



Scholarly Publishing

A Short Introduction

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Why Publish?

“Fame”

Recognition by your peers, personal prestige,
career advancement

“Fortune”

Promotions, research funding/grants

Responsibility

To society, contribution to science,
taxpayer-funded research

Sharing results - Making your research/findings public

Free exchange of information, feedback from other scientists

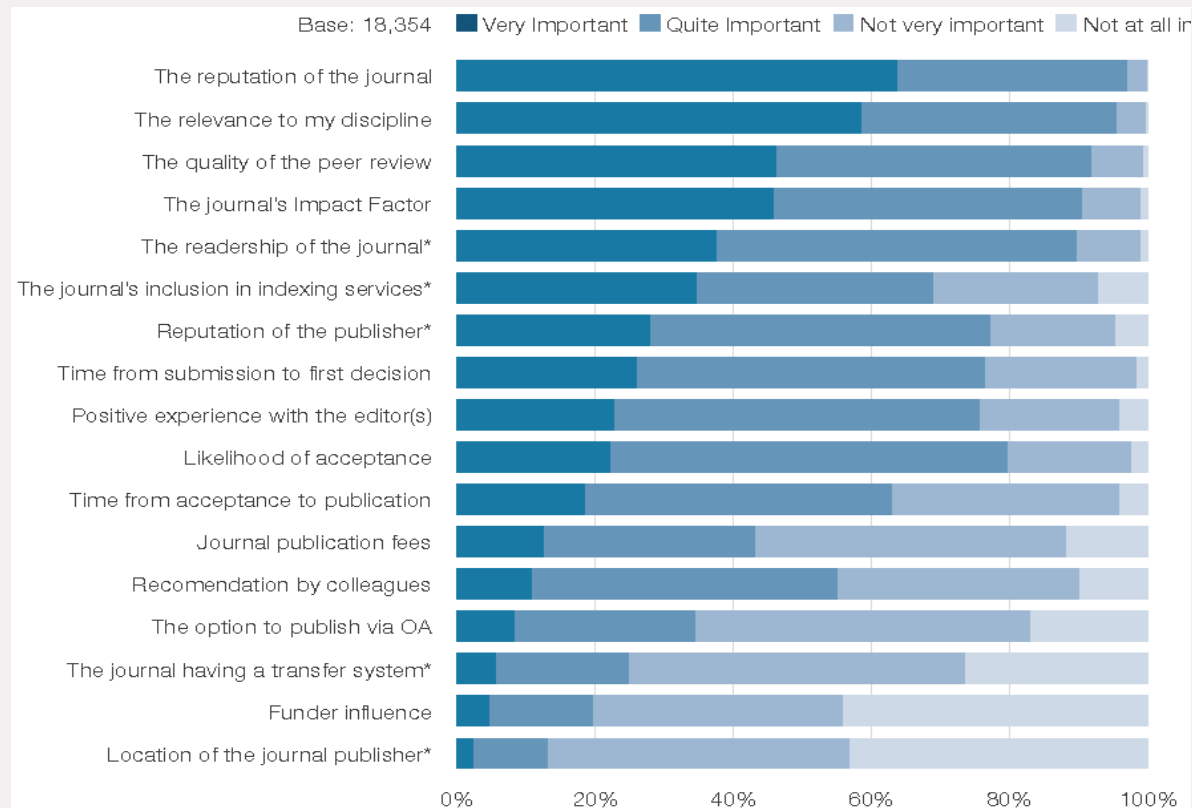


How do I know a journal is any good?

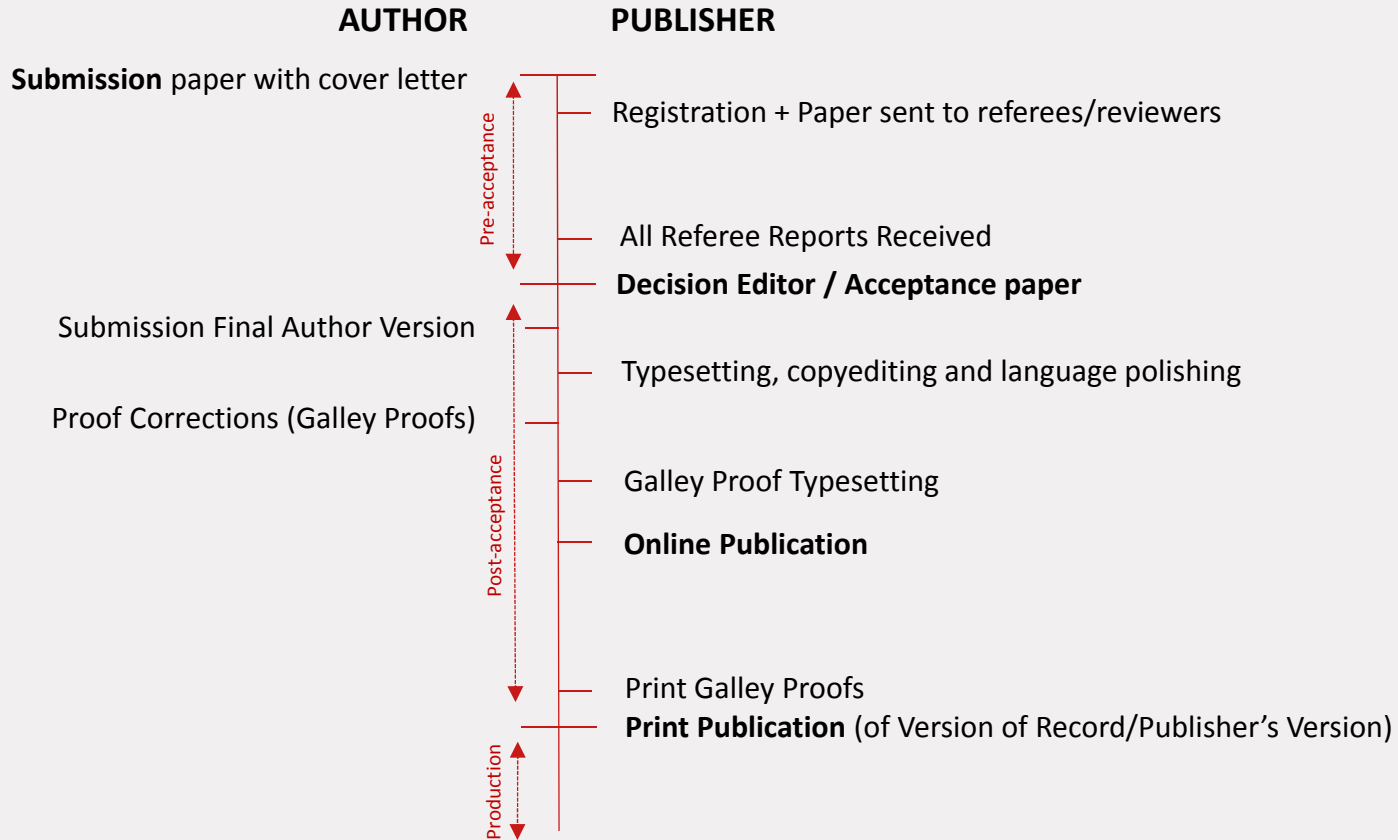
- What is the scope of the journal ?
- Which scientific community does the journal “serve”?
- Who reads and cites which journals in my field?
- Who is on the editorial board?
- Practical considerations such as handling of the peer-review process, quality of the referee reports, efficiency and speed of the publication process, publication costs, etc.
- Metrics such as impact factor, citations, etc.
- Reputation Publisher – Is the journal indexed in Scopus, Web of Science, SciFinder and other databases with quality control standards?

Nature Publishing Group Survey

Factors driving choice where to submit



Publishing a paper – Basic sequence of events



The Peer-Review Process



Who is involved?

- **Author**
- **Editor:** fulltime professional or scientist/expert
- **Referee/reviewer:** scientists, experts -> traditionally anonymous, recently also Open Peer Review
- **Journal/publisher:** procedures, costs, rights/ownership

Internal Editorial Office Structure

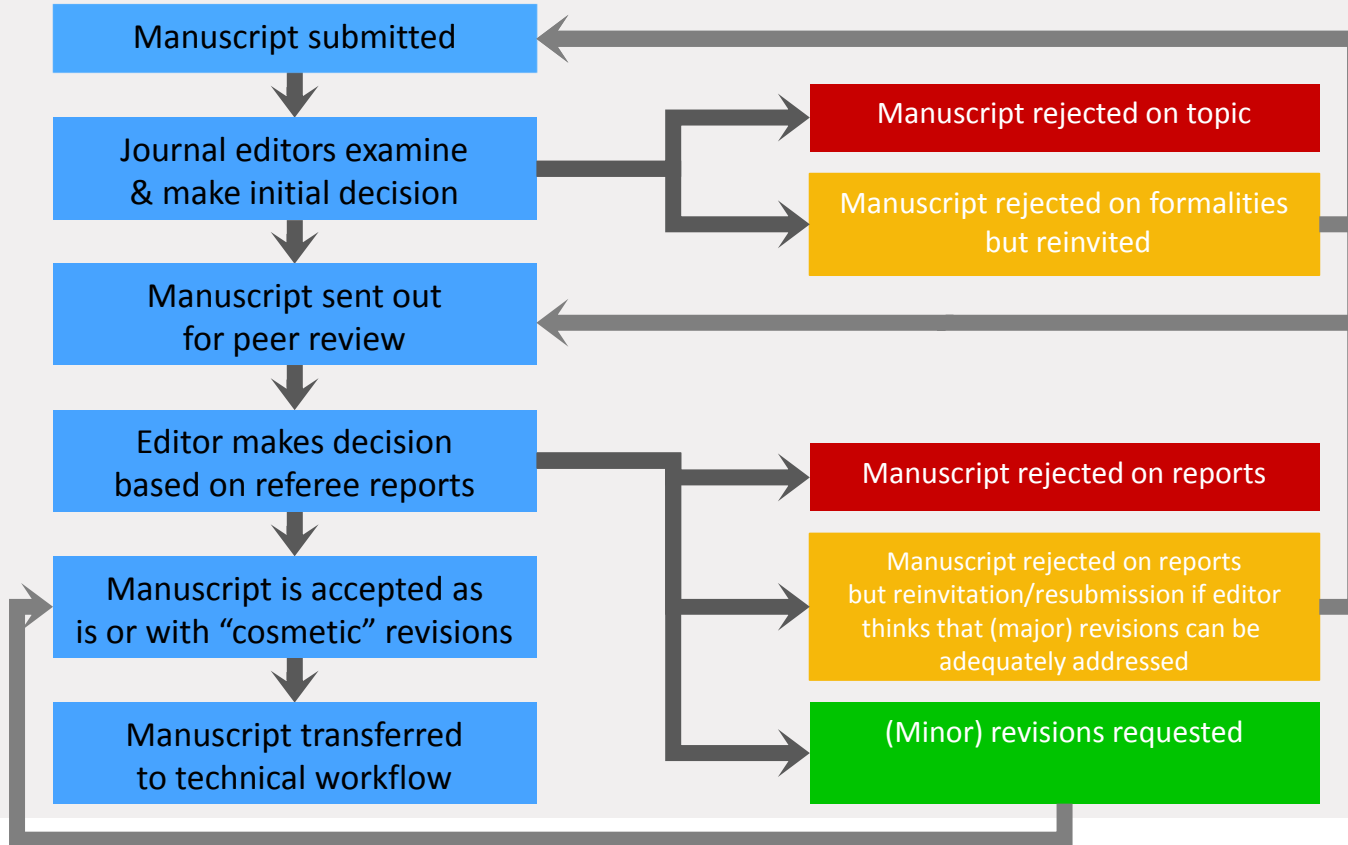


External Editorial Office Structure

Editor-in-Chief (s) -> Professors, Experts, Specialists, Topical Editors, Regional Representatives



Peer Review – The Editorial Workflow



What Do Editors and Referees Check?

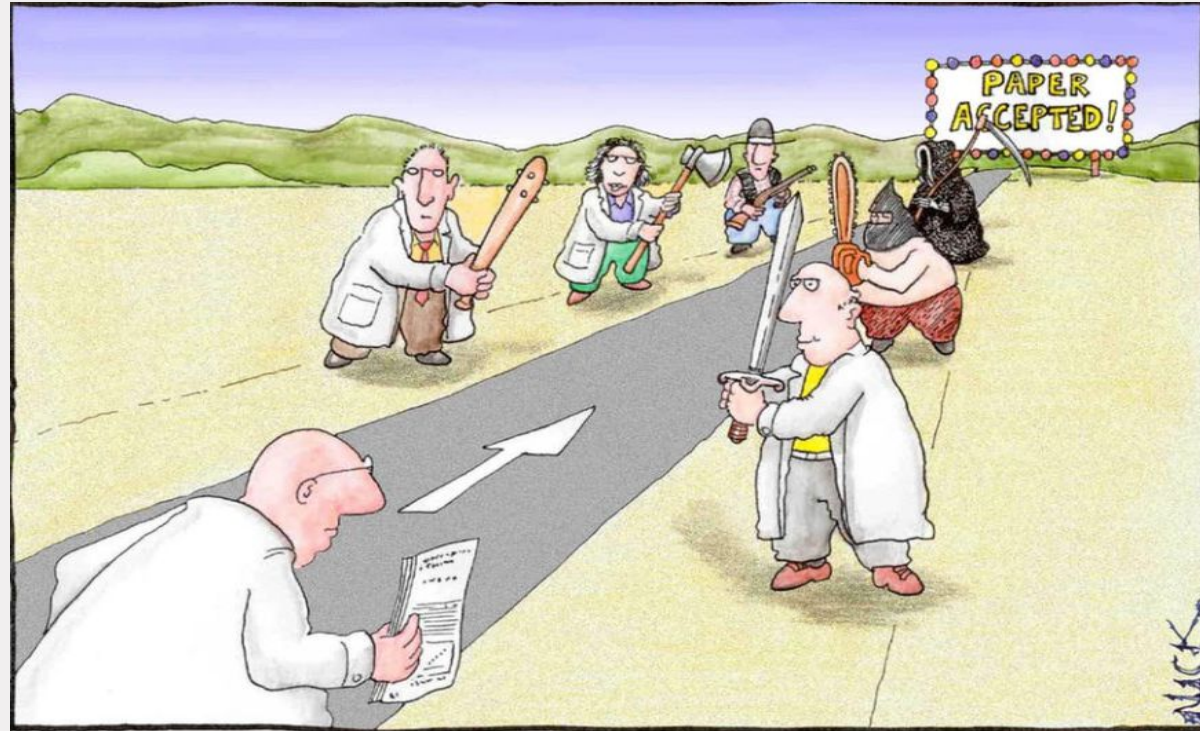
- ✓ **Suitability** – Is this the right journal for this work?
- ✓ **Innovation/Novelty/Relevance** – What does this manuscript offer that I can't find elsewhere?
- ✓ **Hypothesis** – Is there a good reason for doing this work? What question does it answer?
- ✓ **Evidence** – Do the data and the explanation support the conclusions?
- ✓ **Writing** – Is the manuscript well written? Do I have to work hard to understand the main results? -> Language Rating!

Which parts of the article will the editor look at first?

- Cover Letter
- Title
- Abstract
- Keywords
- Conclusions
- References
- Figures/Graphs

and if lucky.....

- Introduction
- First 2-3 Paragraphs



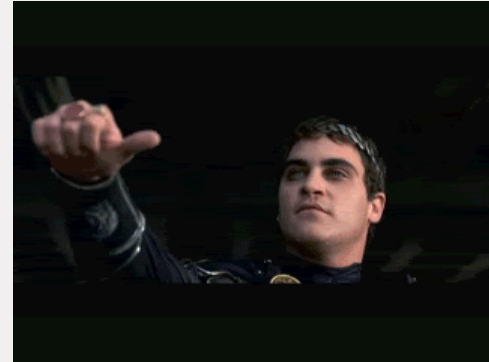
How Does The Editor Select Referees?

- Suggestions from submitting author
- References
- In-House Database
- Editor's Experience
- Suggestions from other Referees
- Suggestions from Board Members (very rare) -> Disputes

Who Accepts/Rejects the Paper?

Referee reads and judges the article,
sends his recommendations to the editor!

Editor evaluates reports and decides!



Why Was My Paper Rejected?

Direct (“in-house”, “on topic”)

- Outside scope journal
- Wrong format
- Novelty unclear
- Impact/importance unclear
- Interest unclear
- ...

On reports

- Technical/scientific issues
- Results less important/interesting
- Conclusions do not support the data
- Motivation unclear/unimportant
- Ethical questions
- Unclear presentation

- Bad luck !!



Rejection? Don't do this!

- Don't take rejections personally
- Don't write (angry) e-mails shortly after receiving an (unfair) rejection
- Don't speculate – stick with the facts!



Be Nice to the Editor

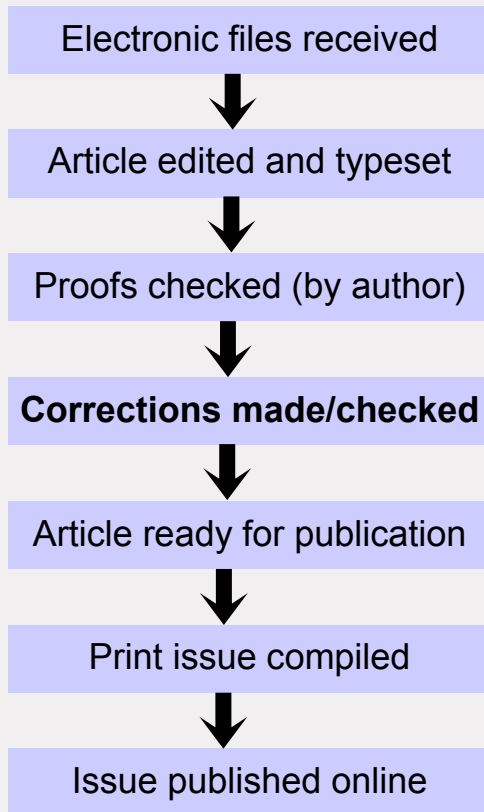
Author 1 and Nobel Prize Winner: “I have grown used to my papers looking like a dog’s breakfast after a Wiley editor has ‘edited’ them”

Author 2: “.....you are a racist slavedriver....”

Author 3 : “you will all burn in hell”



Paper Accepted – The Technical Editing Workflow



Article published online in
advance of print publication

Issue “printed & dispatched” to customers

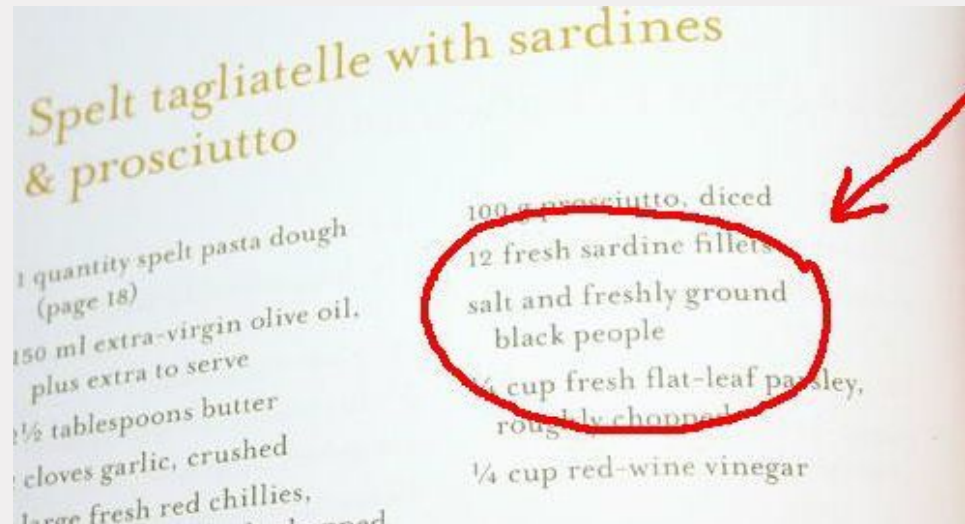
Take your proof-reading seriously!



Kyle Hill
@Sci_Phile

Proofread your papers
onlinelibrary.wiley.com/doi/10.1111/et... HT
[@WhySharksMatter](https://twitter.com/WhySharksMatter)
pic.twitter.com/GBA2WWoKoE

Although association preferences documented in our study theoretically could be a consequence of either mating or shoaling preferences in the different female groups investigated (should we cite the crappy Gabor paper here?), shoaling preferences are unlikely drivers of the documented patterns both because of evidence from previous research and inconsistencies with *a priori* predictions. Our methods closely followed those of published mate choice experiments in this system (Tobler et al. 2009a,b; Plath et al. 2013),





The Role of Scientific Journals

Historically

1. Registration identification
2. Peer Review validation, feedback, content acquisition
3. Dissemination preparation, distribution, marketing
4. Archiving permanent storage/availability & preservation

Recently

5. Discoverability searchability, findability & navigation

Challenges/Opportunities

- Unbundling and fragmentation of functions
- (Disruptive) Innovation
- Shift to publication and scholarly content services across the entire research lifecycle



Who adds value to the publishing process?

Authors = Scientists

- provide free content
- content validation (peer review)
- copyright transfer

Publisher

- content acquisition
- registration
- peer review support
- typesetting / copyediting
- web publishing / digital archiving / printing
- marketing, distribution, branding
- organizing communities through journal portfolios



Copyright and Copyright Transfer Agreement

- **If no other agreements are made, the copyright of a paper that only you have written belongs to you** (in the Netherlands), not to your university, not to your supervisor.
- Be aware that you may have signed an agreement or contract (with your supervisor, university, funding body, or in the future your employer) in which specific agreements were made
- Publishing papers/scholarly books – most scholarly publishers will demand a **copyright transfer agreement (CTA)**
- **CTAs often significantly restrict your rights** to distribute, copy, etc. any version of the article.
- Copyright is **national law**; although international copyright treaties exist (such as the Berne convention), there are sometimes significant differences between regions/countries (e.g., USA versus Europe)

Copyright Transfer Agreement

What are you allowed to do with the content of your paper when you or one of the co-authors signed a CTA with a publisher:

Am I allowed to.....?

- share or re-publish the paper, for example on my website, blog, [ResearchGate](#) or [institutional repository](#)
- make or share paper or digital copies of it, for example for colleagues or students
- re-use (parts of) it for another publication, for example your dissertation?
- use the images of my research paper in a review paper that I am going to write

Depends on the [publisher](#)

Depends on the version of the paper



How do universities get access to journals?

- Universities traditionally obtain access through **subscriptions** to journals. Journals are sold as **package deals** of tens or hundreds of journals; package deals are set up in such a way that **renting** individual journal titles is very costly or even impossible
- Universities negotiate so-called **big deals**, either just one university or coalitions of universities
- Detailed and often restrictive agreements with regard to **copyright**
- Market has oligarchic characteristics and is highly inelastic – researchers cannot easily stop publishing in (prestigious) journals, **price sensitivity is low**
- Large historic backlogs give publishers substantive negotiating power



Publishing – A Short History

1323 Compagnie du Gai Sçavoir, the oldest learned society on record, is founded in Toulouse

1660 Royal Society of London

1665 *Basic form of peer review* introduced

1731 *Medical Essays and Observations* = first fully peer-reviewed journal, Royal Society of Edinburgh

1841 Chemical Society/Royal Society of Chemistry

1848 American Association for the Advancement of Science is founded

1869 The journal *Nature* publishes first issue

1876 American Chemical Society is founded

1880 The journal *Science* publishes first issue

1899 American Physical Society

Publishing – 1950-2000

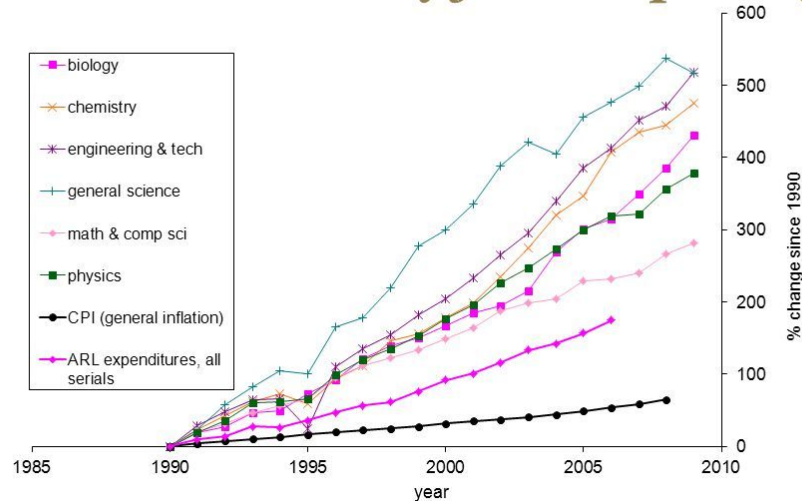
- Subscription-based business model – content behind paywall
- Commercial publishers enter journals market
- Introduction of the concept “top quality” journals; adoption JIF
- Distribution monopoly (access through print only)
- Market fairly static – little/moderate innovation and high price inelasticity

Publishing 1990-2010 – Peak in Serials Crisis



University of Pittsburgh

Crisis in scholarly journal pricing



Bill Hooker, April 2009. Data sources: Library Journal Annual Serials Price Surveys, Association of Research Libraries, US Dept. of Labor

- **Serials Crisis:** skyrocketing subscription costs
- Rebellion: what value do publishers really add?
- Journals become predominantly digital

1990: *Postmodern Culture* is the first online-only journal with no printed version available

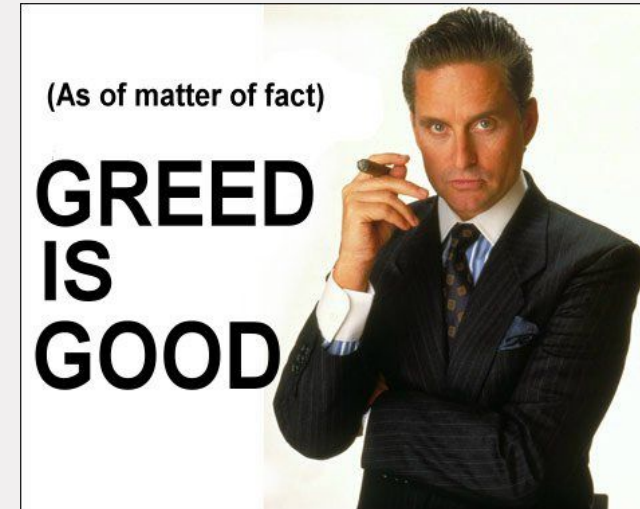
1991: arXiv, the science pre-print server, is launched

2003: The Public Library of Science (PLOS) is founded

2006: *PLOS ONE*, first open access megajournal, is published

The Profit Margins Issue...

Industry/Company	Profit Margin 2014
Oil/gas	1-10%
Car Industry	2-10%
Food Industry	10%
Apple	20%
Vodafone	22%
Large Banks/Financial Institutions	20-30%
Pharma	20-40%
Pfizer	42%
Elsevier/Wiley/Springer/T&F	30-45%
Most Society + Small Publishers	-10-15%
Industry Average	15%



Publishing 2010-now

- Print has become niche/obsolete, but publisher infrastructure and mindset is still (partly) based on old “paper print” business models
- **2012:** First open access journals with new forms of peer review, new business models, and new funding sources
- Funders, activist scientists and policy makers demand new business models in publishing and different reward systems in science -> **open access / open science**



