You Get What You Pay For – In Paper Reviewing Just Like Everywhere Else

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Let’s Review the Basics

• Professors publish research (mostly) because it helps them get...
• lifetime employment (tenure) with salary
• promotion (higher prestige and higher salary)
• entries on their annual report and resume (= additional merit pay or salary raises)
• fame
• good feelings about contributing to humanity.
What are the Problems?

- **Problem 1**: Some reviews are *objectively* not fair, not to the point, simply under-informed and *reviewers even contradict each other.*
- **Problem 2**: Reviewers want to impose their style on authors. *It’s my way or the highway.*
- **Problem 3**: More and more papers get published. Reviewers *don’t notice problems* with papers. *Bad papers get published.*
- There has been an increase in *retractions* in the top journals in recent years.
Real Example of Reviewer Contradiction. Reviewer 1. 1/2016. Copy and Paste

… the paper suffers from a number of weaknesses, not least of which is the lack of clear definition of what might constitute errors, ambiguities or misalignments between ontologies of different types, how these are related to semantic types and their definitions for the purposes of QA, and what are the actual QA strategies being proposed. It should not be necessary for readers to go through X Y's dissertation to guess at which types of criteria are used to define errors.
Reviewer 2. Same Paper. Copy and Paste from the Review

A huge concern is the clarify and the length of the paper. The paper is quite long.
Problem 2: “My Way” says the Reviewer

• Copy Paste From Reviewer: Latin abbreviations are used freely in the middle of sentences, when ideally they ought to be reserved for use at the beginning of parenthetical expressions.

• Copy Paste From


Finally, I tend to reserve i.e. and e.g. to introduce parenthetical statements, but it's also perfectly fine to use i.e. and e.g. in other ways.
Problem 3: More and More Papers Get Published

Growth of articles published in peer-reviewed journals

Rebased

Number of articles in 2008

- China: 112,318
- Brazil: 30,021
- India: 38,366
- US: 332,916
- Russia: 27,605

Sources: Thomson Reuters, Web Science Database
Problem 3 Corollary: More and more *Bad* Papers Get Published


Highly Cited Papers that were Retracted from Top Journals


• Why did the Reviewers not Notice Problems before the papers were published?
Just for Fun… Citations of those 10 papers AFTER Retraction

- 868, 382, 103, 228, 46, 18, 106, 299, 44, 109
- Did the reviewers of the *citing papers* notice that the papers were citing retracted papers?
Let’s Talk about Reward Structures…
Grants

- A professor writes a proposal to a federal funding agency such as NSF, NIH.
- These proposals are peer reviewed.
- *IFFFF* the proposal is accepted (funded) then the professor [typically] gets:
  - Money for a PHD student.
  - Summer salary
  - Conference travel and/or equipment money
  - Rewards from the university (sometimes money, honor, maybe tenure, promotion)
Journal Papers & Conference Papers

- *IFFFF* the paper gets accepted then the professor gets:
- One more entry in her/his resume
- Rewards from the university (usually honor and, if relevant: tenure and promotion).
- Typically a single paper does little though. Many papers are needed.
- A small step toward fame.
Reviewing a Journal Paper

• *IFFFF* a professor reviews a journal paper he gets:
• Pretty much … *nothing*.
• At best, early knowledge of other people’s research.
• And a line in her/his resume as reviewer that is ignored by every tenure committee I know. (I know few.)
A Rational Professor

- A rational professor who has
  - a grant deadline,
  - a conference paper deadline or
  - great results for a journal paper and
  - a paper review deadline on the same day
- will schedule her/his oh so limited time …
- … in what way?
- Any guesses?
- With less time the quality of reviews suffers.
"WE HAVE MET THE ENEMY AND HE IS US."

...POGO
What is the Solution? Part 1

• **Pay Reviewers**
• This will also make them more responsible.
• **Pay journal editors!**
• Because they are professors too.
• They have even more work.
Paying Reviewers Needs to Become a Part of Academic Culture

- No claim is made that this is an entirely new idea.
- Some organizations have tried paying reviewers.
- For example, Collabra [http://www.collabra.org/about/our-model/](http://www.collabra.org/about/our-model/) has tried it.
- But it is not done by most journals.
Collabra Payment Model

Collabra is Limited to Psychology
Receive earnings electronically as cash
Why should we Pay for Something that was Always Free? **Why Now?**

- Science is not the *Gentlemen’s Club* it used to be.
- Now authors/professors are *evaluated* with Key Performance Indicators (KPIs), Citation Indices. H-Index. Google I-10index …
- When everything is measured and *managed* and when measures are used for reward (and punishment) then every desirable behavior needs to be rewarded.
- Rewarded with the same “coin.”
There are Precedents of Paying for what Used to be Free before

- Television used to be free-to-air.
- Most people are willing to pay for Cable TV or Satellite Dish TV.
- Or for Internet TV.
- Car radio is still free.
- Yet I get advertisements for Satellite Radio every month.
- People are willing to Pay for Better Quality
For Followers of Malcolm Gladwell

• There are more and more new journals.
• High quality journals will need to differentiate themselves.
• Paying reviewers will be one differentiator.
• Once a few good journals start paying, we will reach a tipping point.
• Then it will be pay or go out of business.
• All “good reviewers” will only work for pay.
What is the Solution? Part 2

• Allow authors to submit expert testimony refuting statements of journal reviewers.
• Authors should be sure the editor does not just forward their refutations to the reviewers.
• Journals should not use and not pay reviewers who have been refuted repeatedly.
• Universities need to give professors credit for doing reviews in Tenure Evaluations.
• 6 paid journal reviews = 1 journal publication.
• (We can argue about the “six.”)
Conclusions

• Researchers have no time to do reviews.
• Quality of publications is suffering.
• More and more retractions.
• Solution: Pay reviewers.
• Allow authors to submit expert testimony.
• Ensure that refutations are not forwarded.
• Journals should stop using and paying bad reviewers.
• Consider reviews as serious tenure items.
Thank You

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Aren’t People Going to Game the System?

- Yes
- So what?
- There is no perfect system.
- We need to replace the current system with a better system.
- Remember, some people rejected the idea of the World-Wide Web? Because there would be dead links. Yes there are dead links. So what?