

Minutes of CEIC meeting

Minneapolis

13–14 February 2010

Present: **JB** John Ball (Chair) ball@maths.ox.ac.uk

OC Olga Caprotti Olga.Caprotti@helsinki.fi

JHD James Davenport (Notes) J.H.Davenport@bath.ac.uk

MD Mike Doob mdoob@ccu.umanitoba.ca

CH Carol Hutchins carol.hutchins@nyu.edu

PO Peter Olver olver@math.umn.edu

In Attendance: **DA** Doug Arnold — arnold@umn.edu

KF Kris Fowler — Mathematics Librarian at Minnesota¹

Apologies: **UR** Ulf Rehmann rehmann@math.uni-bielefeld.de

1. Round Table at ICM

The title for the panel is *Use of Metrics for Evaluating Research*. The chair is Laszlo Lovász, with Antonio de la Peña (Mexico), Doug Arnold, Malcolm MacCallum (U.K.). JB quoted various instances of use/abuse of metrics, and DA stated that “metrics are distorting science”. DA had various questions.

- (a) Is the discussion limited to bibliometrics, or should wider issues, e.g. re-publication, be addressed? The consensus was for limiting the scope.
- (b) How do we deal with the fact that some countries have different cultural norms in terms of these issues?
- (c) How do smaller institutions, developing countries etc. assess quality *if* bibliometrics are not the right way? Large organisations, e.g. Oxford, Minnesota, have “local experts”: smaller ones may have little choice. Indeed it was noted that Australia’s ERA has produced a categorisation of journals: http://www.arc.gov.au/era/key_docs10.htm. JHD observed that, according to this model citation data are not used, exceptionally, for *pure* mathematics.

¹Morning of 13th only.

DA presented a case study on Impact Factor Manipulation for journals in mathematics. It was clear to the Committee from this case study that:

- (a) Impact Factor manipulation is not just a theoretical risk — it does occur, and *in mathematics*;
- (b) This manipulation can have major effects, causing a hitherto-unknown journal to have three times the Impact Factor of recognised world leaders.

It was noted that Google, for example, has a significant team working on detecting and preventing page rank manipulation, but there is no such effort for Impact Factor, even when the manipulations are pretty blatant.

DA pointed out that there *are* a number of good reasons to have a rough idea of the quality of journals:

- (a) Researchers need to have an idea where to submit;
- (b) Readers may need information to help them most valuably invest their time;
- (c) People serving on editorial boards need some form of feedback;
- (d) Libraries need a guide for which journals to subscribe to ;
- (e) *Where* one publishes is a useful factor in evaluation of staff and candidates;
- (f) Many evaluating bodies need a rough guide to quality;.

He therefore proposed the development of an alternative system of rating journals be developed, based on a consensus of expert opinion, rather than bibliometric data, and suggested that IMU and ICIAM (and possibly IMS), which are highly regarded bodies it but not publishers, oversee the process. Without an easy-to-use and accessible alternative, DA argued, the Impact Factor will be used, to the detriment of the mathematical community. He then outlined a process which would lead to a detailed plan for such a rating system, and give the overseeing bodies sufficient information to decide on whether to proceed. He asked:

- What CEIC's rôle might be?
- What could the panel do?
- What could the GA do?
- What could ICIAM do?

JHD asked for a two-dimensional classification, whereby the very good, but specialised, journal, could be recognised. JB was worried about the legal aspects of IMU doing such a classification given the flimsy state of their finances. DA accepted that this worth checking, but refused to be scared by the threat of litigation, and quoted SIAM's example. Macmillan (the publishers of Nature) were sued by ElNaschie, and expect to win that case.

It was noted that the process had to support frequent review of the list, and allow new journals to move up the ranking. The ranking committee has to be renewed fairly frequently. Many of the details still need to be worked out. It was noted that the large publishers have moved to selling journals in big bundles, which means that the Impact Factor's rôle in journal acquisition decisions was less than one might think. JB noted that banding ('A'-'C' or variants), would be dangerous, as the difference between "bottom of the A" and "top of the B" would be unjustifiable.

CEIC would have to discuss how to take these issues forward, but it was clear, not merely that manipulation *could* take place, but that significant manipulation *does* take place.

Round Table Business

JB noted that we would need (short) biographies of the panellists, and said he would ask for them.

JB

A description of the Round Table for the ICM programme was prepared and would be sent to the panellists for comment.

Panel

DA's suggestion

CEIC decided that EC should:

EC

- (a) consider DA's suggestion;
- (b) raise the question of Impact Factor manipulation with ICSU, since this seems to be a widespread concern.²

2. Best Practice Document for Mathematical Journals

CH had circulated *Rights and Responsibilities in ACM Publishing*, recommending that we consider the *structure* of the document.

It was noted that standards, and the extent to which those standards are communicated, vary widely.

Many (but not all) journals allow one to measure turn-round time. This is, of course, a sum of referee time, author time and editorial time, and the Committee observed that, while referee time was *generally* dominant, this was not universal. A case of one year was quoted, but it was noted that this was, while on the high side, not unusual. Another question was the number of referees. Some journals insist on two, some on "two, but one may be the editor". It was noted that the *right* referee is more important, in practice, than the number.

It was noted that SIAM used to get one plagiarism issue every two years, whereas it is now running at a rate of one per month. It *may* be impracticable to deal with them all in as detailed fashion as SIAM did with one recent case.

²Type "Impact Factor Manipulation" into Google Scholar.

JB asked what we (CEIC, IMU) should do that was different from what was already done. DA noted that CH's document had an excellent list of questions that a journal should answer. There is rarely an explicit statement about the correctness obligations imposed on referees.

A draft document was produced, which would be refined and then communicated to the EC for their comments. **EC**

3. Archiving

A subgroup looked at this. A revised report, aimed at the EC Meeting 27–8 February, was circulated. **All→JHD**

4. IMU on the Web

The Committee discussed alternative methods and infrastructure for the dissemination of 'IMU on the Web'. As previously suggested, maybe it should move to being a blog, with the equivalent slot in the newsletter being replaced by a list and a link. JB noted that, while this was probably desirable, it should wait for the establishment of a stable office, and an appropriate Content Management System. **EC**

5. ICSU World Data System

JB had submitted an expression of interest, naming `secretary@mathunion.org` as the contact, and circulated a draft follow-up letter. **All→JB**

6. CEIC Web Pages

UR had communicated that the CEIC web pages *are* now hosted in Berlin. Nevertheless, they are not in a CMS, and are hopelessly out-of-date. It was felt that, while the long-term future of these pages clearly lay with the stable office, a "quick and dirty" update was necessary before the ICM. **JHD/Berlin**

It was noted that the Best Practices series of documents could do with being formalised, and maybe a periodic review process instituted.

7. CEIC Terms of Reference

The CEIC's terms of reference are that "The CEIC's duties include:

- (a) Reporting regularly to the EC, advising it on aspects of IMU operations related to information and communication, including financial implications, and keeping it informed of new developments.
- (b) Reviewing the development of electronic information, communication, publication, and archiving so as to keep the EC abreast of current and emerging issues.

- (c) Advising the EC about potential opportunities to endorse standards ('best practice recommendations.) on issues related to publication and communication, including such matters as the use of software and data repositories.
- (d) Advising the EC about potential opportunities to foster the growth of electronic infrastructure, and selectively creating tools for this purpose (such as the Federated World Directory of Mathematicians or links to other tools)."

It was suggested to recommend changing them as follows:

EC

- (b') Reviewing the development of electronic information, communication, publication, and archiving so as to keep the EC abreast of current and emerging issues. Publicising relevant developments to the wider community via *IMU on the Web* and other methods.
- (d') Advising the EC about potential opportunities to foster the growth of electronic infrastructure, and selectively creating tools for this purpose.

8. **Digital Mathematical Library**

It was noted that the European DML Initiative EuDML got funded by the EU recently: 1.6 million Euro for 3 years: http://www.eudml.eu/w/Main_Page.

9. **Annual Report for IMU Bulletin**

In line with usual practice, the Committee had not formally met in 2009. JB to check the format and scope of this report.

JB

10. **AOB: Author ID**

CH mentioned work by Jim Pitman. It was noted that Nature Publishing Group have pioneered ORCID³: see also www.researcherid.com. JHD noted that *Mathematical Reviews* does a very good job of this *within* the mathematical community.

³<http://orcid.securesites.net>: *Nature* **462**, Issue no. 7275, 17 December 2009, p. 825.