Prof. Wolfgang Glänzel
Editor-in-Chief
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Sent by e-mail to:
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Lausanne, 6 May 2021

RE: *Predatory publishing in Scopus: evidence on cross-country differences*, Vít Macháček and Martin Srholec, Scientometrics (2021) 126:1897–1921

Dear Prof. Glänzel,

Thank you for taking the time for our call in March and for your agreement to forward this letter to the publisher, to whom we request the swift retraction of the above-cited article.

This article describes a linear regression analysis (Generalized Linear Model) of the distribution of authors who have published in journals that had been unilaterally blacklisted by Mr. Beall and which are also indexed by Scopus, from which the authors make conclusions about the nature of demographics more likely to use services from unscrupulous publishers.

The editors and reviewers of a Journal such as *Scientometrics* – as well as the authors of the article themselves – must have been aware that the bibliometrics community has long warned against the use of Jeffrey Beall's list as a legitimate resource for many reasons:

- Mr. Beall holds strong and well-documented bias against open-access publishing.
- His list was managed without peer review, without the support of an expert committee, and without any formal due process of investigation, ethical oversight, or appeal.
- Mr. Beall disavowed the legitimacy of the list himself when he personally withdrew it from publication.
- The list has not been available for over five years.

This "data source" is biased, unreliable, unvalidated, and unavailable – and thoroughly unsound for a scientific article. For these, and additional reasons below, **this article must be immediately retracted.**

Conditions for retraction

According to the website of your Publisher (https://support.springernature.com/en/support/solutions/articles/6000080090-springer-s-corrections-and-retractions-policy), Springer Nature follows the Committee on Publication Ethics' (COPE) recommendations for guidance in retraction decisions. COPE states that retraction is recommended when there is "clear evidence that the findings are unreliable, either as a result of major error (e.g., miscalculation or experimental error), or as a result of fabrication (e.g., of data) or falsification (e.g., image manipulation)."

The use of Jeffrey Beall's list as the core data resource for the article and its conclusions fits the requirement for retraction. This compendium is flawed as a data source for such a study and inconsistent with the mission of *Scientometrics*, which states to be "concerned with the quantitative features and characteristics of science and scientific research." To conduct quantitively valid research, the sources on which this research is based must be reliable, authoritative, and prepared in a manner that allows for the proper conduct of research. The list of Mr. Beall fails on all these criteria.

Jeffrey Beall's list

Jeffrey Beall's list was a black-list compendium of journals and publishers that Mr. Beall unilaterally and without any due process alleged were "potential, possible, or probable predatory scholarly open-access publishers." He compiled, single handedly, this list of thousands of journals that he claimed met his personal untransparent criteria as predatory. The list was managed without peer review, without the support of an expert committee, and without any formal due process of investigation, ethical oversight, or appeal. Under increasing pressure from the University of Colorado, his then employer, and following the outcome of an investigation for ethical misconduct, Mr. Beall himself had to retract his list from publication in January 2017.

Mr. Beall had a track record of arbitrary inclusion / exclusion of open-access publishers (Hindawi, MDPI, and Frontiers), and was not able or willing to provide substantive reasoning for these decisions. We can provide, upon request, documentation of Frontiers' extensive and fruitless attempts to engage with Mr. Beall about his biased decision.

We recognize all too well that there are numerous unscrupulous publishers, but such a poorly run and unethical list makes it even harder for the community to separate the good form the bad journals.

By using Jeffrey Beall's skewed list as its core data set, false and defamatory conclusions are drawn by the authors after running their Scopus extraction through a statistical analysis. To conduct a statistical evaluation based on this retracted compendium consisting of the subjective perspective of one person is unprofessional and unscientific; to publish this in an established scientific journal is entirely inconsistent with the stated objectives of your Journal and defames the reputation of hundreds of thousands of authors, and editors who now stand accused of predatory behavior by the authors, and officially and publicly sanctioned by the Publisher and Editor-in-Chief of *Scientometrics*. By publishing this article as a scientifically legitimate article when its foundation has been discredited and had to be retracted means that your journal endorses such a list and the allegations it makes.

Data integrity

The characteristics of a valid dataset for quantitative analysis are: accuracy, completeness, reliability, relevance, availability and timeliness. Jeffrey Beall's list satisfies none of these criteria, and therefore any study which claims to build statistically valid insights based on these data is absurd and deeply flawed scientifically.

Accuracy of Jeffrey Beall's list as a data source

At start, the authors write that they use the term *predatory journals* to signify journals "suspected of abusing paid open-access to extort fees from authors, and following significantly flawed editorial processes" further stating that predatory publishers have "fake members of editorial boards and amateur business management." But surprisingly, the authors do not then apply their own definition, quality criteria or expert evaluation in their methodology. Rather, they are simply assuming inclusion by Mr. Beall on the date of 1 April 2016 as the one and only quality to define a "predatory publisher", attaching this label to all the journals listed without any attempt to validate this assertion themselves (with some moderation regarding Frontiers titles, as discussed below). As bibliometric experts, the authors should be aware that other more reliable data sources are available and should be capable of conducting their own professional assessment. Instead of applying a sound scientific approach, the authors assume that the list is fundamentally reliable and credible, both in the language they employ in the article and in the processes they describe for their study. This wholly fails to comply with a sound scientific approach.

Mr. Beall's well-known bias against Open Access

Jeffrey Beall's list was an expression of one person's agenda against open-access publishing. Personal bias is clearly a determining factor for inclusion because Mr. Beall, as a single person, simply did not have the capacity to conduct an analysis based on the criteria listed on his website for each of the many thousands of Journals he blacklisted. He also had no resources for updating nor correcting the list. He also had no ethical oversight on his selection process and no appeals process. Such a compendium can only be interpreted as the opinion of a person with a self-declared agenda against open access, and not as a validated, authoritative, and accurate dataset on which to provide the basis of statistical analysis of publishing practices.

Mr. Beall's bias against open-access publishing is publicly known and self-declared. He once wrote that (Beall, J. *The Open-Access Movement is Not Really about Open Access* (http://triplec.at/index.php/tripleC/article/view/525/514) From TripleC: Communication, Capitalism and Critique):

> *While the open-access (OA) movement purports to be about making scholarly content open-access, its true motives are much different. The OA movement is an anti-corporatist movement that wants to deny the freedom of the press to companies it disagrees with. The movement is also actively imposing onerous mandates on researchers, mandates that restrict individual freedom. To boost the open-access movement, its leaders sacrifice the academic futures of young scholars and those from developing countries, pressuring them to publish in lower-quality open-access journals. The open-access movement has fostered the creation of numerous predatory publishers and standalone journals, increasing the amount of research misconduct in scholarly publications and the amount of pseudo-science that is published as if it were authentic science.*

We respect any person's right to hold and voice their own views – but we strongly object to a study that considers these views as authoritative and credible facts that can be used in statistical analysis of a scientific study.

This basic criticism is widely shared. Here we provide a selection of expert reviews on Jeffrey Beall's list.

1. Davies, P. (October 4, 2013). *Open Access "Sting" Reveals Deception, Missed Opportunities.* **Scholarly Kitchen**.

   > *"[…] Finally, it means that librarian, Jeffrey Beall, should reconsider listing publishers on his "predatory" list until he has evidence of wrongdoing. Being mislabeled as a "potential, possible, or probable predatory publisher" by circumstantial evidence alone is like the sheriff of a Wild West town throwing a cowboy into jail just 'cuz he's a little funny lookin.' Civility requires due process."*

2. Esposito, J. (December 16, 2013). *Parting Company with Jeffrey Beall*. **Scholarly Kitchen**.

   > *"[…] I have been following some of Beall's work with growing unease. Here and there some (to me) distasteful political ideology peeked through (with my pragmatic mindset, any kind of ideology makes me queasy), but you don't have to agree with somebody all the time to agree with them some of the time. But now, in a recent screed, he has crossed the line. While I continue to admire Beall's List, the broader critique (really an assault) of Gold OA and those who advocate it is too strong for me."*

3. Bivens-Tatum, Wayne (2014). *Reactionary Rhetoric Against Open Access Publishing*. **tripleC** *12* (2): 441-446.

> *"[…] Beall makes a number of outrageous claims about OA advocates without referring to or citing any of them. There's absolutely no evidence presented that any OA advocates hold any of the 'anti-corporatist'(sic) views that Beall attributes to them, which leaves the article as an eight-page rant against a straw target. Beall (2013, 590) claims that 'a close analysis of the discourse of the OA advocates reveals that the real goal of the open access movement is to kill off the for-profit publishers and make scholarly publishing a cooperative and socialistic enterprise'. That close analysis never comes. If it had come, this article would be a serious contribution to the OA discussion instead of an uninformative rant, especially if it had analysed representative passages from numerous OA advocates instead of cherry-picking juicy but unrepresentative quotes from a handful of alleged zealots. It wouldn't have proved anything against OA itself, but it might have made for a good read and would have been less cringe-worthy."*

4. Berger, Monica; Cirasella, Jill (2015). *Beyond Beall's List: Better Understanding Predatory Publishers*. **College & Research Libraries News** *76* (3): 132?135.

> *"[...] Crawford criticizes Beall for not contextualizing predatory or low-quality publishing as a phenomenon that predates OA and is not exclusive to OA journals. He also points out that Beall favors toll-access publishers, specifically Elsevier, praising its 'consistent high quality.' However, a simple Google search for 'fake Elsevier journals' reveals Beall's position as tenuous. Furthermore, Beall conflates OA journals with 'author pays' journals, and reveals his skepticism, if not hostility, about OA."*

5. Walt Crawford, see: http://citesandinsights.info/civ14i4.pdf. *The Sad Case of Jeffery Beall*

> *"[…] In the same month, and I'd guess many times since, Beall explicitly equated gold OA with 'author-pays model,' either ignorant of or deliberately ignoring the fact that most gold OA journals don't have article-processing charges and that a higher percentage of subscription-based journals than gold OA journals do have author-side charges (or page and other charges). Beall started with a list of a few 'predatory' publishers. The list grew by leaps and bounds, sometimes including long-established publishing houses with the misfortune of being headquartered in India (specifically, Hindawi), with Beall acting as prosecutor, judge and jury on who's predatory and who's not. He's still doing it -- in just one year, his list nearly doubled in size.*
> *Recent posts have made it clear that Beall's own criteria are all that matter: He's the one-man authority on predatory – but only predatory OA – publishing. Remarkably, hundreds if not thousands of librarians and others seem to take Beall's word as gospel."*

6. Anderson, R. *Should We Retire the Term "Predatory Publishing?"* (https://scholarlykitchen.sspnet.org/2015/05/11/should-we-retire-the-term-predatory-publishing/)

> *"Beall's List has been controversial since its establishment for a variety of reasons, some of them obvious (no publisher, whether legitimate or not, appreciates being publicly branded a 'predator'), and some of them less so. One of the more subtle reasons for the controversy around Beall's List lies in the fact that it focuses entirely on OA publishing. Predictably, this has aroused the ire of many in the OA community, who have accused Beall of targeting these publishers out of an animus towards OA itself – a charge to which Beall provided a fair amount of ammunition when he wrote an impassioned attack on the OA movement in the journal **tripleC**."*

7. ThierryMcGlynn https://smallpondscience.com/2013/04/09/keeping-tabs-on-pseudojournals / *Keeping tabs on pseudo journals [retracted]*

> *"Update 10 March 2014: Since I published this post, I've been made aware of an alternative agenda in Jeffrey Beall's crusade against predatory publishers. His real crusade is, apparently, against Open Access publishing. This agenda is clearly indicated in his own words in an open access publication entitled, 'The Open-Access Movement is Not Really about Open Access.' More information about Beall's agenda can be found here. I am not removing this post from the site, but I am disavowing its contents as positive coverage of the work of Beall may undermine the long-term goal of allowing all scientists, and the public, to access peer-reviewed publications as easily and inexpensively as possible."*

Completeness of Jeffrey Beall's list as a data source

Jeffrey Beall's list has other serious flaws as a data source for publishing practices, one which is raised by the authors themselves. It only considers journals that publish in English:

> *The lists contain mainly journals that at least have English-language websites. In regions in which a large part of scientific output is written in other languages — such as in Latin America, Francophone areas and countries of the former Soviet Union — estimates of the extent of predatory publishing based on Beall's lists may be underestimated, because Beall did not identify predatory journals in local languages.*

The authors recognize the limitations of Jeffrey Beall's list here when they state that "estimates of the extent" might be "underestimated," which underscores the subjective nature of the list and invalidates the legitimacy of their own approach, which uses the list as the basis of a quantitative analysis of publishing practices.

Reliability of Jeffrey Beall's list as a data source

The only authority behind the legitimacy of the list was Mr. Beall himself, who claimed full personal responsibility for its reliability. He had no oversight committee, nor expert panel of reviewers, nor experts to independently judge complaints and appeals. In January 2017, following an ethical investigation by Board of Regents of the University of Colorado System, Mr. Beall retracted the list from his blog, and dissociated himself from the responsibility of the allegations made and abandoned his role as the sole authority behind its legitimacy.

Availability / Timeliness of Jeffrey Beall's list as a data source

The authors downloaded a version of the list on 1 April 2016, about six months before the list was retracted by Mr. Beall. Thus, for over five years now the list has not formally existed.

In consequence, several problems are raised when the authors state that: *"The analysis considers evidence from the period between 2015 and 2017, because, as noted above, using older data risks that some of the journals currently featured on Beall's lists were not yet predatory at an earlier time."*

Here the authors:
- recognize that the lack of timeliness of the compendium obliges them to limit their own analysis to an arbitrary (and outdated) time window;
- refer to "currently featured" journals of a non-existent list;
- abandon what would have been the logical approach of seeking validated data from currently maintained sources, further underscoring the arbitrary data selection and confirmation bias of the study.

It is also of note that some existing versions of the list are maintained by a small number of anonymous groups, but these versions, largely built around the archived list Mr. Beall deleted in 2017, are equally inappropriate. They do nothing to improve the reliability and integrity of the data and are equally arbitrary in their inclusion criteria.

Inappropriate use of linear regression

The linear regression technique employed by the authors is unsuited to the task. Using this statistical approach on unreliable data also lends the dangerous impression of seriousness to the authors' approach that places a statistical "smokescreen" over the deficiencies of the Jeffrey Beall's list as a "dataset."

We provide one example of the danger inherent in this approach. Based on their analysis the authors conclude that "Arab, oil-rich and/or eastern countries" are particularly vulnerable to fraudulent publishing, and they go even further to recommend that policymakers in these countries "pay more attention to the quality of research evaluation" based on their analysis.

Analysis of Frontiers as a predatory publisher

Given all the evidence at their disposition, the authors should have rapidly concluded that the inclusion of Frontiers on this list was unjustified. In their report they write (our emphasis):

> *Frontiers journals appear to be quite different* **from typical predatory outlets** *on the face value of their citation rates. Only 4 journals in Frontiers' portfolio of 29 included in this study are not ranked in the first quartile in at least one field according to the Scimago SJR citation index (Scopus 2018b). Most Frontiers journals are also indexed in the Web of Science and the Directory of Open Access Journals. Hence, judging by the relevance of Frontiers journals for the scientific community, there is a question mark about their inclusion on the predatory list.*

By their very own analysis using bibliometric tools, they find that Frontiers is a publisher that leads in citation performance and community relevance. Yet they continue with their assessment with the assumption that any journal on Beall's List is predatory, possibly because the authors were unwilling to question the legitimacy of their own approach. Later in the article, they continue:

> *Next, results are reported by the source list we used to identify predatory journals using three categories: (i) Beall's list of standalone journals; (ii) Beall's list of publishers excluding Frontiers; and (iii) Frontiers.*

They have strong quantitative evidence that Jeffrey Beall's list has included a high-quality publisher, which should have led them to the obvious conclusion that using the list as a data source for defining "predatory publishers" is fundamentally flawed. Instead, they push forward by providing Frontiers its own category of predatory publisher. This is ludicrous and certainly the most unprofessional manner possible of building a statistical model around the "data."

They conclude their work on Frontiers with the following statement:

> *As far as the comparison by source list is concerned, the results confirm that Frontiers has a different modus operandi than the rest of the pack. If only articles in Frontiers journals are considered, for instance, GDP per capita has statistically significant but opposite signs from the benchmark results. In fact, the model explains this outcome variable quite poorly, from which follows that a different approach is needed* **to get to bottom of what is up with this publisher.** *Although there is no evidence in the data presented upon which we can judge whether the inclusion of Frontiers on Beall's list was justified or not, the results at the very least clearly indicate that Frontiers is atypical. Henceforth, therefore, we focus on the outcomes excluding Frontiers.*

The emphasis above is ours. Based on their own assessment, as quoted above, the authors clearly do have evidence that inclusion on the list was not justified. This paragraph reveals the quandary of the authors – if they include Frontiers, they lose the signal that leads to their conclusions; and if they exclude Frontiers, this amounts to an admission that the list is unreliable as a "data source."

Failing to act is damaging to scientific integrity

The use of Jeffrey Beall's list as a "data source" for bibliometric study is seriously flawed and unreliable for the many reasons presented. In addition, the creation of a special category of predator for Frontiers has led to significant and measurable damage to the reputation of our company, its employees and our external editors and authors.

In our discussions with external partners, and with authors and reviewers, we have received enquiries about Frontiers as a "predatory publisher," many citing the article by Macháček and Srholec. Here is an email received a few weeks ago:

> *We write to request an extension of 20 days for submitting the revised version of our manuscript.* ***We recently learned that Frontiers has been included in a list of predatory journals and that would hamper this publication to be accepted by our university's PhD program. Our university's committee will discuss this case in 20 days and we wish to wait until their decision is made.*** *We would also like to ask you for arguments for defending publishing in Frontiers and why the classification as a predatory journal is not warranted.*

The parallel publication of a promotional news piece about the article in *Nature*, "*Hundreds of 'predatory' journals indexed on leading scholarly database*" (https://www.nature.com/articles/d41586-021-00239-0) participated significantly in generating well over 83'000 views, 2 citations and an Altmetric score of 491 to the *Scientometrics* source article. One only hopes the authors of the *Nature* news article simply did not take the time to properly identify the inherent weaknesses of the work, and that there was no intent to amplify the potentially libelous claims made in the article.

Now that we have brought the problematic nature of these actions to your attention, we hope you agree that the *Scientometrics* article is unsuitable as a piece of scientific literature, and as a consequence, is swiftly retracted to minimize the accumulated and growing damage it has caused Frontiers (and potentially to other publishers who have unjustly been tagged with the "predatory" label by the authors).

Please contact me directly for any further discussion related to this matter. We request confirmation of the retraction of this article by Friday 21 May at the latest.

Very best regards,

Frederick Fenter
Chief Executive Editor