

HOW CAN WE RECOGNIZE PREDATORY PUBLISHERS? THE CHARACTERISTICS OF PREDATORY JOURNALS

László Berek^{1,2}

¹Óbuda University, Doctoral School for Safety and Security

²Óbuda University, University Library

¹berek.laszlo@lib.uni-obuda.hu

Abstract: *The study deals with the problem of predatory publishing. Predatory journals and publishers are one of the biggest threats to online scientific communication, publishing and open access. The main cause of this phenomenon – predatory publishing - is the "publish or perish" pressure of researchers. In many cases, it is difficult to identify these journals.*

The study introduces the characteristics of predatory publishers and outlines a possible expert system for recognizing these journals. What are the important online resources and databases to identify suspicious journals and how Hungarian Scientific Bibliography (MTMT database) can help Hungarian researchers?

Key Words: *Predatory journals, Predatory publisher, Academic ethics, Open access, Scholarly publishing, Scientific communication, Journal metric, MTMT - Hungarian Scientific Bibliography*

1. INTRODUCTION

The pressure of "publish or perish" and the acceleration of online scientific communication has brought the appearance of predatory publishers and journals. Of course, the phenomenon is made up of many components, but these are the two most important. Our world has accelerated, just take a look at any area.

Let's take a look at the definitions of "publish or perish"...

„Publish or perish” used to refer to an attitude or practice existing within academic institutions, whereby researchers are under pressure to publish material in order to retain their positions or to be deemed successful.” [1]

„Publish or perish (POP) is a phrase that describes the pressure put on academics to publish in scholarly journals rapidly and continually as a condition for employment (finding a job), promotion, and even maintaining one’s job.” [2]

Scientific research has also accelerated and research tools are evolving accordingly. As research accelerates, the time taken to communicate the results is reduced. (...but at least researchers try to minimize it as much as possible) It has always been important to publish the most important research results as fast as possible, and in recent years technology has made it possible.

Of course the "publish or perish" pressure make serious impact on the spread of predatory journals as well. [3] Nevertheless, the mushroom-like nature of the proliferation of online journals and the existence of a very well-structured web site can trick researchers.

Predatory journals and publishers are a a real threat to scientific communication. Predatory journals hunt for unsuspecting researchers and publish papers without any quality or plagiarism control. [4] The problem is that such journals will eventually find out how low quality they are, scientifically invaluable. At this point, the researchers who published here are also stigmatized. Unfortunately, there is no specific definition for predator publishers and journals. On the other hand, by examining the characteristics of the journal, the predator's suspicion can often be clearly established.

2. THE PROLIFERATION OF PREDATORY JOURNALS

Let's take a look at the factors that led to the creation of predatory publishers!

Journals are the best suited surfaces for authentic and quicker publication of research results. Of course, the advancement of technology has not left the journal publishers alone: nowadays most of the journals are published online only. 2012 was the year from wich the number of online-only journals was higher than the number of paper-based journals. Of course, today the number of online publications has continued to increase, while the number of periodicals with physical appearance has continued to decline. Thus, the time from the submission of the manuscript to its publication is reduced.

Another important factor that is closely related to the constraint of publications, is the number of citations. The current scientometric theories, and systems are all traced back to the impact of the research, to the data of citations. Of course, with different computations, weights, and different algorithms, but each scientometric system is based on the number of citations.

Increasing the number of citations is therefore a central issue for researchers. Various techniques, systems, online interfaces are available for researchers to "advertise" their work, thus increasing the number of references. Most importantly, however, the entire text itself must be freely accessible. Naturally, this way more people can access research results, the search engines indexed the text more easily and other researchers not have to pay for the content of the journal. As a result, more people will use it in their work and they will cite to the original work in their papers.

These three factors are important if the researcher wants to be "successful" in the current system: to publish continuously, to increase the number of citations, to publish open access! Predatory publishers and journals will convince unsuspecting researchers that they are best suited for these purposes.

Predatory journals are primarily intended to deceive young researchers who are not yet familiar with recognized journals in their research area. A common method used by predator publishers is to send unsolicited emails by robots asking the researchers to publish their papers, magnifying their current work. [5] [6] These emails sometimes have solecisms and grammatical errors.

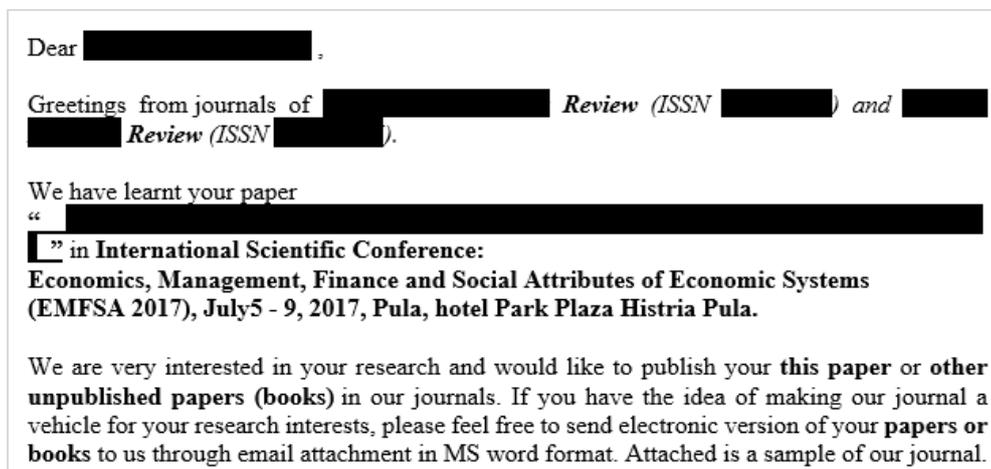


Figure 1. E-mail from a predatory journal... with some grammatical error

For young researchers, an announcement in an open access conference publication is the perfect grip for such publishers' online robots: in many cases, the author's name, publication title, and author's email address can be "read" for the robot. From now on, the software will only need to paste the data into the template mail and can automatically send the alert letter. It may be flattering to young researchers that they want to publish their papers in a scientific journal.

3. IDENTIFICATION OF PREDATORY JOURNALS

To identify predatory journals, researchers need to be familiar with current scientific rankings, official science metrics, and stay well-informed in scientific databases. This is also important because predatory journals falsify these rankings and values. If we detect these signs, we may start to suspect...

When examining journals, signs can be identified to help authors determine whether a journal is a predator. Of course, the presence of one characteristic does not mean a clear predatory classification for the publication under review, but the more signs are true for a journal, the stronger the suspicion is.

- The journal is not indexed by competent scientific databases.
- The journal website does not contain information about the editorial board.
- There are non-academic advertisements on the webpage.
- The website of the journal does not contain information on the address and contact details of the editorial board.
- The manuscript's review time (*Article Publication Time*) is suspiciously short.

Call for Paper :	
Submission Date	: 30th January, 2020
Acceptance	: 1 - 2 Weeks
Publication Date	: 05th February, 2020
Indexing	: 10th February, 2020

Figure 2. ... how can they review the paper so quickly?

- The scientific work of the editor-in-chief, the editorial board, and the columnists cannot be credibly monitored.
- There is no transparent description of the publishing process.
- The journal claims an "alternative" (fake) impact factor score.
- The scientific work of the editor-in-chief, the editorial team members cannot be trackable in scientific databases.

There are signs that clearly confirm the suspicion of the journal under investigation. If the publisher/journal claims false information about...

- ...indexing in specific scientific database;
- ...its journal metrics;
- ...the editorial office location and address.

Is the journal indexed by accepted scientific databases?

If the journal website makes a false statement about indexing, it is easy to see: the title of the journal and the ISSN number should be checked in the database and on the publisher site. (eg WoS Master Journal List, SCImago Journal Rank) Many times these journals indicate that GoogleScholar indexes its content ... it can be true, but it does not mean any professional, scientific activity. A scientific journal doesn't pride itself with indexing by GoogleScholar, because it's almost natural.

In the event that the contents of a journal can be searched in credible scientific databases, it is certainly not a predator journal. We primarily need to look at the contents of Clarivate Analytics, Elsevier, and other reputable publisher databases. With Clarivate Analytics, you can access a searchable list of journals indexed in the Web of Science database, even without a subscription. This is the Master Journal List (<https://mjl.clarivate.com/>) - if the journal is on the platform, we can be sure the publication is not a predator. *"The Master Journal List is an invaluable tool to help you to find the right journal for your needs across multiple indices hosted on the Web of Science platform."* [8]

Another important source for researchers and authors is the SCImago Journal & Country Rank (<https://www.scimagojr.com/>) operated by the Scopus database. The SCImago Journal Rank is available free of charge and if the questionable journal is included in the database, we can be sure that the publication is not predator. By the way, SCImago (SJR) is a science journal and country ranking database that allows researchers to get information about the current scientific classification of a journal or a country. *"The SCImago Journal & Country Rank is a publicly available portal that includes the journals and country scientific indicators developed from the information contained in the Scopus® database"* [9]

What kind of journal rankings or impact metric the journal shows itself?

This is also clear evidence to exclude them from scientific publications. If the journal's website claims to have Impact Factor value but doesn't actually have it, then there is no point in further investigating.

Researchers can use the Clarivate Analytics Journal Citation Reports (JCR) database for verification. If the journal has an official Impact Factor value, it must be found in the database. Since this is a subscription-based service, researchers should visit an university library and ask for help from library staff. Most of the university and research libraries have subscriptions to the Journal Citation Reports database. The journal may also indicate that it is ranked in the SCImago database. This can be easily checked on a freely available portal: SCImago Journal & Country Rank.

There are many deceptive journal rankings that mislead researchers. Predatory journals use these bogus/fake impact metrics. In many cases, their names are very similar to authentic rankings. (Global Impact Factor, Universal

Impact Factor, AQCJ Impact Factor, Journal Impact Factor...)



Figure 3. Bogus impact metrics – for an „international journal“

Lists of predatory journals („black and white“ lists)

There are several international predatory journal and publisher lists. Jeffrey Beall's list was the most well-known "black-list" on the Scholarly Open Access blog. (The blog has been discontinued, but the list is still available) In addition, several lists – black- and whitelists as well - are being created and updated, help researchers find the right journals.

After Beall's blog, a number of similar lists have been made and are constantly being updated. Such as Crawford's "Gray OA" list [6] or the UGC Approved List of Journals page. [7]

These lists, blogs, and pages can be good starting points, but researchers have to be careful with the information here. If a journal is included in such a list, it is not clear evidence that it is a predator. In any case, further investigation of the journal is required.

Over the past few years, several studies have been published that deal with the content of these lists and webpages. Several researchers claimed that these lists are not suitable to clearly identify predatory journals. These studies point to errors in the examination of journals and shortcomings in the selection methodology. [8] [9] [10]

MTMT Hungarian Scientific Bibliography

In Hungary, the official database of publications and citation is Hungarian Scientific Bibliography. "The Hungarian Scientific Bibliography (*Magyar Tudományos Művek Tára, MTMT*) is a comprehensive national bibliographic database of scientific publications and citations." [15] This platform can also help researchers in decision. The MTMT journal database also contains a "predatory?" field in the record of every journal.

In this regard, journals can be classified into three categories in the MTMT journal database:

- Unknown;
- Not predatory;
- Predatory.

A journal is classified as "Unknown" if it has not yet been verified by the MTMT administration or the classification is not clearly identifiable. Journals set as "Predatory" may not receive peer-reviewed and scientific classification in MTMT.

4. CONCLUSION

It is obvious that in order to identify predatory journals and publishers, researchers need to know the most important scientific databases, the scientific journals, and journal metrics systems. Beyond that, knowing the characteristics of predatory journals is also important, because without them, judgment can be a problem. Complicating the problem is that the websites of questionable journals are becoming more and more professional each year, more like the websites of scientific journals. This makes it even easier for unsuspecting researchers to be misled. The solution to this problem would, in my opinion, be to set up an expert system that can track the typical changes in predator journals and publishers. Such an expert system would effectively help researchers avoid predatory journals.

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