

# Predatory Journals

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# Predatory Journals

- Yes, they exist.
  - Why they exists requires some context.
  - And yes, we can deal with predatory journals.

# What is the Scholarly Communications Process?

# Define Scholarly Publishing

- The scholarly publishing system includes the process of creating and evaluating scholarly content, disseminating it to the scholarly community, and preserving it for future use.
- One of the fundamental purposes of the system of scholarly publishing is to facilitate inquiry and the creation of new knowledge.
- The majority of scholars pursue their research and disseminate the results with little or no expectation of direct financial reward.
- Ultimately, their contents are published in handbooks and become “common knowledge”.

# Scholarly Publishing Process

- Usually publication in major journals only takes place after the draft text has been reviewed by experts in that particular field of study and by the publisher.
- This process of review and communication provides a certain guarantee of quality.
  - This is known as peer review; the peer reviewers are known as referees.
- Articles in academic journals and officially published books and reports are normally assessed in advance.
- As a practical rule, the more authoritative (proxy for quality) the journal, the more rigid the testing.

# The Issues Concerning Scholarly Publishing

# Tenure and Promotion

- Rewards in the academic environment are often based on the prestige and impact of a faculty member's publication record.
- The original intents of publishing in peer-reviewed academic journals include sharing scholarship, establishing priority in making discoveries, and initiating conversations among scholars.
- Such publication has also become a criteria for faculty tenure decisions in most disciplines, especially at institutions focused on research.
- Faculty seeking tenure and promotion often must publish in journals known for their quality.
- Researchers are increasingly dependent on funding organizations, which base their assessments of subsidy applications on, amongst other things, publications that are subject to peer review.

# Authors Give Up Their Rights

- Publishing represents one of the most effective paths to getting recognition and building a reputation.
- As a result of the pressures to publish, faculty often sign away to publishers all rights to their scholarly work in exchange for publication.
- Scholars who sign away rights can find themselves needing to request permission from publishers to place their own articles on a personal web site, in a course pack or institutional repository, or to distribute copies to colleagues.

# Journal Prices Have Increased Significantly

- Journal prices have increased significantly for more than two decades.
- More and more journals are issued by profit-making entities, charging on average 4-5 times the subscription price charged by non-profit societies.
- Statistics kept by the Association for Research Libraries show that that between 1986 and 2006 journal prices have increased by 321%, while inflation has increased 68%.

# Journal Prices Have Increased Significantly

- Library acquisitions budgets have not enjoyed similar increases; academic libraries are purchasing fewer books and journals.
- Some journal publishers are aggregating or "bundling" electronic content, offering libraries packages of journals with strong economic inducements to buy the package over selecting individual titles.
- At research institutions around the world, scholarly work is submitted to commercial publishers only to be bought back by libraries at those same institutions at immense costs.

# Alternative Models Have Emerged for Disseminating Scholarship

- New ways of disseminating scholarly information are emerging. Internet technologies and new business models could increase the reach of scholarly publications.
- Open Access (OA) refers to scholarly literature that is online and freely available on the Internet and offers generous rights for educational use.
- OA publishing includes peer-reviewed literature as well as author pre- and post-prints and other materials placed in digital repositories.

# Alternative Models Have Emerged for Disseminating Scholarship

- A well-known mandate requiring open access publishing is the NIH Public Access Policy, which ensures that the public has access to the published results of NIH funded research.
- Several universities (Harvard, MIT, Duke, Princeton and Kansas among others) have passed institutional open access mandates that require all faculty journal articles to be deposited in their institutional repository unless a waiver is sought.

**So, We Have Some Tensions**

# Tensions

- As a practice, universities assess researchers for tenure and promotion (publish or perish) according to the number of their publications. Frequent publishing helps to establish one's reputation in a discipline. Despite growing criticism of this principle, it remains a major criterion in the assessment of researchers.
- As the capability to publish journals by almost anyone has increased because of technologies, we have seen explosive growth in the number of publications.
- Another assessment factor is the question of how often a researcher's publication is cited by fellow researchers. Citation databases keep track of the number of times a work is cited and by who. There is also considerable criticism of this type of assessment system.
- As of now, the systems of peer review and quantity assessment remain essential in the scholarly publishing process.

# Tensions

- Copyright is also an issue as scholars relinquish control of their own work by signing over intellectual property rights.
- The cost of journals are increasingly outpacing library budgets and limiting access to research.
- Dissatisfaction with the existing scholarly communication system has led to the development of new publishing models, from publishing in open access journals to depositing their work in an institutional repository.
- Will publication in an open access journal be valued less by tenure review boards than publication in a traditional print journal?

# An Unfortunate Outcome of All of These Tensions

- A rise in predatory publishers

# Open Access Publishing

# What is Open Access Publishing?

- Generally, an open access publication is a publication that provides immediately free online access to all users worldwide. There are exceptions such as two-year rolling walls (AKA, embargos).
- There are thousands of journal publications that fit this definition.
- Open access holds the promise of making scholarly articles freely available to everyone, regardless of affiliation, on the internet, increasing dissemination.
  - Articles can be cited sooner

# How Does OA Work?

- Digital access is free to users with the cost being borne/subsidized by authors, their sponsors, the publishing society, or even the library.
- Peer review and proper attribution of authorship can be unchanged.
- A variety of income models are currently in use to support open-access journals.

# Resistance to OA? Sure .....

- Bowing to some of the pressures of open access publishing, certain publishers have made some of their journal content free and open while shielding other articles behind the subscription fees (usually the author has the choice to pay for his/her article to be OA).
- While having access to some information is better than nothing, this model is a complex one to manage.
- It is a challenge to know what is free and what is not, and “how” can it be free.

# Examples

- Publishers with paid options for open access can be found on [SHERPA's](#) website.
- Some journals are becoming Open Access after an embargo of 6-24 months. These journals generally do not have author submission charges and are instead funded by the subscription for the most recent issues. These are not fully open access titles, but the less current content becomes freely available.

# HighWire Press

- is a division of the Stanford University Libraries, which produces the online versions of high-impact, peer-reviewed journals and other scholarly content.
- HighWire partners with influential scholarly societies, university presses and publishers to create a collection of the finest, fully searchable research and clinical literature online.
- Many of their titles are freely available after an embargo period. Many titles are also free to developing economies.

# Public Library of Science (PLOS)

- PLOS is a nonprofit organization of scientists and physicians committed to making the world's scientific and medical literature a freely available public resource.
- PLOS has chosen to apply the less-restrictive Creative Commons Attribution License (CCAL) to all works they publish.

# PeerJ

- PeerJ is an Open Access publisher in the biological and medical sciences that offers rapid peer-reviewed publication in a range of subject areas.
- Rather than charging publication fees, PeerJ operates with a membership model, where authors can pay a one-time fee to publish for life.
- Membership does not guarantee publication, but offers a benefits such as a PrePrint server for working papers and a network of other scholars.

# eLife

- eLife is an open access publishing venue for scholars in the life sciences.
- eLife also allows researchers to submit supplemental data to help advance the ideas and findings reported in the research.

# BioMed Central

- BioMed Central is an STM publisher, whose articles are made freely and permanently accessible online immediately upon publication.
- Publishing costs are covered with article processing charges.

# Directory of Open Access Journals (DOAJ)

- [DOAJ](#) is an online directory that indexes and provides access to quality open access, peer-reviewed journals.

# Ways to Measure Quality of Outputs

# Impact Factors of an Academic Journal

- The impact factor of a journal measures how often, on average, an article in a journal has been cited during a particular year.
- It is frequently used as a proxy for the relative importance of a journal within its field.
  - From the impact factor, you can gauge how important a journal is in comparison to other journals in the same discipline.
  - Journals with higher impact factors deemed to be more important than those with lower ones.

# Impact Factor Computation Method

- The impact factor of a journal for a specific year is calculated by the number of times references have been made to articles in that journal over the past two years, divided by the total number of articles in that journal during this two-year period.
- The greater the frequency of references to a journal, the higher the impact factor is and the greater the importance that is attached to that journal.

# Example of Impact Factor

- By way of example, we can mention the Lancet, a medical journal:
- In the Lancet, a total of 1,020 articles was published during 2002 and 2003.
- In 2004, these 1,020 articles were cited 22,147 times.
- The 2004 impact factor for the Lancet was therefore  $22147 / 1020 = 21.713$ .
- To draw a comparison: the impact factor of another medical journal like the British Medical Journal is 7.038.
- Does that make Lancet 3 times better than BMJ? Nah. Just cited 3 times more often.

# Times Author's Article Cited

- the relative number of citations an individual article receives is better viewed as citation impact
- use the Journal Citation Reports to locate impact factors

# H-Index, Sometimes Called the Hirsch Index or Hirsch Number (2005)

- The h-index is an index that attempts to measure both the productivity and citation impact of the published body of work of a scientist or scholar.
- The index is based on the set of the scientist's most cited papers and the number of citations that they have received in other publications.
- The index can also be applied to the productivity and impact of a scholarly journal as well as a group of scientists, such as a department or university or country.
- Subscription-based databases such as Scopus and the Web of Knowledge provide automated calculators.

# i-10 Index (2011)

- is a measure developed by Google Scholar
- It is the number of academic publications an author has written that has at least ten citations from others.

# Altmetrics (2010)

- Altmetrics are a very broad group of metrics, capturing various parts of impact a paper or work can have.
- In scholarly and scientific publishing, altmetrics are non-traditional metrics proposed as an alternative to more traditional citation impact metrics, such as impact factor and h-index.
- is a generalization of article level metrics, and has its roots in the #altmetrics hashtag.
- Although altmetrics are often thought of as metrics about articles, they can be applied to people, journals, books, data sets, presentations, videos, source code repositories, web pages, etc.

# Altmetrics (2010)

- Altmetrics cover not just citation counts, but also other aspects of the impact of a work, such as how many data and knowledge bases refer to it, article views, downloads, or mentions in social media and news media.
  - Viewed - HTML views and PDF downloads
  - Discussed - journal comments, science blogs, Wikipedia, Twitter, Facebook and other social media
  - Saved - Mendeley, CiteULike and other social bookmarks
  - Cited - citations in the scholarly literature, tracked by Web of Science, Scopus, CrossRef and others
  - Recommended - for example used by F1000Prime [Faculty of 1000 Prime from which members (mostly biology and medicine) recommends articles].

# Eigenfactor Score (measure the importance of a journal to the scientific community)

- Journals are rated according to the number of incoming citations, with citations from highly ranked journals weighted to make a larger contribution to the Eigenfactor than those from poorly ranked journals.
- As a measure of importance, the Eigenfactor score scales with the total impact of a journal. All else equal, journals generating higher impact to the field have larger Eigenfactor scores.
- <http://eigenfactor.org/>
  - Eigenfactor also displays the journal's Article Influence score which is a measure of the average influence of each of its articles over the first five years after publication.
  - based on the ISI Web of Science database

# SCImago Journal Rank (SJR indicator)

- is a measure of scientific influence of scholarly journals that accounts for both the number of citations received by a journal and the importance or prestige of the journals where such citations come from.
- is a variant of the eigenvector centrality measure used in network theory. Such measures establish the importance of a node in a network based on the principle that connections to high-scoring nodes contribute more to the score of the node.

# SCImago Journal Rank (SJR indicator)

- inspired by the PageRank algorithm (used by Google to rank web pages), has been developed to be used in extremely large and heterogeneous journal citation networks. It is a size-independent indicator and its values order journals by their "average prestige per article" and can be used for journal comparisons in science evaluation processes.
- is a free journal metric which uses an algorithm similar to PageRank and provides an alternative to the impact factor (IF), which is based on data from the Science Citation Index.
- based on the Scopus database

# Examples

- Impact factors of journals published by [Nature Publishing Group](http://www.nature.com/npg_/company_info/impact_factors.html)  
[http://www.nature.com/npg\\_/company\\_info/impact\\_factors.html](http://www.nature.com/npg_/company_info/impact_factors.html)
- Journal Citations Reports -- not at UWF
  - UWF has [Web of Science](http://atoz.ebsco.com/Link/Provider/15184?PackageId=3062&UrlSource=ATOZ&Usage=ATOZ)  
[http://atoz.ebsco.com/Link/Provider/15184?PackageId=3062&UrlSource=ATOZ  
&Usage=ATOZ](http://atoz.ebsco.com/Link/Provider/15184?PackageId=3062&UrlSource=ATOZ&Usage=ATOZ)
- UWF LibGuide on Citation Searching  
<http://libguides.uwf.edu/content.php?pid=307221&sid=2516008>

However .....

# Tensions Created via Open Access

- There is the pressure to publish; there is a growing acceptance for paying to publish in a peer-reviewed OA journal.
- There are thousands of journals ... who can keep track of them all?
- Therefore, the rise of the predatory journal
  - There are always scammers out there

# Predatory Journals

- Predatory open access publishing describes an exploitative open-access publishing business model that involves charging publication fees to authors without providing the editorial and publishing services associated with legitimate journals (open access or not).
- Beall's List is the most often-cited list of predatory journals

# Beall's List

- This is a list of questionable, scholarly open-access publishers assembled by Jeffrey Beall.  
<http://scholarlyoa.com/publishers/>
- Criteria of what is a predatory journal is at <http://scholarlyoa.files.wordpress.com/2012/11/criteria-2012-2.pdf>
  - will assist you in identifying legit vs. questionable/predatory publishers and journals.
- Recommend that scholars read the available reviews, assessments and descriptions provided here, and then decide for themselves whether they want to submit articles, serve as editors or on editorial boards.

# Example

- the email I received from SOP
- then go to Ulrich

# Good Can Also Turn Bad

- A respected Canadian medical journal, *Experimental & Clinical Cardiology*, that was sold to offshore owners is now printing scientific junk for hire, but still trading on its original good name.
- The journal's new owners say they are in Switzerland.
- And for \$1,200 U.S. they'll print anything — even a garbled blend of fake cardiology, Latin grammar and missing graphs.

# Good Can Also Turn Bad

- the Ottawa Citizen tested this particular journal by sending in “an outrageously bad manuscript” that was a “hodgepodge of medical-sounding words adding up to nothing: “VEGF proliferation in cardiac cells contributes to vascular declension.”
- Experimental & Clinical Cardiology published 142 articles in July 2014 alone, worth a total of \$170,000 U.S. for one month.
- It operates online only and doesn't bother with editing, so it has almost no costs.

So, Be Careful Out There .....