

Description

Many academic historians trace the [peer review](#) process back to 1752 when the Royal Society of London created a “Committee on Papers” to review submission for publication in their *Philosophical Transactions* journal. Others claim an even earlier lineage, citing a similar development at the Royal Society of Edinburgh in 1731.

The nature of the “review” performed by these early committees was more about assisting the editor with selection rather than authenticating any claims made in the respective submissions. It wasn’t until the mid 20th century that peer reviewers took on the role of judging papers and providing feedback to the authors.

In all that time, there has never been any mention of payment for services performed. Some journals offer free access to databases for a limited time, but in the majority of cases, the work of a peer reviewer is performed as a public service to the academic community with the added benefit of seeing what kind of research is being done in the field, and adding some valuable credits to your resume.

A Service Increasingly under Scrutiny Now

In 2005, researchers at the Massachusetts Institute of Technology (MIT) created a software program called [SCIgen](#) that randomly combined strings of words to generate fake computer science papers. The objective of the exercise was to prove that the peer review process was fundamentally flawed and the conferences and journals would accept meaningless papers. After being notified by other researchers who were deliberately tracking SCIGen papers, journals were still quietly pulling articles as late as 2014.

The media attention that this simple exercise “to maximize amusement” generated has brought the peer review process under considerable scrutiny. Are journals really making a concerted effort to review submissions? Or is it just a perfunctory exercise implemented to add a perception of [academic quality for the journal](#)?

Birth of Peer Review Rings

In spite of rising concerns over the perceived value of peer reviews, researchers seem to be sufficiently concerned about potential rejection to invest time and effort in circumventing the process whenever possible.

In November 2014, *Nature*, the international weekly journal of science, published an article about peer-review rings, where peer-reviewers colluded to review each other’s work, with glowing reviews of course. Unfortunately, the unusual speed with which those reviews were performed and delivered to the journals – often within 24 hours – led the journal editors to be suspicious about the quality of work being performed.

Greater Transparency Can Stop Quality Deterioration

Researchers have always counted on a [rigorous peer review process](#) as a sign of academic integrity. Journal directories indicated 'peer-reviewed' or 'refereed' icons next to individual journal listings as a badge of prestige.

However, the advent of [open access publishing](#), and pay-to-publish journals that charge *article processing fees* (APF's), has brought the [peer review process into disrepute](#). Stunts like *SCIgen* are entertaining, but the fact that they were so successful casts a long shadow over the academic publishing industry in general. Meeting the often demanding publication requirements of prestigious journals can add hours of work for aspiring researchers, and to know that the process can be circumvented so easily has to be frustrating.

The fact that the process takes place under a veil of anonymity doesn't help if you seek clarification in reviewer feedback. If the calls for greater transparency in the peer review process are eventually answered, perhaps the current state of disrepute will be resolved.

How do you think the peer review process can be improved? Share your thoughts with us in the comments below!

Category

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2. Understanding Reviews

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