuting Symbolic Capital into Economic Capital*, Note de Recherche 2020-03, CIRST, Université du Québec à Montréal. <https://doi.org/10.31235/osf.io/t9gkf>.
- Kincaid, E. 2022. *The Lancet. Retraction Watch*, 28 June.
- King, C. 2007. "Multiauthor Paper Redux: A New Peek and New Peaks." *ScienceWatch* November/December, <http://ips.clarivate.com/m/pdfs/klnl/8428096/swmultiauthor.pdf>.
- Knoll, E. 1990. "The Communities of Scientists and Journal Peer Review." *Journal of the American Medical Association* 263 (10): 1330–32. <https://doi.org/10.1001/jama.1990.03440100030004>.
- Krauskopf, E. 2021. "Article Processing Charge Expenditure in Chile: The Current Situation." *Learned Publishing*. <https://onlinelibrary.wiley.com/toc/17414857/70/0>.
- Krawczyk, F. and Kulczycki, E. 2021. "How Is Open Access Accused of Being Predatory? The Impact of Beall's Lists of Predatory Journals on Academic Publishing." *Journal of Academic Librarianship* 47: 102271. <https://doi.org/10.1016/j.acalib.2020.102271>.
- Labbé, C. 2020. "'Ike Antkare', One of the Great Stars of the Scientific Firmament." *ISSI Newsletter* 6 (2): 48–52.
- Larivière, V. and Gingras, Y. 2010. "The Impact Factor's Matthew Effect: A Natural Experiment in Bibliometrics." *Journal of the American Society for Information Science and Technology* 61 (2): 424–27. <https://doi.org/10.1002/asi.21232>.
- Larivière, V., Haustein, S. and Mongeon, P. 2015. "The Oligopoly of Academic Publishers in the Digital Era." *PLoS ONE*: 10 June. <https://doi.org/10.1371/journal.pone.0127502>.
- Lawrence, P. 2003. "The Mismeasurement of Science." *Current Biology* 17 (15): R583–5. <https://doi.org/10.1016/j.cub.2007.06.014>.
- Lawrence, P. 2007. "The Politics of Publication." *Nature* 422 (20 March): 259–61. <https://doi.org/10.1038/422259a>.
- Lee, C., Sugimoto, C., Zhang, G. and Cronin, B. 2013. "Bias in Peer Review." *Journal of the American Society for Information Science and Technology* 64 (1): 2–13. <https://doi.org/10.1002/asi.22784>.
- Lindebaum, D. and Jordan, P. 2021. "Publishing More Than Reviewing? Some Ethical Musings on the Sustainability of the Peer Review Process." *Organization* 30 (2): 396–406. <https://doi.org/10.1177/13505084211051047>.
- Lock, S. 1994. "Does Editorial Peer Review Work?" *Annals of Internal Medicine* 121 (1): 60–61. <https://doi.org/10.7326/0003-4819-121-1-199407010-00012>.
- Long, T., Errami, M., George, A., Sun, Z. and Garner, H. 2009. "Responding to Possible Plagiarism." *Science* 323 (5919): 1293–94. <https://doi.org/10.1126/science.1167408>.
- López-Cózar, E., Robinson-García, N. and Torres-Salinas, D. 2014. "The Google Scholar Experiment: How to Index False Papers and Manipulate Bibliometric Indicators." *Journal of the American Society for Information Science and Technology* 65 (3): 446–54. <https://doi.org/10.1002/asi.23056>.
- Lutmar, C. and Reingewertz, Y. 2021. "Academic In-Group Bias in the Top Five Economic Journals." *Scientometrics* 24 October. <https://doi.org/10.1007/s11192-021-04174-9>.
- Macdonald, S. 2013. "Dangers Lurk in Move to Open-Access Publishing: Plans to Expand Access to Research Are Admirable but Misguided." *Financial Times* 8 April.
- Macdonald, S. 2015a. "Dishonest Conformity." *Editors' Bulletin* 10 (3): 62–64. <https://doi.org/10.1080/17521742.2016.1182375>.
- Macdonald, S. 2015b. "Emperor's New Clothes: The Reinvention of Peer Review as Myth." *Journal of Management Inquiry* 24 (3): 264–79. <https://doi.org/10.1177/1056492614554773>.
- Macdonald, S. 2019. "Lawyers Should Not Be the Judges of Academic Responsibility." *Times Higher Education*, 30 April.
- Macdonald, S. and Kam, J. 2007. "Ring a Ring o' Roses: Quality Journals and Gamesmanship in Management Studies." *Journal of Management Studies*. 44: 640–55. <https://doi.org/10.1111/j.1467-6486.2007.00704.x>.
- Macdonald, S. and Kam, J. 2010. "Counting Footnotes: Citability in Management Studies." *Scandinavian Journal of Management* 26: 189–203. <https://doi.org/10.1016/j.scaman.2010.01.003>.
- Manca, A., Martínez, G., Cugusi, L., Dragone, D., Mercuro, G. and Deriu, F. 2017. "Predatory Open Access in Rehabilitation." *Archives of Physical Medicine and Rehabilitation* 98: 1051–56. <https://doi.org/10.1016/j.apmr.2017.01.002>.

- Martin, B. 2013. *Learning to Love Rejection*. Research Paper 1175, Faculty of Law, Humanities and the Arts, University of Wollongong, NSW.
- Martin, B. 2016. “Editors’ JIF-boosting Stratagems – Which Are Appropriate and Which Not?” *Research Policy* 45: 1–7. <https://doi.org/10.1016/j.respol.2015.09.001>.
- McGuigan, G. and Russell, R. 2008. “The Business Of Academic Publishing: A Strategic Analysis of the Academic Journal Publishing Industry and Its Impact on the Future of Scholarly Publishing.” *Electronic Journal of Academic and Special Librarianship* 9: 3.
- Merriman, B. 2021. “Peer Review as an Evolving Response to Organizational Constraint: Evidence from Sociology Journals, 1952–2018.” *American Sociologist* 52: 341–66. <https://doi.org/10.1007/s12108-020-09473-x>.
- Merton, R. 1968. “The Matthew Effect in Science.” *Science* 159 (3810): 56–63. <https://doi.org/10.1126/science.159.3810.56>.
- Metze, K. 2010. “Bureaucrats, Researchers, Editors, and the Impact Factor – A Vicious Circle that Is Detrimental to Science.” *Clinics* 65 (10): 937–40. <https://doi.org/10.1590/S1807-59322010001000002>.
- Miner, J. 2003. “Commentary on Arthur Bedeian’s ‘The Manuscript Review Process: The Proper Roles of Authors, Referees, and Editors.’” *Journal of Management Inquiry* 12 (4): 339–43. <https://doi.org/10.1177/1056492603259056>.
- Monbiot, G. 2011. “Academic Publishers Make Murdoch Look Like a Socialist.” *Guardian* 29 August.
- Necker, S. 2014. “Scientific Misbehavior in Economics: Unacceptable Research Practice Linked to Perceive Pressure to Publish.” *Research Policy* 43 (10): 1747–59. <https://doi.org/10.1016/j.respol.2014.05.002>.
- Neveda, M., Boden, R. and Nugroho, Y. 2012. “Rank and File: Managing Individual Performance in University Research.” *Higher Education Policy* 25: 335–60. <https://doi.org/10.1057/hep.2012.12>.
- Office of Fair Trading 2002. *The Market for Scientific, Technical and Medical Journals*, London, September.
- Olivieri, N. 2003. “Patients’ Health or Company Profits? The Commercialisation of Academic Research.” *Science and Engineering Ethics* 9 (1): 29–41. <https://doi.org/10.1007/s11948-003-0017-x>.
- Oransky, I. 2021. “Journal Distances Itself from Cash for Citations Scheme after Retraction Watch Report.” *Retraction Watch* 12 October.
- Oravec, J. 2017. “The Manipulation of Scholarly Rating and Measurement Systems: Constructing Excellence in an Era of Academic Stardom.” *Teaching in Higher Education* 22 (4): 423–36. <https://doi.org/10.1080/13562517.2017.1301909>.
- Osterloh, M. and Frey, B. 2020. “How to Avoid Borrowed Plumes in Academia.” *Research Policy* 49: 103831. <https://doi.org/10.1016/j.respol.2019.103831>.
- Pearson, A. and Sharma, P. 2015. “Referencing in Scholarly Articles. What Is Just Right?” *Family Business Review* 28 (3): 188–92. <https://doi.org/10.1177/0894486515599111>.
- Pells, R. 2019. “Journal Transparency Rules Will Help Scholars Pick Where to Publish.” *Times Higher Education*, 6 June, 8.
- Petersen, A. 2019. “Megajournal Mismanagement: Manuscript Decision Bias and Anomalous Editor Activity at *PLOS One*.” *Journal of Informetrics* 13: <https://doi.org/10.1016/j.joi.2019.100974>.
- Petrişor, A-I. 2016. “Evolving Strategies of the Predatory Journals.” *Malaysian Journal of Library & Information Science* 21 (1): 1–17. <https://doi.org/10.22452/mjlis.vol21no1.1>.
- PloS Medicine* Editors 2006. “The Impact Factor Game.” *PloS Medicine* 3 (6): e291. <https://doi.org/10.1371/journal.pmed.0030291>.
- Price, D. 1964. “Ethics of Scientific Publication.” *Science* 144: 655–57. <https://doi.org/10.1126/science.144.3619.655>.
- Quan, W., Chen, B. and Shu, F. 2017. “Publish or Impoverish. An Investigation of the Monetary Reward System of Science in China (1999–2016).” *Aslib Journal of Information Management* 69 (5): 486–502. <https://doi.org/10.1108/AJIM-01-2017-0014>.
- Reynolds, R. 2016. “The Predatory Publishing Phenomenon: Dead End or Just an Inconvenience on the Road to a New Scholarly Publishing Landscape.” *Insights* 29 (3): 233–38. <https://doi.org/10.1629/uksg.325>.
- Richardson, R. 2024. “Engineering the World’s Highest Cited Cat, Larry.” 18 July, <https://reeserichardson.blog/2024/07/18/engineering-the-worlds-highest-cited-cat-larry/comment-page-1/18> July.
- Robergs, R. 2003. “A Critical Review of Peer Review: The Need to Scrutinize the ‘Gatekeepers’ of Research in Physiology.” *Journal of Exercise Physiology* 6 (2): i–xiii.

- Rockwell, S. 2014. *Ethics of Peer Review: A Guide for Manuscript Reviewers*. https://medicine.yale.edu/therapeuticradiology/research/Ethical_Issues_in_Peer_Review_34211_284_4548_v1.pdf.
- Rolfe, G. 2016. "A Sacred Command of Reason? Deceit, Deception, and Dishonesty in Nurse Education." *Nursing Philosophy* 17: 173–81. <https://doi.org/10.1111/nup.12124>.
- Rushforth, A. and de Rijcke, S. 2015. "Accounting for Impact? The Journal Impact Factor and the Making of Biomedical Research in the Netherlands." *Minerva* 53: 117–39. <https://doi.org/10.1007/s11024-015-9274-5>.
- Scanff, A., Naudet, F., Cristea, I., Moher, D., Bishop, D. and Locher, C. 2021. "A Survey of Biomedical Journals to Detect Editorial Bias and Nepotistic Behavior." *PLoS Biology* 23 November. <https://doi.org/10.1371/journal.pbio.3001133>.
- Schwartzman, R. 1997. "The Forum, Peer Review as the Enforcement of Disciplinary Orthodoxy." *Southern Communication Journal* 63 (1): 69–75. <https://doi.org/10.1080/10417949709373078>.
- Seeber, M., Cattaneo, M., Meoli, M. and Malighetti, P. 2019. "Self-citations as Strategic Response to the Use of Metrics for Career Decisions." *Research Policy* 48 (2): 478–91. <https://doi.org/10.1016/j.respol.2017.12.004>.
- Sense About Science 2009. *Peer Review Survey 2009*, London, <http://www.senseaboutscience.org/pages/peer-review-survey-2009>.
- Shao, J. and Shen, H. 2011. "The Outflow of Academic Papers from China: Why Is It Happening and Can It Be Stemmed?" *Learned Publishing* 24 (2): 95–97. <https://doi.org/10.1087/20110203>.
- Shen, C. and Björk, B.-C. 2015. "'Predatory' Open Access: A Longitudinal Study of Article Volumes and Market Characteristics." *BMC Medicine* 5 (13): 230. <https://doi.org/10.1186/s12916-015-0469-2>.
- Shibayama, S. and Baba, Y. 2015. "Dishonest Conformity in Peer Review." *Prometheus* 33 (3): 215–33. <https://doi.org/10.1080/08109028.2015.1114745>.
- Siler, K. and Frenken, K. 2020. "The Pricing Of Open Access Journals: Diverse Niches and Sources of Value in Academic Publishing." *Quantitative Science Studies* 1 (1): 28–59. https://doi.org/10.1162/qss_a_00016.
- Siler, K., Vincent-Lamarre, P., Sugimoto, C. and Larivière, V. 2021. "Predatory Publishers' Latest Scam: Bootlegged and Rebranded Papers." *Nature* 598 (26 October): 563–65. <https://doi.org/10.1038/d41586-021-02906-8>.
- Simkin, M. and Roychowdhury, V. 2003. "Read Before You Cite!" *Complex Systems* 14: 269–74. <https://doi.org/10.25088/ComplexSystems.14.3.269>.
- Smaldino, P. and McElreath, R. 2016. "The Natural Selection of Bad Science." *Royal Society Open Science* 3: 160384. <https://doi.org/10.1098/rsos.160384>.
- Smeyers, P. and Burbules, N. 2011. "How to Improve Your Impact Factor: Questioning the Quantification of Academic Quality." *Journal of Philosophy of Education* 45 (1): 1–17. <https://doi.org/10.1111/j.1467-9752.2011.00787.x>.
- Smith, R. 2006. "Peer Review: A Flawed Process at the Heart of Science and Journals." *Journal of the Royal Society of Medicine* 99 (4): 178–82. <https://doi.org/10.1177/014107680609900414>.
- Smith, R. 2014. "Medical Research—Still A Scandal." *BMJ Opinion* 31 January, <https://blogs.bmj.com/bmj/2014/01/31/richard-smith-medical-research-still-a-scandal/>.
- Sovacool, B. 2008. "Exploring Scientific Misconduct: Isolated Individuals, Impure Institutions, or an Inevitable Idiom of Modern Science?" *Bioethical Inquiry* 5: 271–82. <https://doi.org/10.1007/s11673-008-9113-6>.
- Spears, T. 2014. "Respected Medical Journal Turns to Dark Side." *Ottawa Citizen* 20–27 August. <https://ottawacitizen.com/technology/science/respected-medical-journal-turns-to-dark-side>.
- Stetka, V. 2018. "Battling Predators in Prague." In *Predatory Publishing*, ed. Joy, E., 6–11, Coventry, Post Office Press.
- Stöckelová, T and Vostal, F. 2017. "Academic Stratospheres-cum-Underworlds: When Highs and Lows of Publication Cultures Meet." *Aslib Journal of Information Management* 69 (5): 516–28. <https://doi.org/10.1108/AJIM-01-2017-0013>.
- Stossel, T. 1985. "Reviewer Status and Reviewer Quality. Experience of the *Journal of Clinical Investigation*." *New England Journal of Medicine* 312 (10): 658–59. <https://doi.org/10.1056/NEJM198503073121024>.
- Straumsheim, C. 2017. "Academic Terrorist." *Inside Higher Education*, 2 June, <https://www.insidehighered.com/news/2017/06/02/librarian-behind-list-predatory-publishers-still-faces-harassment-online>.

- Stremersch, S., Camacho, N., Vannests, S. and Verniers, I. 2015. “Unravelling Scientific Impact: Citation Types in Marketing Journals.” *International Journal of Research in Marketing* 32: 64–77. <https://doi.org/10.1016/j.ijresmar.2014.09.004>.
- Teixeira da Silva, J. and Al-Khatib, A. 2019. “The Clarivate Analytics Acquisition of Publons: An Evolution or Commodification of Peer Review?” *Research Ethics* 15: 3–4. <https://doi.org/10.1177/1747016117739941>.
- Teixeira da Silva, J., Dobránszki, J., Tsigaris, P. and Al-Khatib, A. 2019. “Predatory and Exploitative Behaviour in Academic Publishing: An Assessment.” *Journal of Academic Librarianship* 45 (6): 102071. <https://doi.org/10.1016/j.acalib.2019.102071>.
- Teplitskiy, M., E. Duede, M. Menietti, and K. Lakhani. 2018. “Why (Almost) Everything We Know about Citations Is Wrong: Evidence about Authors.” *Proceedings of the 23rd International Conference on Science and Technology Indicators*, Centre for Science and Technology Studies, Leiden University, 1488–92.
- Tienari, J. 2012. “Academia as Financial Markets? Metaphoric Reflections and Possible Responses.” *Scandinavian Journal of Management* 28: 250–56. <https://doi.org/10.1016/j.scaman.2012.05.004>.
- Tipler, F. 2003. “Refereed Journals: Do They Ensure Quality or Enforce Orthodoxy?” *ISCID Archive*. https://gluefox.com/min/Tipler_PeerReview_070103.pdf.
- Triaridis, S. and Kyrgidis, A. 2010. “Peer Review and Journal Impact Factor: The Two Pillars of Contemporary Medical Publishing.” *Hippokratia* 14 (Supplement 1): 5–12.
- Trubnikov, D. and Trubnikova, E. 2023. “From Bogus Journals to Predatory Universities: The Evolution of the Russian Academic Sphere within the Predatory Settings of the State.” *Minerva* 62: 49–68. <https://doi.org/10.1007/s11024-023-09502-2>.
- Trumbore, S. 2024. “Publishing Is Stressful: What Can We Do about It?” *Eos*, 17 July, <https://eos.org/editor-highlights/publishing-is-stressful-what-can-we-do-about-it>.
- Upton, B. 2023. “Another Wiley Journal Board Resigns after Month-Long Strike.” *Times Higher Education*, 7 August.
- van Bevern, R., Komusiewicz, C., Niedermeier, R., Sorge, M. and Walsh, T. 2016. “H-index Manipulation by Merging Articles: Models, Theory, and Experiments.” *Artificial Intelligence* 240: 19–35. <https://doi.org/10.1016/j.artint.2016.08.001>.
- van Rooyen, S., Godlee, F., Evans, S., Smith, R. and Black, N. 1998. “Effect of Blinding and Unmasking on the Quality of Peer Review.” *JAMA* 280 (3): 234–37. <https://doi.org/10.1001/jama.280.3.234>.
- van Teijlingen, E. and Hundley, V. 2002. “Getting Your Paper to the Right Journal: A Case Study of an Academic Paper.” *Journal of Advanced Nursing* 37 (6): 506–11. <https://doi.org/10.1046/j.1365-2648.2002.02135.x>.
- Verbeke, A., Von Glinow, M. and Luo, Y. 2017. “Becoming a Great Reviewer: Four Actionable Guidelines.” *Journal of International Business Studies* 48: 1–9. <https://doi.org/10.1057/s41267-016-0049-5>.
- Wang, S., Liu, X. and Zhou, J. 2022. “Readability Is Decreasing in Language and Linguistics.” *Scientometrics* 127: 4697–729. <https://doi.org/10.1007/s11192-022-04427-1>.
- Waters, L. 2004. *Enemies of Promise: Publishing, Perishing, and the Eclipse of Scholarship*. Chicago: Prickly Paradigm Press.
- Wen, J. and Lei, L. 2022. “Adjectives and Adverbs in Life Sciences across 50 Years: Implications for Emotions and Readability in Academic Texts.” *Scientometrics* 127: 4731–49. <https://doi.org/10.1007/s11192-022-04453-z>.
- Wennerås, C. and Wold, A. 1997. “Nepotism and Sexism in Peer-Review.” *Nature* 387: 341–43. <https://doi.org/10.1038/387341a0>.
- Wilhite, A. and Fong, E. 2012. “Coercive Citation in Academic Publishing.” *Science* 335: 542–43. <https://doi.org/10.1126/science.1212540>.
- Wilhite, A., Fong, E. and Wilhite, S. 2019. “The Influence of Editorial Decisions and the Academic Network on Self-Citations and Journal Impact Factors.” *Research Policy* 48: 1513–22. <https://doi.org/10.1016/j.respol.2019.03.003>.
- Willmott, H. 1995. “Managing the Academics: Commodification and Control in the Development of University Education in the UK.” *Human Relations* 48 (9): 993–1027. <https://doi.org/10.1177/001872679504800902>.
- Willmott, H. 2011. “Journal List Fetishism and the Perversion of Scholarship: Reactivity and the ABS List.” *Organization* 18 (4): 429–42. <https://doi.org/10.1177/1350508411403532>.
- Wilson, J. 1978. “Peer Review and Publication.” *Journal of Clinical Investigation* 61 (6): 1697–701. <https://doi.org/10.1172/JCI109091>.

- Wood, F. 2021. "The Cult of the Quantifiable: The Fetishism of Numbers in Higher Education." *Prometheus* 37 (1): 8–26. <https://doi.org/10.13169/prometheus.37.1.0008>.
- Wren, J. and Georgescu, C. 2020. "Detecting Potential Reference List Manipulation within a Citation Network." <https://doi.org/10.1101/2020.08.12.248369>.
- Zhang, H. 2023. "Is Hindawi 'Well-Positioned for Revitalization?'" *BishopBlog*, <http://deevybee.blogspot.com/2023/07/is-hindawi-well-positioned-for.html>.
- Zhou, Z., Tse, T. and Witheridge, M. 2019. "Metamorphic Robustness Testing: Exposing Hidden Defects in Citation Statistics and Journal Impact Factors." *IEEE Transactions on Software Engineering* May, <https://doi.org/10.1109/TSE.2019.2915065>.
- Zietman A. 2013. "Falsification, Fabrication, and Plagiarism: The Unholy Trinity of Scientific Writing." *International Journal of Radiation Oncology Biology Physics* 87 (2): 225–27. <https://doi.org/10.1016/j.ijrobp.2013.07.004>.
- Zukerman, H. 2018. "The Sociology of Science and the Garfield Effect: Happy Accidents, Unanticipated Developments and Unexploited Potentials." *Research Metrics and Analysis* 7 August, <https://www.frontiersin.org/articles/https://doi.org/10.3389/frma.2018.00020/full>, <https://doi.org/10.3389/frma.2018.00020>.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.