

Open Access Culture Change

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<http://www.lms.ac.uk/publications/journals#jcm>

Committee on Electronic Information and Communication

International Mathematical Union

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Origin Ginsparg, 1991

See <http://people.ccmr.cornell.edu/~ginsparg/blurb/pg96unesco.html>

1999 “Paper journals are a testament to the dinosaur mentality of tenure committees”

2001 The concept of “open access” (as it became called) was endorsed by the International Mathematical Union: http://www.mathunion.org/fileadmin/CEIC/Publications/Call_to_All_Mathematicians_to_Make_Publications_Electronically_Available.pdf

- No reputable mathematics journal does not support green OA (at least)
- While estimates vary, consensus is that over 50% of current “published” mathematics research is Open Access



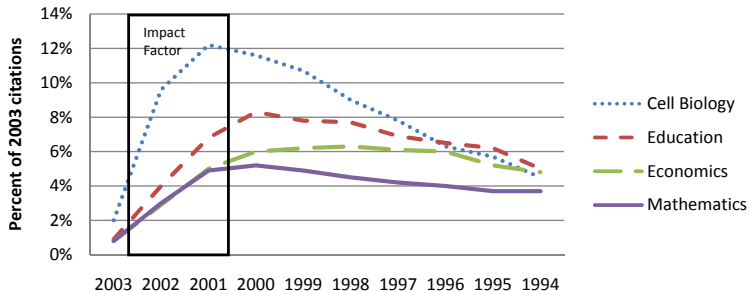
The problem lies in formulating the question — what is “published”, what is “mathematics” and what is “research”.

[AET08] states “Relying on statistics is not more accurate when the statistics are improperly used”.

It also makes the fundamental point “Research usually has multiple goals and it is therefore reasonable that its value must be judged by multiple criteria”

Proc. AMS has 0.434 citations/article and *Trans. AMS* has 0.846 (within the impact factor range) So a *Trans AMS* article is better? The probability that a random *Proc.* article has at least as many citations as a random *Trans.* article is 62%: i.e. the obvious deduction is wrong.

Citation Curves



A graph showing the age of citations from articles published in 2003 covering four different fields. Citations to article published in 2001-2002 are those contributing to the impact factor; all other citations are irrelevant to the impact factor. Data from Thomson Scientific.

Impact Factor is like Libor: once it's worth money, people will manipulate it. It is often thought that these are trivial, and we laugh at "to be accepted in this journal, your paper must reference at least two other papers in the [name deleted]", but it can be serious.

El Naschie 's self-citations made *Chaos, Solitons and Fractals* into Number 2 in ISI's "Mathematics, Interdisciplinary Applications" category.

International Journal of Nonlinear Science and Numerical Simulation gamed itself, via *Journal of Physics: Conference Series*, into the "highest impact" journal in Applied Mathematics. No member of my committee had ever heard of this journal until our attention was drawn to it. [Arn09]

International Council of Science Unions is debating this issue at the moment.

Note that this is important because of the highly centralised of the French academic system.

“L'évaluation doit porter sur les articles et non sur les revues” :

Clause 1 of recommendation 1. [Aca11]

My translation: *Evaluation should be based on the articles and not on the journals*

Personal Observations

- The cost of running *any* sort of journal has plummeted.
- This is often confused with the OA movement
- The fact that two things happend at the same time does not mean that they are the same thing!
- Physical page limits have acted as an economic filter in the past, but this has essentially disappeared
- The fact that three things happend at the same time does not mean that they are the same thing!
- Academics are not getting less busy, and peer review is under pressure everywhere
- There is a lot going on, and the publishing model is probably in greater flux at any time than Gutenberg/Caxton

-  Académie Des Sciences Institut de France (ed. J.-F. Bach).
Du bon usage de la bibliométrie pour l'évaluation individuelle
des chercheurs: Rapport remis le 17 janvier 2011 à Madame la
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<http://hal.archives-ouvertes.fr/hal-00604117>, 2011.
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[http://www.mathunion.org/fileadmin/IMU/Report/
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-  D.N. Arnold.
Integrity Under Attack: The State of Scholarly Publishing.
SIAM Review 12, 42, 2009.