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From the Editors' Desks

Welcome to our new editor

The major news item for this issue is the appointment of our new editor, Dr Armen Yuri Gasparyan (see page 62): he has many ideas for developing the journal and you will find some of these in his editorial (page 30). One first step has been to increase the number of indexing services that list *ESE*, giving the journal greater visibility within the scientific and publishing communities. The full list is on page 63.

Tallinn news

All the plenary speakers for the EASE Congress on Editing in the Digital World have now been confirmed: see enclosed Circular for details. We have some proposals for parallel sessions and are looking forward to receiving more so put on your thinking caps! We also have three possible workshops, on writing, editing and translating.

Membership update

We're very pleased that almost all membership renewals have now been completed. We continue to attract new members but unfortunately these are offset by further resignations: a major blow was the BMJ Group cutting their corporate membership for their journal editors substantially. Please continue to spread the word. The EASE Council hopes that we are offering plenty for members to enjoy: we also welcome ideas and volunteers to become involved in various projects. Next year, we will be seeking new members for Council and perhaps for the Publications Committee, so please think about how you might be able to help.

AGM in Barcelona

Our next event is the EASE Annual General Meeting, which will be held the Facultat de Biblioteconomia i Documentacio in Barcelona on Monday 20 June, starting at 9 am. This will be followed by a seminar on "How to review and get reviewed". Details have been circulated separately: we hope to see some of you there.

Anniversary for EASE

Next year will be the 30th anniversary of EASE and we plan to celebrate this during the year, particularly during the Tallinn conference. Our preliminary thoughts and a call for suggestions will appear in the August issue.

Contributions for next issue

The copy date for the August issue is 15 June. Please send your contributions to the relevant editor by then.

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Editorial

European Science Editing in a time of change

Abstract *European Science Editing*, a scientific and educational organ of the European Association of Science Editors, has developed from a simple newsletter to an internationally recognized journal covering science writing, editing, and publishing. Following the digital trend, changes are being introduced to facilitate online accessibility and retrievability, to make the information within the journal more readily available to a global audience.

Keywords Periodicals as topic; quality; science; editing; publishing

The role of scholarly journals in disseminating evidencebased knowledge and facilitating science communication between professionals around the world is increasing rapidly in the era of digitization.¹ The advent of new information technologies substantially accelerates the exchange of ideas and collaboration between experts, thereby contributing to progress in most fields of science. To justify their role in science communication, journals should meet certain quality criteria.

European Science Editing (*ESE*) as a scientific and educational organ and the formal means of communication of the European Association of Science Editors (EASE) has been and will continue to be at the forefront of publications regarding science editing. It began as a newsletter in 1982 after the European Life Science Editors Association merged with the European Association of Earth Science Editors to form EASE. The newsletter became a bulletin in 1986 and was transformed into a journal under Hervé Maisonneuve (France) in 2002.² Since then, edited by Moira Johnson (UK), it has flourished, covering a wide range of topics, from polishing the language of scientific articles to the role of impact factors. I am honoured to continue this tradition and to continue the development of the journal, particularly the digital form.

ESE has become an important educational tool for both young and established science editors, seeking answers to the numerous questions that arise during linguistic and scientific editing and publishing. Though it is primarily a European journal, it covers issues of great interest to editors from all countries. One of the sections, "Editing around the world", specifically addresses the challenges faced in diverse settings. Other familiar features (Reports of meetings, News notes, The editor's bookshelf, Book reviews, and the EASE-Forum digest) will continue to provide items of interest to our readers.

One area where there is acknowledged scope for improvement in the journal is in the publication of primary research related to science editing in the form of Articles, to complement high quality opinion pieces under Essays or Reviews. As more research is conducted on science communication, peer review, ethics, and scientometrics, so we would like to make *ESE* the journal of choice for papers on these topics – many of which are currently scattered amongst various scientific journals.

Readers will notice some changes in the current issue, which reflect our ambition to make the digital form of the journal more accessible and to improve the journal's suitability for inclusion in various abstracting and indexing services. Thus, articles and essays/reviews will now include abstracts, key words and correspondence information. *ESE* has recently been added to more international indexing services: the full list appears on page 63 and will be kept updated on the EASE website. Articles will also be posted separately on the journal's website to facilitate proper indexing and easy access to information of interest to the diverse readership.

Many of the contributions to *ESE* come from biomedical editors, partly reflecting the biomedical bias within the EASE membership. Many developments in scientific publishing, such as open access, conflict of interest, and authorship statements originate in the biomedical field. The journal will continue to welcome contributions from all areas of science and to facilitate communication between editors with diverse professional backgrounds.

Like any scientific journal, *ESE* relies on high quality submissions from different countries and continents, fostering its international appeal. The internationalization should also extend to peer review, with the involvement of a large number of international experts in the evaluation of the submissions, and we would like to broaden the reviewer database for the journal and to formalize the review process. As an acknowledgement, reviewers' names will be published in the first issue of a year.

In conclusion, in this era of rapid change in both science and publishing, *ESE* will continue to develop, building on the achievements of the past to create a truly outstanding international journal in the field of science editing and communication.

Armen Yuri Gasparyan

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References

- Gasparyan AY, Banach M. A medium of science communication in our times. *Archives of Medical Science* 2009;5(1):1–2.
- 2 O'Connor M. Copy-editing in science: a life? *The Write Stuff* 2004;13(4):67–69.

Articles

Systematic quality review of clinical guidelines – feasible and useful?

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Abstract

Background: Many clinical guidelines are produced and used, but there is no consensus on how to evaluate their quality. The purpose of this study was to test the feasibility and the benefit of systematic quality review of clinical guidelines.

Methods: 127 Norwegian guidelines were evaluated with the AGREE (Appraisal of Guidelines Research and Evaluation) instrument. Each guideline was assessed by two certified reviewers.

Results: Each reviewer spent 2-5 hours on each guideline. The average cost for evaluating one guideline amounted to about €800. Fifteen guidelines received the conclusion "strongly agree", 98 "recommend with provisos or alterations", 8 "would not recommend", and 6 received "unsure".

Conclusions: Most Norwegian clinical guidelines do not fulfil the quality criteria in the AGREE instrument. Better guidance for rating the overall assessment is needed. Systematic quality review of guidelines is more structured than peer review of scientific articles, but has less consequence as it is done independently of publication. Guidelines should be reviewed by an independent body before publication, and their evaluation should include novelty and relevance.

Keywords Practice guidelines as topic; quality control; guideline adherence; review, systematic; Norway; AGREE

Background

The Institute of Medicine, part of the National Academy of Sciences in the United States of America, has defined clinical guidelines as "systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances".¹ The production and use of clinical guidelines are increasing. Sixty one per cent of general practitioners in the Netherlands² and 93% in Great Britain³ reported using guidelines that they believed matched the needs of individual patients. Clinical guidelines are primarily intended to improve the quality of care,^{4,5} but are also used as indicators of healthcare quality^{6,7} as well as for legal, political, and economic purposes. They are frequently published on open internet sites and in guideline databases without a systematic quality review prior to publication. Studies within several medical fields have shown that the quality of clinical guidelines from central guideline developers in Europe, North America, and international organisations varies and that most do not fulfil high quality criteria.⁸⁻¹³ There is a huge imbalance between the number of guidelines and the number of high-quality studies that assess their effectiveness and effect on patient outcomes.⁵

To assess the quality of guidelines, the AGREE (Appraisal of Guidelines Research and Evaluation) instrument was developed by an international collaboration of researchers and guideline developers funded by the BIOMED-2 programme of the European Union¹⁴ and validated on 100 guidelines from 11 countries, with 195 appraisers. The Guidelines International Network (G-I-N), a global not-for-profit association which holds the world's largest international guideline library, works in partnership with the AGREE Research Trust.

Several questions regarding the evaluation of guidelines remain to be answered. Should guidelines be evaluated before or after they are published? Could and should the AGREE instrument¹⁵ be used as a template for guideline development or as a tool for evaluating guidelines after publication? Will evaluations with AGREE help to identify the most reliable recommendations in the treatment of individual patients? Will any potential benefits of AGREE evaluations justify their cost? In addition, can we – in guideline publication and evaluation – learn something from the long-established tradition of using peer review to assess the quality of scientific articles?

The objectives of this study were to test the feasibility and the benefits of systematic quality reviews of clinical guidelines. We have also compared this process with that of peer review of scientific articles.

Methods

The Norwegian Electronic Health Library (NEHL) includes a database with 457 Norwegian clinical guidelines, guidance documents, and procedures. We selected clinical guidelines for quality review, using the following inclusion criteria: Norwegian origin of guideline, publication in the period 2000–2009, comprehensive clinical guidelines (not procedures or summaries), national (not only local) relevance, and direct relation to patient care.

We used the AGREE instrument¹⁵ for the evaluation. AGREE evaluations assess 23 items (see box), each of which

Domains and items in the AGREE instrument

Scope and purpose

- 1 The overall objective(s) of the guideline is (are) specifically described.
- 2 The clinical question(s) covered by the guideline is (are) specifically described.
- 3 The patients to whom the guideline is meant to apply are specifically described.

Stakeholder involvement

- 1 The guideline development group includes individuals from all the relevant professional groups.
- 2 The patients' views and preferences have been sought.
- 3 The target users of the guideline are clearly defined.
- 4 The guideline has been piloted among target users.

Rigour of development

- 1 Systematic methods were used to search for evidence.
- 2 The criteria for selecting the evidence are clearly described.
- 3 The methods used for formulating the recommendations are clearly described.
- 4 The health benefits, side effects and risks have been considered in formulating the recommendations.
- 5 There is an explicit link between the recommendations and the supporting evidence.
- 6 The guideline has been externally reviewed by experts prior to its publication.
- 7 A procedure for updating the guideline is provided.

Clarity and presentation

- 1 The recommendations are specific and unambiguous.
- 2 The different options for management of the condition are clearly presented.
- 3 Key recommendations are easily identifiable.
- 4 The guideline is supported with tools for application.

Applicability

- 1 The potential organizational barriers in applying the recommendations have been discussed.
- 2 The potential cost implications of applying the recommendations have been considered.
- 3 The guideline presents key review criteria for monitoring and/or audit purposes.

Editorial independence

- 1 The guideline is editorially independent from the funding body.
- 2 Conflicts of interest of guideline development members have been recorded.

is rated on a four point scale: 4 denotes "strongly agree", 3 "agree", 2 "disagree", and 1 "strongly disagree". The items are organized in six domains (box); "scope and purpose", "stakeholder involvement", "rigour of development", "clarity and presentation", "applicability", and "editorial independence". Each domain describes a dimension of the guideline quality. Domain scores were calculated by summing up all the scores of the individual items in a domain and by standardising the total as a percentage of the maximum possible score for that domain.

Nine doctors and one nurse took part in a one-day workshop followed by two training guideline assessments and were certified as AGREE reviewers. They undertook to review the selected guidelines, and each guideline was assessed by two reviewers during 2007–2009. The six domain scores were calculated with the aid of the formula: (obtained score – minimum possible score)×100%. The guidelines received one out of four final conclusions: strongly recommend, recommend with alterations or provisos, would not recommend, or unsure. The two reviewers had to agree on the conclusion, for each assessment.

The results of the evaluations were published together with each guideline on our website, http://www. helsebiblioteket.no/Retningslinjer. Guideline developers were contacted before publishing the evaluation results and were given the opportunity to reply and to supply further information.

We used the AGREE instrument to evaluate the quality of Norwegian guidelines and to evaluate the feasibility and usefulness of doing these evaluations. Calculations of average scores with confidence intervals were performed using statistical software (SPSS 15).

Results

Each reviewer spent from two to five hours on each clinical guideline they assessed. In total, 127 clinical guidelines were assessed. The average cost for evaluating one guideline amounted to 6400 Norwegian krone (\in 800), including administration costs.

The average scores (percentages; with standard error) for the six domains are shown in Table 1.

The average quality scores (mean (SE)) were high for "scope and purpose" and "clarity and presentation", which corresponds to "agree" or "strongly agree" on most of the items in those two domains. Those two domains also scored significantly higher than the mean score of 49% for all domains (p<0.01). "Rigour of development", "applicability", "editorial independence", and "stakeholder involvement" had low scores, with a score of "disagree" or "strongly disagree" for the majority of the items. When all domains were combined, 15 guidelines received the conclusion "strongly agree" (most scores above 60%), 98 guidelines received "recommend with provisos or alterations" (most scores between 30% and 60%), eight guidelines received

Table 1: Average scores for the six domains

Domain	Mean (SE) (%)
Scope/purpose	73 (3)
Clarity/ presentation	60 (3)
Stakeholder involvement	46 (3)
Editorial independence	35 (3)
Applicability	35 (3)
Rigour of development	33 (3)

"would not recommend", and the reviewers were "unsure" about six guidelines.

Discussion

Most Norwegian guidelines did not fulfil all the quality criteria in the AGREE instrument: four out of six domains yielded low scores and three quarters received the overall assessment "recommend with provisos or alterations". It was cost and time consuming to do the evaluations.

We evaluated core clinical guidelines from a wide range of medical fields. The reviewers were trained and certified before assessing, but the AGREE instrument does not provide clear guidance on when to give 1, 2, 3, or 4 points on each item scored. Results of evaluations depend on how accurately authors have documented the work and material on which each guideline is based. Incomplete reporting and documentation may result in misleadingly low scores.

This project has provided Norwegian healthcare personnel with an overview of guidelines from different developers, together with the results of the quality evaluation. This has made the guideline quality more transparent, and we hope that this will help to raise the standard of existing as well as new guidelines. Our results support previous published studies, which show that the quality of guidelines varies and may be poor.⁸⁻¹³ Few guidelines received a high score. For many conditions there are no Norwegian guidelines with high scores. Even with high scores, research has shown that different guidelines on the same topic can provide recommendations that differ considerably.^{16,17} Factors other than scientific evidence – such as socioeconomics, cultural differences, or characteristics of health systems – can also influence the development of recommendations.¹⁸

As one of the founders of the AGREE instrument points out: "the AGREE instrument does not assess the clinical content of the recommendations or the quality of the supporting evidence. Good methodological quality does not necessarily indicate good-quality recommendations."¹⁹ We have confirmed the need for an appropriate review system that can help practitioners to find the most reliable guidelines. The feasibility of this project depends on the capacity of a third party to carry out the work. This involves administration, practical work, and costs incurred by the evaluation process, as well as publication of the results.

Table 2 reveals important differences between the process of systematic quality review of guidelines and traditional peer review of scientific manuscripts submitted to medical journals. The overview is based on instructions to authors and peer reviewers in major journals like *BMJ* and *The Lancet*^{20,21} and guidelines for peer review from international organisations for medical editors.²²⁻²⁵ Even if peer reviewers are not paid on a regular basis there are administration costs; analyses have estimated the cost of peer review to be \$200-480,^{26,27} but studies report that peer review costs vary substantially.²⁸

In contrast to clinical guidelines, scientific articles are constructed according to an international standard, the IMRAD (introduction, methods, results, and discussion) structure,²⁹ and are usually peer reviewed according to guidelines on good publication practice.¹⁶⁻¹⁹ But different journals use different review forms, which do not ensure that the same items are checked in each review. Reviewers can use the CONSORT (Consolidated Standards of Reporting Trials) statement, which is intended to improve the reporting of randomized controlled trials, and extensions

Table 2. Quality review of clinical guidelines with AGREE (Appraisal of Guidelines Research and Evaluation
compared with peer review of scientific articles

Quality review of clinical guidelines	Peer review of scientific articles		
Aiming at increased quality	Aiming at increased quality		
Not routinely and systematically done	Routinely done for all scientific journals		
Post-publication review	Pre-publication review		
Reviewers receive systematic training and are certified.	Experienced researchers or clinicians do the reviewing without any formal training.		
Universal review instrument available	Semi-structured review form for each journal		
Reviewers are paid	Reviewers not paid on a regular basis		
Reviewers know each other's identity and aim at agreeing on the final conclusion	Reviewers do not know each other and do not have to agree		
Reviewers are not necessarily specialists in the medical field discussed in the guideline	Reviewers are normally specialists in the field of the paper		
Review limited to purpose, stakeholder involvement, rigour of development, presentation, application and editorial independence	Review includes the whole research process, (hypotheses, design, data collection and analysis) as well as presentation and conclusion		
The structure of clinical guidelines varies and makes evaluation difficult	Scientific articles usually follow the IMRAD structure which simplifies peer review		
Change to clinical guideline based on quality review is voluntary and up to the guideline developers	Scientific articles are not published if reviewers and the editor of the journal are not satisfied		

of the CONSORT statement have also been developed for other types of study design.³⁰ Tom Jefferson, an author and reviewer in the Cochrane Collaboration, found that no methods for quality improvement other than peer review had been tested and suggested that this should be done.²⁷ The structured and transparent method of quality review of clinical guidelines with AGREE ensures that all items in the form will be checked in the course of each review process. Evaluation of guidelines with AGREE rests upon the evaluation of the methods and process alone; relevance, importance of the questions addressed in the guidelines, novelty, and validity of the medical content are not directly evaluated. This is a weakness compared with traditional peer review of scientific articles, where both the content and the process are evaluated, and it builds on an assumption that a good process leads to correct medical content.

Evaluation of guidelines with AGREE usually takes the form of a review of already-published guidelines, and these evaluations have little impact on the quality of the guidelines even though some developers - for example, the National Institute for Health and Clinical Excellence (NICE) - use AGREE as a checklist when they develop guidelines. National Clearinghouse, a public guideline library in the United States and part of the Agency for Healthcare Research and Quality,³² uses some quality criteria for guidelines to be included in the database. The peer review process of scientific articles is done prior to publication and can therefore affect the quality of articles before they are issued and indeed determine whether they are published or not. A new version of AGREE has now been published with minor changes,³³ but its guidance on rating is no better and it does not include questions about novelty or relevance.

Conclusions

Because the content, purpose, and structure of clinical guidelines vary, and differ from those of scientific articles, we need methods for appraisal that differ from those designed to evaluate scientific research.

Both processes, peer review of scientific articles and quality evaluation of guidelines, can be improved. Peer review of scientific articles can become more structured, transparent, and consistent. Guidelines should be reviewed by an independent body before publication, and the evaluation would benefit from including perspectives that relate to patient outcome, novelty, and relevance. From our findings we conclude that systematic quality review of clinical guidelines is feasible, and that the scores can be useful for guideline developers when updating guidelines, but the overall assessment "recommend with provisos or alterations" given to three out of four guidelines in our study is not very helpful for clinicians. Better guidance for rating the overall assessment is needed.

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Authors' contributions AHR and MN designed the study, contributed substantially to the acquisition of data, and analyzed and interpreted the findings. AHR drafted the manuscript, and MN revised the manuscript critically for important intellectual content. EM contributed to analysis, interpretation of data, and was involved in revising the manuscript critically for important intellectual content. All authors have read and approved the final manuscript.

References

- 1 Committee to Advise the Public Health Service on Clinical Practice Guidelines, Institute of Medicine. *Clinical practice guidelines: directions for a new program*. Washington, DC: National Academy Press, 1990.
- 2 Grol R, Dalhuijsen J, Siep T, Veld C, Rutten G, Mokkink H. Attributes of clinical guidelines that influence use of guidelines in general practice: observational study. *BMJ* 1998;31(7162):858–861.
- 3 Watkins C, Harvey I, Langley C, Gray S, Faulkner A. General practitioners' use of guidelines in the consultation and their attitudes to them. *British Journal of General Practice* 1999;49(438):11–15.
- 4 Burgers JS, Grol R, Klazinga NS, Makela M, Zaat J. Towards evidence-based clinical practice: an international survey of 18 clinical guideline programs. *International Journal of Quality in Health Care* 2003;15(1):31–45.
- 5 Lugtenberg M, Burgers JS, Westert GP. Effects of evidencebased clinical practice guidelines on quality of care: a systematic review. *Quality and Safety in Health Care* 2009;18(5):385–392.
- 6 Cluzeau F, Burgers J, Brouwers M, Grol R, Mäkelä M, Littlejohns P, et al. Development and validation of an international appraisal instrument for assessing the quality of clinical practice guidelines: the AGREE project. *Quality and Safety in Health Care* 2003;12(1):18–23.
- 7 Hermens RP, Ouwens MM, Vonk-Okhuijsen SY, van der Wel Y, Tjan-Heijnen VC, van den Broek LD, et al. Development of quality indicators for diagnosis and treatment of patients with non-small cell lung cancer: a first step toward implementing a multidisciplinary, evidence-based guideline. *Lung Cancer* 2006;54(1):117–124.
- 8 Peterson A, Carlhed R, Lindahl B, Lindstrom G, Aberg C, Andersson-Gare B, et al. Improving guideline adherence through intensive quality improvement and the use of a National Quality Register in Sweden for acute myocardial infarction. *Quality Management in Health Care* 2007;16(1):25–37.
- 9 Nagy E, Watine J, Bunting PS, Onody R, Oosterhuis WP, Rogic D, et al. Do guidelines for the diagnosis and monitoring of diabetes mellitus fulfill the criteria of evidence-based guideline development? *Clinical Chemistry* 2008;54(11):1872–1882.
- 10 Navarro Puerto MA, Ibarluzea IG, Ruiz OG, Alvarez FM, Herreros RG, Pintiado RE et al. Analysis of the quality of

clinical practice guidelines on established ischemic stroke. *International Journal of Technology Assessment in Health Care* 2008;24(3):333–341.

- 11 Nelen WL, van der Pluijm RW, Hermens RP, Bergh C, de Sutter P. Nygren KG, et al. The methodological quality of clinical guidelines of the European Society of Human Reproduction and Embryology (ESHRE). *Human Reproduction* 2008;23(8):1786–1792.
- 12 Lopez-Olivo MA, Kallen MA, Ortiz Z, Skidmore B, Suarez-Almazor ME. Quality appraisal of clinical practice guidelines and consensus statements on the use of biologic agents in rheumatoid arthritis: a systematic review. *Arthritis and Rheumatism* 2008;15(11):1625–1638.
- 13 Misso ML, Pitt VJ, Jones KM, Barnes HN, Piterman L, Green SE. Quality and consistency of clinical practice guidelines for diagnosis and management of osteoarthritis of the hip and knee: a descriptive overview of published guidelines. *Medical Journal of Australia* 2008;189(7):394–399.
- 14 Vitry AI, Zhang Y. Quality of Australian clinical guidelines and relevance to the care of older people with multiple comorbid conditions. *Medical Journal of Australia* 2008;189(7):360–365.
- 15 AGREE Collaboration. Appraisal of Guidelines for Research and Evaluation Instrument (AGREE). 1991. http://www. agreecollaboration.org/pdf/aitraining.pdf. Appendix 1. (Accessed 13 January 2011.)
- 16 Haagen EC, Hermens RP, Nelen WL, Braat DD, Grol RP, Kremer JA. Subfertility guidelines in Europe: the quantity and quality of intrauterine insemination guidelines. *Human Reproduction* 2006:21(8):2103–2109.
- 17 McIntosh HM, Neal RD, Rose N, Watson E, Wilkinson C, Weller D, et al. Follow-up care for men with prostate cancer and the role of primary care: a systematic review of international guidelines *British Journal of Cancer* 2009;100(12):1852–1860.
- 18 Burgers JS, Bailey JV, Klazinga NS, van der Bij AK, Grol R, Feder G. Inside guidelines: comparative analysis of recommendations and evidence in diabetic guidelines from 13 countries. *Diabetes Care* 2002;25(11):1933–1939.
- 19 Burgers JS. Guideline quality and guideline content: are they

related. Clinical Chemistry 2006;52(1):3-4.

- 20 TheLancet.com. For authors. http://www.thelancet.com/forauthors. (Accessed 13 January 2011.)
- 21 BMJ. Guidance for peer reviewers. http://resources.bmj.com/ bmj/reviewers/peer-reviewers-guidance. (Accessed 12 Jan 2011.)
- 22 Equator Network. Resources for editors and peer reviewers. 30 June 2010. http://www.equator-network.org/resourcecentre/editors-and-peer-reviewers/editors-and-peerreviewers/#editperr. (Accessed 13 January 2011.)
- 23 International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals: writing and editing for biomedical publications. http://www.icmje.org. (Accessed 13 January 2011.)
- 24 World Association of Medical Editors. Policy statements. http://www.wame.org/resources/policies. (Accessed 13 January 2011.)
- 25 Committee on Publication Ethics. Code of conduct. http:// publicationethics.org/code-conduct. (Accessed 13 January 2011.)
- 26 Rowland F. The peer-review process. *Learned Publishing* 2002;15(4):247–258.
- 27 King DW, Tenopir C. Scholarly journal and digital database pricing: threat or opportunity? Paper presented at PEAK 2000 conference, Michigan, 23–24 March 2000.
- 28 King DW. The cost of journal publishing: a literature review and commentary. *Learned Publishing* 2007;20:85–106.
- 29 Sollaci LB, Peira MG. The introduction, methods, results, and discussion (IMRAD) structure: a fifty-year survey. *Journal of the Medical Libraries Association* 2004;92(3):364–371.
- 30 CONSORT. The CONSORT Statement. 10 November 2010. http://www.consort-statement.org/consort-statement. (Accessed 13 January 2011.)
- 31 Jefferson T. Quality and value: models of quality control for scientific research. A look at alternatives to the peer review system suggests it might be the best bet. *Nature* 2006; doi:10.1038/05031 (http://www.nature.com/nature/ peerreview/debate/nature05031.html).
- 32 Agency for Healthcare Research and Quality. National Guidelines Clearinghouse. http://www.guideline.gov/index.aspx.33 AGREE II. 2010. Downloadable at http://www.agreetrust.org.
- 35 AGREE II. 2010. Dowilloadable at http://www.agreetrust.org.

Scientific discourse and contrastive linguistics: hedging

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Abstract Expressing tentativeness and possibility – presenting claims with caution and precision – is important in research papers. Writers from different linguistic backgrounds show variations in the amount of this "hedging" and the types of devices they use.

Keywords Science; linguistic hedges; claim; modalisation; knowledge; politeness; mitigation

Hedging is the expression of tentativeness and possibility. It is therefore central to academic/scientific writing, where statements are rarely made without subjective assessment of their reliability and where claims need to be presented with caution and precision. Science indeed is scepticism, doubt, refutation, speculation, formulation of hypothesis, criticism. As a consequence, the expression of doubt and possibility is central to the negotiation of claims, and what counts as effective persuasion is influenced by the fact that evidence, observations, data, and flashes of insight must be shaped with due regard for the nature of reality and their acceptability to an audience.

In medical writing, hedges play a critical role in gaining ratification for claims for a powerful peer group by allowing writers to present statements with appropriate accuracy, caution, and humility, expressing possibility rather than certainty and prudence rather than overconfidence. In a context where the accreditation of knowledge depends on the consensus of the research community and the need to evaluate evidence, comment on its reliability, and avoid potentially hostile responses (the "boomerang effect"), expressions such as "may", "might", "could", "possible", and "likely" can contribute to gaining the acceptance of research claims.

Medical and scientific writers in general thus need to decide on the level of the knowledge claims they wish to make. They are in a position of tension because the higher the level of claim the more likely it is that its assertion will contradict existing positions and challenge the assumptions underlying ongoing research in the area. "Claim-making is a risky practice," as Ken Hyland expresses it.¹ It is by resorting to hedges that researchers modify the "epistemic warrant", the confidence and uncertainty, of their claims. These devices allow the writer to show that s/he is not fully committed to the propositional content of the utterance or that s/he opens a discursive space where readers can dispute the writer's interpretations.

Hedges are among the main pragmatic features which shape the research paper as the principal vehicle for new knowledge and which distinguish it from other forms of academic discourse.² They allow researchers to produce a closer fit between their statements about new discoveries and the pre-existing understandings within the scientific community. They are therefore both cautious and interactive devices in that they build a relationship between the writer and the community of readers and allow academic writers to anticipate their audience reactions by moderating the degree of certainty with which they present their knowledge claims. Robert Boyle (1627–1691) was, if not the inventor of hedging, at least the foremost institutionalizer of "modesty" strategies in empirical science writing.³

Because hedges can express politeness, indirectness, understatement, mitigation, commitment, and/or vagueness, they are pragmatically polyfunctional⁴ and have been the focus of extensive research in all kinds of discourses, scientific discourse being one of them.

Since George Lakoff published the first research on hedging in 1972,⁵ an abundant literature has demonstrated the importance of this socio-pragmatic phenomenon in Anglo-American scientific/academic writing using different approaches, but no real consensus has been reached. We could almost say that there are as many approaches as there are researchers who studied the phenomenon. This lack of consensus was exemplified in the late 1990s by the radically opposed stances adopted by Peter Crompton⁶ on the one hand, who advocated using the scientific method to analyse the subject, and myself⁷⁻⁹ on the other, whose mentalistic approach defined hedges as primarily the product of a mental attitude. Hedges are no longer approached from a semantic perspective but rather from a socio-pragmatic one.

Linguists and applied linguists from a number of other cultural and linguistic backgrounds have also studied the phenomenon of hedging in written scientific discourse. Research papers in French use much more prescriptive, authoritarian, and categorical language than those written by English-speaking colleagues.¹⁰⁻¹² Researchers writing in English instead tone down their claims, using so-called *bémol* statements¹⁰ when stating their claims and rejecting the opinions of others, thus avoiding the so-called Face-Threatening Act.¹³ It has been argued that in the use of such "*précautions oratoires*" we find the most prominent cultural difference between English and French academic writing.¹⁴ This led Christiane Beaufrère-Bertheux to refer to the *hypermodestie* of Anglo-American scientists,¹⁵ and Claude Sionis to describe the "exaggerated self confidence of French academics", who therefore sound arrogant to their Anglo-American counterparts.¹⁶

Arrogance and over self-confidence (that is, a lack of hedging devices) have also been noted in Finnish academic writing¹⁷ and in research papers written in Bulgarian and English by Bulgarian-speaking scientists^{18,19} when compared with research papers written in English by native-English-speaking scientists, thus suggesting that Finnish and Bulgarian academic writers show a higher degree of commitment and, consequently, a lower degree of deference, toward the discourse community than their English counterparts.

A comparison of the rhetorical styles of internationally published medical journal articles written by Sudanese and British researchers found differences in the "expression of non-evidential truth" in samples from discussion sections of the articles.20 Sudanese medical writers, compared with British medical writers, are weaker in indicating research implications and promoting further research. Their writing contains less self-expression or personal voice, even though subjective interpretation of data is desirable in discussion sections, since it paves the way for future research. Such differences reflect not only Sudanese writers' English writing skills but also cultural factors. These include the discouragement of personal voices in the collectivist culture in Sudan, and competitiveness between members of Sudanese academia, which results in the "fear of encouraging rival research groups in an environment where there is intense competition for funding²⁰

Research papers written in Spanish and in English by Spanish-speaking scientists were also found to use less hedging, or modalization, than those written in English by native-English-speaking scientists,^{21,22} as were papers written in Dutch by Dutch authors.²³ In contrast, research papers written in German and English by German authors,^{24,25} in Polish by Polish writers,²⁶ and in Czech by Czech writers²⁷ show a higher degree of hedging and of tentative, affective statements than papers written in English by English-speaking writers.

Research into hedging in East Asian languages is more contentious. Although Eli Hinkel claims that hedging is common in the Confucian rhetorical tradition,²⁸ and although previous research shows that essays written by Asian students from that background tend to be "overhedged", his study is inconclusive. Hyland and Milton's analysis of hedging in the Hong Kong University of Science and Technology's learners' corpus showed that essays written by proficient learners were more heavily

hedged (that is, written according to Anglo-American rhetorical norms) than those written by less proficient ones, thus suggesting that a learner's proficiency level plays a role in the use of hedges.²⁹ At any rate, Hinkel's different findings may result from the essay prompts he used, and this highlights the importance of corpus design (sampling of texts).

These differences indicate that hedging forms part of the system of conventions underlying academic writing and that, being conventional, it is culture specific as well.

It should be emphasized, however, that discipline and textual genre play an important role in the frequency of use of hedging devices, research papers from the humanities and social sciences using more probability expressions/ modalization than those belonging to the "hard" and natural sciences. Comparisons of hedging in 19th and 20th century scientific writing have also shown that differences in the use of modalization between them lie not so much in the frequency of hedging devices but in the type of devices used.^{30,31} Other variables could also affect the use of modalization in academic/scientific writing, such as the writer's status, age, and sex, but these variables have rarely, if ever, been taken into consideration, perhaps because of the difficulty of analyzing them.

Competing interests None declared.

References

- 1 Hyland K. Disciplinary discourses: social interactions in academic writing. London: Longman, 2000:93.
- 2 Hyland K. *Hedging in scientific research articles*. Amsterdam: John Benjamins, 1998.
- 3 Atkinson D. *Scientific discourse in sociohistoric context*. Mahwah, NJ: Lawrence Erlbaum, 1999.
- 4 Clemen G. The concept of hedging: origins, approaches and definitions. In Markkanen R and Schröder H, eds. *Hedging and discourse: approaches to the analysis of a pragmatic phenomenon in academic texts*. Berlin: Walter de Gruyter, 1997:235–248.
- 5 Lakoff G. Hedges: a study in meaning criteria and the logic of fuzzy concepts. *Chicago Linguistic Society* 1972;8:183–228
- 6 Crompton P. Hedging in academic writing: some theoretical problems. *English for Specific Purposes* 1997;16(4):271–287.
- 7 Salager-Meyer F. Hedges and textual communicative function in medical English written discourse. *English for Specific Purposes* 1994;13(2):149–170.
- 8 Salager-Meyer F. Language is not a physical object. *English for* Specific Purposes 1998;17(3):295-303.
- 9 Salager-Meyer F. Procrutes' recipes: hedging and positivism. English for Specific Purposes: An International Journal 2000;19(2):175–189.
- 10 Régent O. L'article scientifique: un produit culturel. *ASp* (*Anglais de spécialité*) 1994;5/6:55–61.
- 11 Crosnier E. L'intérêt de la modalisation comme aide à la rédaction en anglais pour les scientifiques français. Méthodologie et perspective pédagogique. ASp (Anglais de Spécialité 1996;11/14:89–103.
- 12 Liddicoat AJ. Writing about knowing in science. LSP and Professional Communication 2005;5(2):8–27.

- 13 Brown G, Levinson S. *Politeness: some universals in language usage*. Cambridge: Cambridge University Press, 1987.
- 14 Martin J. Les enjeux du discours scientifiques: la stratégie de véridiction. *ASp (Anglais de Spécialité)* 1996;11/14:13–33.
- 15 Beaufrère Bertheux C. L'anglais de la recherche médicale: une grande diversité. *ASp (Anglais de Spécialité* 1997;15/18:223–238.
- 16 Sionis C. Writing scientific discourse beyond words. *ASp* (*Anglais de Spécialité*) 1997; 15-18: 339-57.
- 17 Ventola E. Modalization: probability an exploration into its role in academic writing. In: Duszak A, ed. *Culture and styles in academic writing*. Berlin, New York: Mouton de Gruyter, 1997:157–179.
- 18 Vassileva I. Hedging in English and Bulgarian academic writing.
 In: Anna Duszak, ed. *Culture and styles of academic discourse*.
 Mouton de Gruyter: Berlin, 1997:203–223.
- 19 Vassileva I. Commitment and detachment in English and Bulgarian academic writing. *English for Specific Purposes* 2001;20:83–103.
- 20 ElMalik A, Nesi H. Publishing research in a second language: the case of Sudanese contributors to international medical journals. *Journal of English for Academic Purposes* 2008;7(2):87–96.
- 21 Oliver del Olmo S. Análisis contrastivo español/inglés de la atenuación retórica en el discurso médico. El artículo de investigación y el caso clínico. Tesis doctoral. Barcelona. Universitat Pompeu Fabra, 2004.
- 22 Mendiluce Cabrera G, Bartolomé H. La matización asertiva en el artículo biomédico: una propuesta de clasificación para los estudios contrastivos inglés-español. *Ibérica* 2005;10:63–90.
- 23 Burrough-Boenisch J. NS and NNS scientists' amendments of Dutch scientific English and their impact on hedging. *English for Specific Purposes* 2004; 24(1):25–39.
- 24 Clyne MG. The sociocultural dimension: the dilemma of the German-speaking scholar. In: Schröder H, ed. *Subject-oriented texts*. Berlin and New York: De Gruyter, 1991:49–67.
- 25 Kreutz H, Harres A. Some observations on the distribution and function of hedging in German and English academic writing. In: Duszak A, ed. *Culture and styles of academic discourse*. Berlin: Mouton de Gruyter, 1997:181–201.
- 26 Duszak A. Academic discourse and intellectual styles. *Journal of Pragmatics* 1994;21:291–313.
- 27 Cmerjrková S, Danes F. Academic writing and cultural identity: the case of Czech academic writing. In: Duszak A, ed. *Culture and Styles in Academic Discourse*. Berlin: Mouton de Gruyter, 1997; 41–62.
- 28 Hinkel E. Objectivity and credibility in L1 and L2 academic writing. In: *Culture and second language teaching and learning*. Cambridge: Cambridge University Press, 1997:90–108.
- 29 Hyland K, Milton J. Qualification and certainty in L1 and L2 students' writing. *Journal of Second Language Writing* 1997;16(2):183–205.
- 30 Salager-Meyer F, Defives G. From the gentleman's courtesy to the expert's caution: a diachronic analysis of hedges in academic writing (1810-1995). In: Fortanet I, Posteguillo S, Palmer C, Coll JF (Eds). *Genre studies in English for academic purposes*. Castellon. Spain. Universitat Jaume I, 1998:133–171.
- 31 Gross AG, Harmon JE, Reidy MS. *Communicating science: the scientific article from the 17th century to the present*. Oxford: Oxford University Press, 2002.

Essays in Editing

Native and non-native speakers of English as copy-editors of research papers

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Abstract The relationship between proficiency in a language (at the level of a native speaker of that language) and the ability to carry out a range of tasks as part of copyediting of research papers is examined with particular reference to English. Many of these tasks are unrelated to language but demand an eye for detail, sustained concentration, familiarity with style conventions, and domain knowledge. The relative strengths of native and non-native speakers of English as copy-editors are compared.

Keywords Copyediting; technical editing; language editing; quality of editing

A recent report by the Society for Editors and Proofreaders in the UK, titled *What price quality? Overseas outsourcing of editorial services*, summarizes the perspectives of many of its members.¹ The issue of native and non-native speakers as editors features now and then in the EASE Forum as well as in *European Science Editing*.² Outsourcing is bound to be a sensitive issue among editors, whether native or nonnative speakers of the language in which they edit, since it can directly affect their livelihood.

However, many aspects of such outsourcing, especially outsourcing of copy-editing, bear disinterested scrutiny, and this essay is one such attempt, confined mainly to copyediting of research papers written in English by non-native speakers of English for publication in English-language journals. This is an important distinction because publishers from English-speaking countries often outsource copyediting to other countries not so much to fix errors related to idioms and usage as to take care of other aspects such as matching text citations and references, ensuring consistent treatment of headings, and type coding (tagging items other than running text, such as headings, extracts, and lists).

Few will contest, as a general observation, that when it comes to copy-editing such papers, native speakers are at an advantage. They are at a disadvantage when it comes to pricing, however, because typically they live in places where the cost of living is high. However, this is not a straightforward issue of quality versus costs, as I hope to show.

Aspects of copy-editing unrelated to language

If a copy-editor's job is to prepare copy for the press (or, increasingly, for its electronic equivalents), a number of aspects other than language require his or her attention. In fact, the exhaustive checklist of tasks related to copy-editing found in *Butcher's Copy-editing* runs to 20 pages of which only one heading, namely "Author's argument", containing 11 lines in all, lists tasks that are more or less exclusive to language.³

References

More than 40% of the changes made as part of copy-editing in Waites and Campbell's survey were related to references.⁴ Matching citations to references, putting in all the required bibliographic information, and formatting the references in the style required by the journal require an eye for detail, persistence, access to the internet, and application of mind – matters not tied to any particular language.

Stylistic consistency

To change litres to L, to replace a hyphen between two numbers with an en dash, or to italicize "in vitro" require not so much a flair for language as attention to detail, sustained concentration, and familiarity with style conventions.

Tables and figures

Similar considerations apply to tables and charts, two other common adjuncts to research papers. And editing these adjuncts effectively is more a matter of numeracy than of literacy. Figures other than charts make greater demands on the ability to visualize than on verbal fluency.

Domain knowledge

One area in which copy-editors in English-speaking countries have an edge over those from other countries is one that, in my experience, has little to do with English, and that area is domain knowledge: English-speaking countries simply have a greater proportion of copy-editors with qualifications and experience that match the academic disciplines in which they copy-edit and are thus able to copy-edit more effectively, especially when it comes to turning what is often clumsy writing into elegant prose. As one participant in the SfEP survey puts it, "Some copy-editors took on work that they are not able to understand; in places it was clear that the editor had insufficient science to unravel what the authors intended."¹

Software

Copy-editing today requires much greater facility than before with computers in general and word processing in particular. The internet is the copy-editor's trusted ally. Repurposing texts for different platforms and applications, preparing files for automated typesetting, and type coding in particular are skills increasingly expected of copyeditors. As with numeracy and graphic literacy, computer literacy has little to do with fluency in language.

Readers

English is a global language. The latest (3rd) edition of the Oxford Dictionary of English had on its staff not only specialist subject consultants in 23 domains ranging from

David Crystal estimated that the number of English speakers in non-English-speaking countries is three times that of native speakers of English.5 For all I know, subscribers from other countries to scientific journals in English published from English-speaking countries also outnumber the subscribers from Englishspeaking countries - which brings up the matter of readers' expectations. As a non-native speaker of English, I find that articles and prepositions are tricky beasts; as I struggle to mask my infelicities in their correct use, I often wonder how many readers of research papers who are nonnative speakers of English will be troubled by my lapses. For example, in an early draft of this essay, a kindly native speaker of English changed "break even from sales of these titles" to "break even on" (see below). And if the majority of buyers do not care about, or do not even notice, such errors, how long will sellers continue spending money to fix them?

A recent discussion on the EATAW list (European Association for the Teaching of Academic Writing) was focused on possible responses to a doctoral thesis written in non-standard English. The remark that is relevant here, from a native speaker of English, is about readers: "while they might notice an Indian flavour, [they] would not complain that this was not standard English."

Errors

Discussions related to outsourcing often seem to imply that native speakers of English never make grammatical or other language-related errors. If this is indeed so, I wonder how the publishers of *Modern English Usage* or of *Mind the Gaffe* managed to break even on sales of these and similar titles, or how *Eats, Shoots & Leaves* made it to the Christmas best-seller list of Amazon UK soon after it was published. Then there is Paul Brians' website *Common Errors in English Usage*, which, as the FAQ section informs its visitors, is "aimed at the most common errors of native speakers." ⁶ And this applies even to copy-editors.

Another relevant factor is formal instruction in grammar. Indeed, as Einsohn puts it, the approach to punctuation "taken by all the editorial style manuals is to punctuate according to grammatical and syntactical units."⁷ To follow this approach requires familiarity with formal grammar, which is invariably taught in schools when one learns a language as a second language; those who grow up speaking it do not always have that benefit.

Quality of rewrites

The SfEP report mentions that editors from other countries rarely attempt to make the text more readable; when they do so, the re-writes often introduce grammatical errors.¹ The reluctance may stem in part from lack of domain knowledge and in part from the shorter turn-around times, which are often used to sell outsourcing.

Customers' requirements

In a free market economy, it is for customers or clients and not for service providers to weigh the trade-offs: to pay more for a higher-quality service, or pay less and settle for a satisfactory quality – satisfactory to the buyer, that is. This issue is at the heart of many a heated discussion on outsourcing: one post in a recent discussion on the Copyediting-L discussion forum on outsourcing (triggered, as it happens, by the SfEP report mentioned earlier) suggested that it is pricing that separates looking overseas for relevant expertise from outsourcing; that is, when cost is a primary factor in the contracting decision.

Who exactly are the customers when it comes to copyediting services for academic publishing? One category – probably the largest – is authors whose manuscripts are returned by journals because of deficiencies related to language. For them, quality is what the journal or, to be more exact, its reviewers, find *acceptable*. For these customers, cost is obviously an important criterion.

Publishers form the second category and probably demand higher quality, which copy-editors who are native speakers are more likely to supply. However, publishers are not impervious to costs and may well prefer outsourcing if non-native speakers are good enough – a subjective judgement – and offer to do the job at substantially cheaper rates. Although readers are the final consumers or "end users", they are the least influential customers of copy-editing services in the context of scientific journals.

Lastly, there is also the matter of speed and availability, the two factors often used to justify outsourcing. Given the time difference, it is easier to provide overnight service when it is outsourced, and speed may trump quality.

Competing interests The current essay may possibly attract customers seeking the author's copy-editing services.

References

- 1 Lyle K. What price quality? Overseas outsourcing of editorial services. SFEP report: February 2011. http://www.sfep.org.uk/ pub/news/outsourcing.asp. (Accessed 7 March 2011.)
- 2 Kozak M. A call from a non-native English speaker: don't look at my affiliation. *European Science Editing* 2008;34(4):100–104.
- 3 Butcher J, Drake C, Leach M. 2006. Butcher's copy-editing: the Cambridge handbook for editors, copy-editors and proofreaders. 4th ed. Cambridge: Cambridge University Press, 2006;432–452.
- 4 Wates E, Campbell R. Author's version vs. publisher's version: an analysis of the copy-editing function. *Learned Publishing* 2007;20(2):121–129.
- 5 Crystal D. *English as a global language*. 2nd ed. Cambridge: Cambridge University Press, 2003:69.
- 6 Brians P. Common errors in English usage. 2nd ed. Sherwood, OR: Franklin, Beedle, 2008. http://www.wsu.edu/~brians/ errors/index.html. (Accessed 7 March 2011.)
- 7 Einsohn A. *The copyeditor's handbook: a guide for book publishing and corporate communications.* 2nd ed. Berkeley: University of California Press, 2006:73.

Perspectives on science editing and publishing in Iran: think globally, act locally

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Abstract Scientists have the skills to write and structure their papers but frequently need support of other professionals to edit and publicize their works. Nowadays, scientific papers are evaluated on the basis of their "impact", and a journal's quality is dependent on high quality publications. In Iran, two options are available for scientific journals to overcome the issue of growing editing and publishing costs: to involve leading regional and global publishers in the publishing process and to establish outlets for these publishing agencies. The problem is not just Iranian but affects many other developed and developing countries and is becoming a big issue in times of global financial crisis.

Keywords Periodicals as topic; editorial policies; quality control; abstracting and indexing as topic; publishing; Iran

Science in Iran had an impressive history during ancient times, and the growth in Iranian science output, especially during the past 20 years, is apparent from scientometric databases.¹ Iran has become a rapidly growing science producer in the world, based on experts' opinion and reports of the Institute for Scientific Information (ISI) Science Watch, and SCImago Journal and Country Rank.^{2,3} The advancement of science is based on high quality research, and proper writing, editing, and publishing of papers that should be widely disseminated and evaluated.

Scientific publications are the final stage of research. Scientists have the skills to write and structure their papers but frequently need support of other professionals to edit and publicize their works. In fact, scientific publishing cannot be separated from acquisition, copy editing, graphic design, production, printing, marketing, and distribution. The scope of publishing has expanded to include electronic resources, which have been growing rapidly since 2005, especially due to the cost-effectiveness issues that are challenging the publishing market. Successful publications impact greatly on science in terms of communication between scientists and give birth to new ideas, knowledge, and technology.

Databases such as Scopus and Essential Science Indicators from ISI evaluate scientific publications to rank countries, institutions, scientists, and journals.^{4,5} These databases distinguish top scientists, papers, and journals. Nevertheless the ranking based on "impact" should be interpreted with caution, given the inherent limitations of current scientometric indices.⁶ Shifting from traditional journal management to the new standards, the so-called "change or perish" process, is crucial for a journal's survival.⁷

During the past 40 years, Iranian scientists have published more than 130,000 papers, mostly in journals published abroad.⁴ The number of scientific journals published in Iran listed in Index Copernicus is 215; most are supported by local universities and research institutions.⁸

Most Iranian publishers are actively involved in book publishing. To publish scholarly journals and to make them visible in an international arena, they need the support of experts in science editing, but this is not always appreciated by the publishers. Some journal publishers still do not use online editorial management software, a prerequisite of success for editing and publishing a modern scientific journal.

The number of Iranian journal publishers is currently not sufficient, and most journals are managed by scientific editors from the first to the final stages of editing and publishing. This burden may negatively affect the editorial process. In most cases, local universities have provided software for online submission and management after negotiation with various software providers but the problem of publishing and marketing is still there.

Importantly, most scholarly journals published in Iran do not have sufficient individual and institutional subscribers to cover editing and publishing costs. It should be emphasized that most Iranian journals are indexed in global databases such as Google Scholar, Scopus, Directory of Open Access Journals, and only a few are indexed in Web of Science and PubMed. In a survey conducted in 2009, some Iranian journals were found to contain several technical mistakes, including those of incorrect referencing, making being accepted for indexing in local and global databases a daunting task.⁹

I believe most Iranian journals should meet the indexing requirements of leading global databases, should have fully digitized editorial management, and gradually switch from print to electronic publication (print on demand) mode. The latter would allow regular updating of the content of the journal's website, evaluation of the performance of editorial board members, and would save time for review.

Most Iranian editors are doing their best to meet writing, editing, and publishing standards proposed by EASE, COPE, WAME, and other learned societies. Science editing issues are regularly discussed during numerous national and international seminars held throughout the country. One such meeting took place in Isfahan, 13-14 May 2010, to discuss ways to improve the quality of local medical journals and to avoid common errors in writing articles.¹⁰

In my opinion, two options are available for scientific journals to survive and to overcome the issue of growing editing and publishing costs: to involve leading regional and global publishers in publishing Iranian journals and to establish outlets for these publishing agencies in Iran. As an author and editor of several national and international journals with experience in science journalism,¹¹ I believe that we have to take advantages of both options.

I also believe that the circulation of print copies of scientific journals has to be reduced, and more funding should be allocated to electronic publications with an advanced scientometric profile.

The problems outlined are not just Iranian but affect many other developed and developing countries and are becoming big issues in times of global financial crisis. Therefore my message is to think globally and act locally by establishing regional scientific journal publishing companies to cover the costs of high quality journals in the Eastern Mediterranean region.

MA is a member of the World Association of Medical Editors (WAME) and of the Committee on Publication Ethics (COPE)

Competing interests None declared.

References

1 Abdollahi M. Perspectives of Science in Iran. *Iranian Journal* of *Pharmaceutical Research* 2010; 9(3): 207-208.

- 2 Science Watch. Middle East revisited: Iran's steep climb. http:// sciencewatch.com/ana/fea/10novdecFea. (Accessed 26 March 2011.)
- 3 SJR. SCImago Journal and Country Rank. http://www. scimagojr.com. (Accessed 26 March 2011.)
- 4 Scopus. http://www.scopus.com. (Accessed 25 March 2011.)
- 5 ISI Web of Knowledge. http://esi.isiknowledge.com. (Accessed 26 March 2011.)
- 6 Gasparyan AY. Thoughts on impact factors and editing of medical journals. *Inflammation and Allergy Drug Targets* 2010; 9(1): 2-5.
- 7 Malekzadeh R, Habibzadeh F. Change or perish. *Archives of Iranian Medicine* 2008;11(4): 360.
- 8 Index Copernicus. http://journals.indexcopernicus.com. (Accessed 25 March 2011.)
- 9 Merat S, Khatibzadeh S, Mesgarpour B, Malekzadeh R. A survey of the current status of web-based databases indexing Iranian journals. *Archives of Iranian Medicine* 2009;12(3):271–278.
- 10 Iranian medical editors hold 2nd meeting; News and Views from COPE. *Ethical Editing* 2010; 2(2):8.
- 11 ResercherID. http://www.researcherid.com/rid/B-0232-2008. (Accessed 26 March 2011.)

Improving peer review in scholarly journals

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Abstract Peer review in scholarly journals can be improved by masking of both authors' and reviewers' identities (double-blind) or by using open-to-public peer review. This essay deals with currently available options for improving peer review and offers suggestions for enhancing the quality of publications.

Keywords Confidentiality; periodicals as topic; peer review; research standards

Proponents of the traditional peer review system claim that it is an essential tool for enhancing scientific knowledge. On the other hand, critics present a range of arguments: reviewers rarely agree on suitability of a manuscript for publication, thus questioning the reliability of peer review; reviewers' recommendations are frequently based on subjective arguments and do not favour non-native English speakers; the predictive value of peer review is low, since there is a weak (if any) association between the reviewers' comments and the usefulness of the work for the scientific community, measured in terms of citations^{1,2}; peer review is time consuming and costly; and, reviewers' comments can be painful and distressing for novice authors.^{3,4}

How to improve peer review

Alternatives to peer review, such as inviting authors to write articles with a guarantee of publication and relying on the "old boys' network" to identify up-and-coming researchers, violate the principle that research and scholarship should be evaluated and recognized on their merits, not on their social prestige or connections.⁵ Some alternatives, particularly the auction-based approach, are difficult to execute and ethically questionable. The better the submitted paper, the more scientific currency the author will be likely to bid to have it published.

The main approaches to the improvement of traditional peer review are masking the identity of both authors and reviewers (double-blind) and public peer review.

Double-blind review

In single-blind review, the most common review practice, authors do not know the identity of reviewers⁶ but are able to correctly identify reviewers in about 5% of cases.⁷ Keeping the names and affiliations of reviewers confidential encourages reviewers to be candid in their evaluations, and such confidentiality may also attract qualified scientists.⁸ Not surprisingly, reviewers also prefer to comment anonymously.⁹ Informing reviewers about the authors' identity may lead to biases related to authors' previous work, gender, and nationality.¹⁰ To avoid such biases, masking identity of the authors is recommended.¹¹⁻¹⁴

Nonetheless, double-blind review has disadvantages. Proponents believe that knowing the authors' identity makes it easier to compare the new manuscript with previously published articles. Knowing the authors' identity encourages the reviewers to disclose conflicts of interest.^{10,15} Newcombe and Bouton noted that the reviewers unaware of the seniority of the authors provide less educational comments for the inexperienced ones.¹⁶

A survey of medical editors showed that the identity of authors is masked in only 36% of cases.¹⁷ In a survey of more than 3000 non-medical scientists, more than half supported double-blind review and only a quarter supported single-blind review. Double-blind review was primarily supported because of its objectivity and fairness.¹⁸ In contrast to editors, more authors feel that double-blinding is important. Ecologists and evolutionary biologists too preferred double-blind review,⁶ as did women and junior authors.¹⁹

A series of studies report positive findings for doubleblind peer review. Budden et al found that introducing double-blind review led to an increase in submissions written by women.²⁰ Ross et al claim that blinded review negated the associations between abstract acceptance and nearly all abstract characteristics such as gender and institutional prestige.²¹ Papers published in journals with double-blind review had a higher impact, measured by the number of citations; the authors attribute this to a type I error – that is, journals using non-blinded review published low quality papers, which would not have been published in the blinded peer review system.^{22,23}

Improvements were not confirmed to large randomized trials.²⁴ Further, double-blinding is difficult to accomplish, since reviewers can identify the authors in some cases.²⁵ Clues like self-citation²⁶⁻²⁸ and citing well-known studies often disclose information about the origin of the papers.²⁹

Public peer review

With the advent of the internet and modern information technologies, open access journals switched to interactive public peer review, in which a manuscript is open to comments by any visitor to the website where it is posted. Open review has some advantages. Submissions are immediately published online as "discussion papers". Comments on the quality and authors' responses are open.³⁰ The reviewers' arguments are available to public, and reviewers can claim authorship in some cases.³¹ This system may enhance the quality of manuscripts,³² and encourages reviewers to submit constructive and fair comments.

In *Atmospheric Chemistry and Physics*, where interactive review is established, publication has two stages.^{31,33} In the first stage, manuscripts that pass rapid pre-screening are immediately published online as "discussion papers". Interactive public discussion is initiated, and the authors' responses to the comments are published along with the manuscript. In the second stage, revision and peer review are carried out as in traditional journals.

The disadvantages of the open system relate to the low prestige of open access journals and to the risk of acquiring "enemies" among the authors, threatening the fair attitude towards the reviewer.³⁴ Scholarly communications still operate within a relatively closed system , in which authors may later serve as reviewers and vice versa.³²

Many European academics in non-anglophone countries, particularly in Italy, are marginalized because of the tendency of national journals to publish in English.³⁵ This marginalization was termed a "stigma" for non-native English speakers and has been discussed extensively by Flowerdew.³⁶

To reduce the publication gap between scholars from countries of mainstream science and from the scientific periphery, access to publications and writing/editing courses should be expanded.^{43,44} Moreover, encouraging young academics to participate in the peer review process may also have beneficial results.³⁷ As suggested by Mangelsdorf and Schlumberger in 1992³⁸ and practised in many American universities, reviewing classmates' compositions led to a more collaborative stance among students and sharpens their appraisal skills. It also helps them realize that peers' comments are instrumental for improving the readability of a text.³⁹ According to Loonen et al, acting as a reviewer is a recognition, which allows gaining knowledge and expertise, prerequisites for a good stance in the academic community.³⁹

Journal editors can benefit from shortening publication timelines by encouraging authors to follow the current science writing guidelines.⁴⁰ Shashok has published a list of linguistic markers, which could help the reviewers identify content-based or language-based errors.⁴¹ Likewise, Burrough-Boenisch points to the importance of close collaboration between linguists, copy editors, scientists/ researchers, and journal editors.⁴²

Conclusion

These suggestions highlight the options for improving reliability, fairness, and predictive value of peer review. Blinding may reduce bias and may also provide fairness and better inter-reviewer agreement and predictive value. Transparency and fairness can be reached through a wider implementation of public peer review, relying on standard reviewer forms and digitization of the whole system of science editing.

Competing interests None declared.

References

- 1 Bornmann L. Scientific peer review. *Annual Review of Information Science and Technology* 2011;45:199–245.
- 2 Bornmann L. Does the journal peer review select the 'best' from among the work submitted? The state of empirical research. *IETE Technical Review* 2010;27(2):93–96. doi: 10.4103/0256-4602.60162.
- 3 Ross PF. The sciences' self-management: manuscript refereeing, peer review, and goals in science. Lincoln, MA: Ross, 1980.
- 4 Eysenck HJ, Eysenck SBG. Peer review: advice to referees and contributors. *Personality and Individual Differerences* 1992;13(4):393–399.
- 5 Eisenhart M. The paradox of peer review: admitting too much or allowing too little? *Research in Science Education* 2002;32(2):241–255.
- 6 Smit C. Peer review: time for a change? Bioscience 2006;56(9):

712-713. doi: 10.1641/0006-3568(2006)56[712:PRTFAC]2.0 .CO;2

- 7 Wessely S, Brugha T, Cowen P, Smith L, Paykel S. Do authors know who refereed their paper? A questionnaire survey. *BMJ* 1996;313(7066):1185.
- 8 Office of Management and Budget. *Revised information quality bulletin for peer review*. Washington, DC: Office of Management and Budget, 2004.
- 9 Rowney JA, Zenisek TJ. Manuscript characteristics influencing reviewers' decisions. *Canadian Psychology* 1980;21:17–21.
- 10 Working double-blind. *Nature* 2008;451(7179):605–606. doi: 10.1038/451605b
- 11 Armstrong JS. Peer review for journals: evidence on quality control, fairness, and innovation. *Science and Engineering Ethics* 1997;3(1):63–84.
- 12 Cox D, Gleser L, Perlman M, Reid N, Roeder K. Report of the ad hoc committee on double-blind refereeing. *Statistical Science* 1993;8(3):310–317. doi: 10.1214/ss/1177010904
- 13 Brown RJC. Double anonymity and the peer review process. *TheScientificWorldJOURNAL* 2006;6:1274–1277. doi: 10.1100/ tsw.2006.228
- 14 Van Rooyen S. The evaluation of peer-review quality. *Learned Publishing* 2001;14(2):85–91.
- 15 Primack RB, Marrs R. Bias in the review process. *Biological Conservation* 2008;141(12):2919–2920. doi: 10.1016/j. biocon.2008.09.016
- 16 Newcombe NS, Bouton ME. Masked reviews are not fairer reviews. Perspectives on Psychological Science 2009;4(1):62–64.
- 17 Good CD, Parente ST. A worldwide assessment of medical journal editors' practices and needs – results of a survey by the World Association of Medical Editors. *South African Medical Journal* 1999;4:397-401.
- 18 Ware M, Monham M. Peer review in scholarly journals: perspective of the scholarly community – an international study. Bristol, UK: Publishing Research Consortium, 2008. http:// www.publishingresearch.net/PeerReview.htm
- 19 Budden AE, Aarssen L, Koricheva J, Leimu R, Lortie CJ, Tregenza T. Response to Whittaker: challenges in testing for gender bias. *Trends in Ecology & Evolution* 2008;23(9):480– 481. doi: 10.1016/j.tree.2008.06.004
- 20 Budden AE, Tregenza T, Aarssen LW, Koricheva J, Leimu R, Lortie CJ. Double-blind review favours increased representation of female authors. *Trends in Ecology & Evolution* 2008;23(1):4–6. doi: 10.1016/j.tree.2007.07.008
- 21 Ross JS, Gross CP, Desai MM, Hong Y, Grant AO, Daniels SR, et al. Effect of blinded peer review on abstract acceptance. *JAMA* 2006;295(14):1675–1680. doi: 10.1001/ jama.295.14.1675
- 22 Laband DN, Piette MJ. Does the blindness of peer review influence manuscript selection efficiency. *Southern Economic Journal* 1994;60(4):896–906.
- 23 Laband DN, Piette MJ. A citation analysis of the impact of blinded peer review. *JAMA* 1994;272(2):147–149. doi: 10.1001/jama.272.2.147
- 24 Justice AC, Cho MK, Winker MA, Berlin JA, Rennie D. Does masking author identity improve peer review quality? A randomized controlled trial. *JAMA* 1998;280(3):240–2. doi: 10.1001/jama.280.3.240
- 25 Smith R. Peer review: a flawed process at the heart of

science and journals. *Journal of the Royal Society of Medicine* 2006;99(4):178–182. doi: 10.1258/jrsm.99.4.178

- 26 Cho MK, Justice AC, Winker MA, Berlin JA, Waeckerle JF, Callaham ML, et al. Masking author identity in peer review: what factors influence masking success? *JAMA* 1998;280(3):243–245. doi: 10.1001/jama.280.3.243
- 27 Godlee F. Making reviewers visible: openness, accountability, and credit. *JAMA* 2002;287(21):2762–2765. doi: 10.1001/jama.287.21.2762
- 28 Snodgrass R. Single- versus double-blind reviewing: an analysis of the literature. Sigmod Record 2006;35(3):8–21.
- 29 Falagas ME, Zouglakis GM, Kavvadia PK. How masked is the "masked peer review" of abstracts submitted to international medical conferences? *Mayo Clin Proceedings* 2006;81(5):705.
- 30 Marris E. Journal lays bare remarks from peer reviewers. *Nature* 2006;439(7077):642. doi: 10.1038/439642b
- 31 Koop T, Pöschl U. Systems: an open, two-stage peer-review journal. *Nature* 2006. http://www.nature.com/nature/ peerreview/debate/nature04988.html. doi:10.1038/nature04988
- 32 Borgman CL. Scholarship in the digital age. Information, infrastructure, and the internet. Cambridge, MA: MIT Press, 2007.
- 33 Pöschl U. Interactive journal concept for improved scientific publishing and quality assurance. *Learned Publishing* 2004;17(2):105–113.
- 34 DeCoursey T. Perspective: The pros and cons of open peer review. *Nature* 2006. http://www.nature.com/ nature/peerreview/debate/nature04991.html. doi:10.1038/ nature04991
- 35 Giannone DS. Medical writing at the periphery: the case of Italian journal editorials. *Journal of English for Academic Purposes* 2008;7:97–107. doi:10.1016/j.jeap.2008.03.003
- 36 Flowerdew J. Scholarly writers who use English as an additional language: what can Goffman's "Stigma" tell us? *Journal of English for Academic Purposes* 2008;7:77–86. doi:10.1016/j.jeap.2008.03.002
- 37 Misak A, Marusic M, Marusic A. Manuscript editing as a way of teaching academic writing: experience from a small scientific journal. *Journal of Second Language Writing* 2005;14(2):122–131. doi:10.1016/j.jslw.2005.05.001
- 38 Mangelsdorf K, Schlumberger A. ESL student response stances in a peer-review task. *Journal of Second Language Writing* 1992;1(3):235–254. doi:10.1016/1060-3743(92)90005-A
- 39 Loonen MPJ, Hage JJ, Kon M. Who benefits from peer review? An analysis of the outcome of 100 requests for review by Plastic and Reconstructive Surgery. Plastic and Reconstructive Surgery 2005;116(5):1461–1472. doi: 10.1097/01. prs.0000178796.82273.7c
- 40 Begg C, Cho M, Eastwood S, Horton R, Moher D, Olkin I, et al. Improving the quality of reporting of randomized controlled trials: the CONSORT statement. *JAMA* 1996;276(8):637–639. [updated 2010; cited 2011 Mar 30]. http://www.consort-statement.org.
- 41 Shashok K. Content and communication: how can peer review provide helpful feedback about the writing? *BMC Medical Research Methods* 2008;8(3). doi:10.1186/1471-2288-8-3
- 42 Burrough-Boenisch J. Shapers of published NNS research articles. *Journal of Second Language Writing* 2003;12:223–243. doi:10.1016/S1060-3743(03)00037-7

Editing around the World

Scientific journals in Costa Rica: current situation and challenges

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Abstract This article analyzes the progress of the Costa Rican scientific journals, setting out how they have evolved in the recent years. It describes some of their characteristics and how the Latindex project has contributed to their improvement, and it concludes that that there is still work to do to reach the quality of many other good Latin American and worldwide journals.

Keywords Costa Rica; scientific journals; Latindex project; bibliometrics; periodicals as topic.

For many years, Costa Rican scientific journals were, in a sense, "orphans", scattered and fairly invisible. It was only in 2001 that the University of Costa Rica (UCR) mediated at a national level and initiated the Latindex project (www. latindex.org), which eventually led to the recognition that these journals currently enjoy. Prior to 2001, these journals did not use rigorous editorial processes and practices. With few exceptions, they were neither indexed nor evaluated by any organization, except the SciELO Publication System (http://www.scielo.sa.cr), which was established in Costa Rica in 2000 and is still under development.

Currently, about 200 scientific, academic, and cultural journals are published in Costa Rica – which compares with the number found in Peru and Uruguay, but is more than in most of the other Central American and Caribbean countries.¹ A closer look at the profile of scholarly journals published in Costa Rica reveals that many of them can be best described as "cultural", and that scientific journals in the narrow sense are actually scarce and published mainly by public universities.

The database provided by *Latindex* is the only resource in Costa Rica where the current status of these journals can be acknowledged. This database is a reliable directory to account for and characterize the existing journals. Given that Costa Rica has no national evaluation systems to classify journals, *Latindex* has been used to categorize them according to their quality level.²

Background

The scientific and cultural development of Costa Rican journals started in the 19th century with some short publications that contained a broad spectrum of topics that were considered scientific. The first journal, *Horas de solaz*, was published in 1871, with just two issues published before the journal ceased to exist.

Two journals from this early period are significant: *Costa Rica Ilustrada* (1887–1892), because of its impact at the national level, and *Gaceta Médica de Costa Rica* (established in 1896), related to medicine, surgery, pharmacy, and

hygiene,³ because it is the oldest journal that is still being published.

In these early publications, the emphasis was on literature – mainly poetry – and later on, political and social affairs. Many of these publications lasted only for a short time, usually not more than three years, and some of them ceased publication for a period of time, then appeared later, but also only briefly.

In general, these journals were led by well-known writers and groups of intellectuals who wanted to see their work published. Some journals had an international profile, such as *Repertorio Americano* (1919–1958), which was led by Joaquin Garcia Monge, one of the most important Costa Rican writers. Many Latin-American intellectuals published in that journal. Costa Rica also produced some journals sponsored by societies, such as *Vida y Verdad* (1904), named after the society that supported it. This journal discussed various topics brought up by Costa Rican authors and included translations of some European works, such as ones by Erasmus of Rotterdam, Leo Tolstoy, and Herbert Spencer.⁴

Current situation

Because of the lack of a national policy to develop scientific journals, the University of Costa Rica began using *Latindex* criteria to assess the journals and encourage their improvement (table). However, little importance was given to the indexing process. Currently, the Costa Rican presence in the international bibliographic databases or repositories is minimal. Of 206 active Costa Rican journals, only one is indexed in ISI Thomson databases, 10 in the SciELO database, 15 in REDALyC, 18 in DOAJ, two in CAB Abstracts, and one in SCOPUS.

Under the *Latindex* project, the UCR is responsible for training national editors. The university is also in charge of promoting the implementation of new technologies and tools to increase the journals' visibility. In addition, as a representative of the Latindex in Costa Rica, this university has been committed to assess, advise, raise the quality of, and advertise national journals. The results have been gratifying, for in the past six years the inclusion rate of these journals in bibliographic indices and databases has increased from 1% to 10%.

Currently there are over 200 Costa Rican journals in three categories: scientific, technical-professional, and popular science. Of these, 56% are published by state universities. Journals are sold at cost or donated. Their editors are academics who work pro bono because the task is included in their regular teaching and research activities. The main purpose of these journals is to disseminate research results,

lournal name	Publisher	Percentage of Latindex criteria achieved	No of databases and indexes in which journal is included	Publication form	lssues per
Agronomía Mesoamericana		100	18	Print and electronic	
Agronomia mesoamericaria	UCK	100	10	Finit and electronic	Z
Revista de Biología Tropical	UCR	100	42	Print and electronic	4
Actualidades Inv. Educación	UCR	100	6	Electronic	3
Agronomía Costarricense	UCR	97	20	Print and electronic	2
Acta Médica Costarricense	Medical Association of Costa Rica	97	7	Print and electronic	4
Educación	UCR	97	6	Print and electronic	2
Medicina Legal de Costa Rica	Legal Medicine Association	97	4	Print and electronic	2
Población y Salud en Mesoamérica	UCR	97	5	Electronic	2
Diálogos	UCR	94	3	Electronic	2
Ingeniería	UCR	94	4	Print	2
Estudios Históricos de la Masonería LA y Caribeña	UCR and others	94	1	Electronic	2
Odontos	UCR	91	0	Print	1
Biocenosis	UNED	91	3	Print	2
Revista de Matemática	UCR	91	1	Print and electronic	2
Educare	UNA	89	1	Electronic	2
MH Salud	UNA	89	1	Electronic	2
Revista Derecho Electoral	Supreme Electoral Court	89	0	Print and electronic	2
Posgrado y Sociedad	UNED	89	0	Electronic	2
Reflexiones	UCR	88	5	Print and electronic	2
Revista Ciencias Económicas	UCR	88	3	Print	2
Revista Ciencias Sociales	UCR	88	10	Print	2
Revista Geográfica América Central	UNA	88	1	Print and electronic	2
Pensamiento Actual	UCR	88	0	Print and electronic	1
Humanitas	Universidad Católica	88	1	Print	1

Characteristics of 25 best journals in Costa Rica, according to the 2010 Latindex evaluation

UCR=Universidad de Costa Rica, UNED=Universidad Estatal a Distancia, UNA=Universidad Nacional Autónoma.

and to emphasize innovative experience that could push forward professional practice and theoretical discussions. The remaining journals are sponsored by professional associations (*colegios*) and governmental or nongovernmental organizations. Most journals are published twice a year, which is an indication of their difficulties in maintaining a steady flow of submissions and perhaps of economic problems that they face.

Even though the evolution of Costa Rican journals has been slow, the improvement in quality during the past five years is remarkable. In 2004, 11 journals were in the Latindex Catalogue; by 2010, this had risen to 57 (27% of all science journals published in Costa Rica). The number of e-journals rose from 31 in 2004 to 111 in 2010. In 2007, the UCR opened the Latindex-UCR database (www.latindex. ucr.ac.cr), where full versions of articles can be found and downloaded. This tool has led to an increased contribution of authors from other countries to these journals.

Challenges

Many challenges remain. It is necessary for the journals to increase their visibility, not only by being included in international indexes and databases, but also by providing online versions of their content. A tendency towards national isolation is a major constraint that has not yet been overcome. There is still resistance to expanding editorial boards, to accepting more articles by foreign authors, and to allowing external evaluation. Also, regular publication remains to be achieved; for many journals this challenge is related to the scarcity of resources.

Only a few journals are published exclusively in an electronic edition; in general, most Costa Rican journals publish electronic issues that are similar to the printed ones. Therefore, these journals lack value-added services, implementation of metatags, and visibility to internet search engines to make them more versatile.⁵ A few journals take advantage of web-related functions such as online videos, interactivity with the reader, or the use of hypertexts.

In conclusion, the progress of Costa Rican journals from 2002 to 2010 has been very positive but is still

not sufficient to reach the current level of many Latin American and other journals around the world.

Competing interests None declared.

References

- 1 Latindex: Sistema regional de información en línea para revistas científicas de América Latina, el Caribe, España y Portugal [Regional system of scientific journals of Latin America, the Caribbean, Spain and Portugal]. 2010. http:// www.latindex.org. (Accessed 3 March 2011.)
- 2 Aguirre M, Cetto AM, Córdoba S, Flores AM, Román Román A. Calidad editorial y la visibilidad de las revistas: Experiencia de Latindex [Editorial quality and visibility of journals: the Latindex experience]. In: Babini, Dominique y Fraga, Jorge, eds. Edición electrónica, bibliotecas virtuales y portales para las ciencias sociales en América Latina y El Caribe [Electronic editing, virtual libraries and internet portals for social sciences in Latin America and the Caribbean]. Buenos Aires: CLACSO, 2006: 103-122. http:// bibliotecavirtual.clacso.org.ar/ar/libros/secret/babini/ Aguirre%20Cetto%20Fy%20R.pdf. (Accessed 3 March 2011.)
- 3 Ovares F. Literatura de kiosko: revistas literarias de Costa Rica, 1890-1930 [Kiosk literature: literary journals of Costa Rica, 1890-1930]. Heredia, Costa Rica: EUNA, 1994.
- 4 Revistas: Proyecto de digitalización de revistas costarricenses [Journals: Digitalization Process of the Costa Rican Journals].
 2008. Available at: http://www.sinabi.go.cr/Biblioteca%20 Digital/Revistas1.aspx#HERMES_TABS_1_0. Accessed 3 March 2011.
- 5 Córdoba S, Coto R. Characteristics shared by the scientific electronic journals of Latin America and the Caribbean.
 In: Chan L, Mornati S, eds. *ELPUB2008. Open Scholarship: Authority, Community and Sustainability in the Age of Web* 2.0. Proceedings of the 12th International Conference on Electronic Publishing held in Toronto, Canada, 25-27 June 2008:187-202. http://elpub.scix.net/cgi-bin/works/Show?_ id=187_elpub2008&sort=DEFAULT&search=%22ELPUB%3a 2008%22&hits=52. (Accessed 3 March 2011.)

EASE short course in Warsaw





Sec. 1

Waleria Młyniec (left) and Pippa Smart with the "EASE Official Cake"

Reports of Meetings

How to be a successful journal editor – short course

Warsaw, Poland, 5-6 February 2011

EASE arranged for this course, run by Pippa Smart from PSP Consulting, to be held on the premises of the Maria Skłodowska-Curie Memorial Cancer Center in Warsaw. The local organizer was Professor Edward Towpik, a member of EASE Council and editor of the *Nowotwory Journal of Oncology*. The organization was substantially supported by a grant from the Polish Foundation of the European School of Oncology.

The course provided an opportunity for junior editors to meet their peers and discuss successful techniques for developing scientific journals. The course was fully interactive, without formal lectures, but including vivid discussions, case scenarios, problem solving, and group working. Twelve participants from different European countries attended, representing different areas of scientific publishing and different backgrounds (public health, clinical medicine, genetics/biology, etc). All participants received a course folder with notes, data, examples, and relevant articles for further reading. They worked in groups, and all participated in discussions. The course ran from 2 pm on Saturday 5 February to the afternoon of 6 February.

The programme covered three major fields: the role of editors in the modern publishing environment; efficient and successful working with authors and reviewers; and rapid delivery of clear, quality-controlled science to readers, using paper and other media.

The first part of the course was devoted to the rapid changes which are currently ongoing in scientific publishing. Online, electronic-only scientific journals emerged in the past decade and are constantly growing, gaining reputation, and attracting first-league authors. The development of electronic publishing has resulted in a profound transition of the publishing environment (for example, the advent of the PlosOne online peer-reviewed journal). During the course electronic publishing in general was discussed,



EASE can arrange for this course to be held in other cities, if anyone would like to host it at their institution. Please contact the EASE Secretary for details.

and the open-access publishing model was reviewed, including different types of this publishing strategy. Another issue extensively analyzed by Ms Smart and the course participants was the interplay between the owner of the journal, the journal publisher, and the editor (editorial board) of the journal. Appropriate communication between all of these was emphasised and pointed out as the key factor for the success of the journal.

The heart of editing

The second part started on Sunday and covered the heart of editing – working with authors, attracting (and keeping) highly-ranked authors, collaborating with experienced reviewers in the field, and establishing optimal procedures for fast and efficient editorial copy-flow. Discussants shared their experiences, highlighting the invaluable help coming from modern internet-based systems for article submission and review. The different commercial and free systems available were briefly discussed. Practical remarks were provided by Ms Smart, who recommended other tools useful in routine editorial work (CiteULike, Connotea, Turnitin). The value of journal indexing in the major scientific databases was underlined, and how to reward reviewers was discussed.

The final part encompassed issues related to the audience of the journal – its readers. Ms Smart presented data showing readers' expectations of scientific journals. As electronic publishing becomes the major field of scientific communication, many important issues are arising related to the design of electronic journals (tabbed structure instead of classic scrolled-down; individual targeting to other content of potential interest to the reader; layered information; "hypertext the text" principle, etc). Online repositories like PubMedCentral excited a lot of interest.

The course was also an excellent opportunity for networking, both professional and social. Waleria Młyniec, the senior Polish member of EASE, arrived in the evening with a delicious home-made "official EASE cake" and later joined us at the dinner. Professor Towpik invited the participants to a regional restaurant serving traditional highland-style Polish cuisine. The course was evaluated as very effective; both the organization and the merit were indeed outstanding.

Pippa Smart welcomes participants at the start of the "How to be a successful journal editor" course in Warsaw

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Book Reviews

On Fact and Fraud: Cautionary tales from the front lines of science by David Goodstein. Princeton Press, 2010. 184pp. \$22.95, £15.95. ISBN 978-0-691-13966-1



David Goodstein has almost a lifetime's worth of experience in investigating allegations of scientific misconduct. In this erudite and entertaining book we are guided through a number of wellknown cases of potential fraud. I say "potential" because what constitutes fraud is a controversial topic in itself, as Goodstein points out through several excellently presented examples.

First, though, Goodstein analyses the causes of fraud. What drives scientists and sometimes clinicians to falsify data in the first place? He states that three factors are almost always present in cases of fraud: the perpetrator was under pressure to succeed; they thought they already knew the answer; and they were working in a field where exact reproducibility was not expected. This last point probably explains why fraud is found more in biomedicine than in the physical sciences.

Goodstein begins by examining the infamous case of Robert A Millikan's measurement of the charge on an electron, which of the examples elaborated in this book takes its place as my favourite. Millikan fitted the first of the criteria likely to make one falsify data, that of being under considerable career pressure. He was a physicist at a time when others, such as Planck and Einstein, were making great advances, and I suppose that Millikan felt that somehow he had to "keep up with the big boys". Millikan realised that he could obtain an accurate measurement of the unit of electric charge (e) by applying an electric field to droplets of oil and observing how rapidly the droplets fell under gravitational force. It was not until 1984 that Millikan's misdemeanour was exposed, when the research honour society Sigma Xi suggested that Millikan had "cooked" his data. Their accusations were based on Millikan's 1913 publication, which contained data showing that larger charges on oil droplets were always an integral value times that obtained for the value of "e". When Millikan's laboratory notebooks were scrutinised it became apparent that he had been rather selective in his reporting - he reported measurements of only 58 drops of a total of 175 measured over a six-month period in 1911/12.

One could attribute this "oversight" of data that did not exactly fit his hypothesis to a spell of selective amnesia bought on by his powerful belief that the data he did include were the accurate ones and that any other data points were flawed by experimental difficulty, but for the fact that he stated in this paper: "It is to be remarked, too, that this is not a selected group of drops but represents all of the drops experimented upon during 60 consecutive days". Goodstein reproduces several pages of Millikan's notebooks and talks us through first the cheating, and then the covering up by lying, in one of the most important scientific papers of the twentieth century – work that ultimately led to his being awarded the Nobel Prize in physics in 1923. I can only speculate what would have happened had Millikan thought to destroy his notebooks.

Other chapters in the book deal with similar cases of scientists so badly wanting to succeed that they transgress the boundary between truth and falsification. Duplication of panels in a Southern blot published by Vipin Kumar (working in Leroy Hood's laboratory at Caltec) in 1989 is something that, in these more enlightened (or untrusting) days, would now be detected at peer review - most reviewers deliberately seeking to detect such duplication. James Urban, working in Hood's laboratory at the same time as Kumar, went so far as to submit a paper that was based on invented data to a journal. In defence, Kumar argued that he was "green and naive" and thus didn't know any better (a claim rejected by the investigating committee), and Urban claimed to know how the experiment would turn out if he had actually done it (so are we to applaud him for trying to save science a good deal of time and money?). Both claimed to be under pressure to be seen as successful.

These are just three of the examples that Goodstein elaborates on in this entertaining journey through scientific misconduct. The physicists among you will probably find Goodstein's analysis of the events surrounding what he calls "The Cold Fusion Chronicles" (claims of solving the world's energy problems with an inexpensive low-tech means of fusion) fascinating from both the scientific and political points of view. The lengths scientists will go to get the recognition they feel they deserve are truly extraordinary!

Although this book has its depressing side – it is after all a catalogue of misconduct – it should be remembered that cases of deliberate falsification are very rare and that most scientists are as honest and upstanding as we hope and expect them to be. In his closing paragraph Goodstein states: "I hope that the reader will close this book with a deeper appreciation of how science (and scientists) actually work. If so, you will have an understanding grounded in the reality, not theory, of what science is. You will be able to apply the principles described in this book in looking at future cases, and of course, avoid committing fraud yourself."

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EASE-Forum Digest: December 2010 to March 2011

You can join the forum by sending the one-line message "subscribe ease-forum" (without the quotation marks) to majordomo@helsinki.fi. Be sure to send messages in plain text format; the forum software does not recognize HTML-formatted messages. More information can be found on the EASE web site (www.ease.org.uk). When you first subscribe, you will be able to receive messages, but you won't be able to post messages until your address has been added manually to the file. This prevents spam being sent by outsiders, so please be patient.

Can editors' editing entitle them to authorship?

Is there a rationale whereby editors-in-chief who make substantial editorial contributions to the manuscript before publication might be joined as an author of a paper submitted to their journal? Marcin Kozak posed a scenario of an editor-in-chief who reworked a manuscript, giving it a new shape, following which the editor was invited to become a co-author by the authors.

Members of the forum were firm in their view that suggesting changes and additions to a manuscript is merely part of an editor's job, and most felt that acknowledgement of the editor's contribution was also inappropriate. Lawrence Osborn thought a paper should be submitted to another journal if the authors insisted on the editor being joined as an author. Irene Hames cautioned about using diplomacy when answering such a request from the authors because they may genuinely be trying to be fair. Experienced editors should know how to tailor their correspondence if they suspected the authors' motives were to add a prestigious name to the paper so as to increase its visibility and citability.

As a postscript to this discussion, participants might be interested in the stance that the journal Neurology takes on authorship. In their fight against covert pharmaceutical industry bias in the papers they publish, the journal has abandoned the authorship criteria suggested by the International Committee of Medical Journal Editors (ICMJE) that focus on who deserves to be an author. It has adopted the approach that an author is a person who has influenced the content of the paper. This could include a medical writer employed by the pharmaceutical industry but, as suggested by Elizabeth Loder, the BMJ's US-based clinical epidemiology editor, adopting this definition could produce an argument for an editor being included as an author.1 For instance, an editor who requires the authors to change their conclusions which originally had not been supported by the data to conclusions supported by the data, thus changing the paper's message, could be said to have had a substantial influence on the content of the paper.

The EASE Forum discussion digressed to acknowledgement of author's editors. Elisabeth Heseltine felt that although the ICMJE guidelines recommend that

editors should ask authors if they received assistance with the preparation of the manuscript, there was no need to acknowledge the person who had given assistance in the paper (ICMJE gives a person who provided writing assistance as an example of one who might be included in the acknowledgements http://www.icmje.org/ ethical_1author.html). Elisabeth, who is an author's editor, would prefer not to be acknowledged when she does not see the final version, which might have grammatical errors. Sylwia Ufnalska explained that this was the reason why the EASE Guidelines (http://www.ease.org.uk/pdfguidelines/ AuthorGuidelinesHighRes.pdf) recommend that acknowledgements should state that a language professional who had assisted with the manuscript was not responsible for the final version. This solution allows the all-important transparency while protecting the professional reputation of the author's editor. Attention was also drawn to ICMJE's requirement for written permission from any person whose name is included in the acknowledgements.

Finally, James Hartley alerted the forum to a survey of 180 Croatian journals which sought to establish the prevalence of editors publishing in their own journals. While the study found that editors in the sample did not usually publish in their own journals, the researchers concluded that there was a need for greater transparency when they did (*Scientometrics* 2011;86:227-233). In Will Hughes' view, the practice of editors publishing in their own journals should not generally be condoned but the practice was understandable in highly specialized journals with insufficient copy flow.

"In Vitro" or "in vitro" in headings?

Aleksandra Golebiowska asked if the "in" where "in vitro" was used in a heading should have a capital "I" when, according to the respective style guide, prepositions longer than four letters should begin with a capital letter. Paul Neate quoted the Chicago Manual of Style (8.167: Headline style): "prepositions [that] are part of a Latin expression used adjectivally or adverbially (De Facto, In Vitro, etc.)" should be capitalized. He would therefore write both "In" and "Vitro" with an initial capital letter. This was contrary to the style guide at one of his former employers, which prescribed that "in vitro" (and "in vivo" etc) should never be capitalized in headings, even when capitalizing all significant words, which he thought looked awful. Marge Berer, who was against the capitals, was also driven crazy (which makes two of us) by authors who use capitals when explaining acronyms - for example, we interviewed 20 People Living with HIV (PLHIV). It would be interesting to know how this can be justified by its proponents.

"Due to" language moving on are "owing to" and "because of" outdated?

Has "due to" taken over from "owing to" and "because of" in the English language? Angela Turner's authors at *Animal Behaviour* seem puzzled when she edits "due to" out of their papers. Alan Singleton assured her that he still stuck to "due to" as equivalent to "caused by", and "owing to" as equivalent to "because of", but he feared he was in a minority. John Taylor pointed out that "due to" is given the meaning "because of" in Chambers, Collins, and Concise Oxford Dictionaries as well as in the American dictionary Websters, but not in the American Heritage dictionary. (I've noticed that the American journal *Blood* also changes "due to" to "because of"). As for how usage can change, John drew authority from Humpty Dumpty's pronouncement in *Alice in Wonderland*, ""When *I* use a word," Humpty Dumpty said, in rather a scornful tone, "it means just what I choose it to mean — neither more nor less."" Rounding off the discussion, Norman Grossblatt noted that there is no solid reason to avoid using "due to", according to *Merriam-Webster's Dictionary of English Usage*.

How to deal with national (non-English) language abbreviations in English

Institutions in countries where English is not the official language commonly adopt an official English translation in addition to the name in the language of the country. The abbreviation for the name, however, continues to reflect the name in the country language. John Taylor gave an example: the Norwegian Landsorganisasjonen i Norge (LO) is translated as the Norwegian Federation of Trade Unions (LO). The organization always uses the abbreviation LO, even on its English-language webpage. John's problem was presenting the abbreviation in English text: should the accepted abbreviation be used or should the official English title be abbreviated and used (here, NFTU) even though this never appears in any of the organization's documents? All the replies he received urged using the acronym from the original language. David Mason suggested the abbreviation should be explained by giving the English translation followed by the country language name: "He belonged to the Federation of German Trade Unions (Deutscher Gewerkschaftsbund [DGB]). Another famous member of the DGB was Hans Dichter". Stuart Handysides extended the proposal to writing the original name first, for example, the Sociedad Española de Microbiologia (SEM; Spanish Society for Microbiology), pointing out that naming an organization in its own language was necessary not only for clarity but also to show respect. Angela Turner argued that using the official name and abbreviation rather than the translation made it easier for readers to search the organization on the internet. However, Mary Ellen Kerans maintained that the Spanish journals in her group used the English translation followed by the Spanish acronym and omitted the original Spanish name because associations in Spain are best known by their abbreviated names. She felt searches would be successful if the English translation or the acronym were used.

How long does it take to publish an article?

How long a journal takes to publish an article is of great interest to authors and, in the case of biomedical journals, also to sponsors of new drug products. Many journals give the date an article is accepted for publication and the date of publication in the individual article; some give average



times between submission or acceptance and publication. Helle Goldman was looking for statistics based on a large number of lag times because a contributor to his journal, *Polar Research*, which is published three times a year, was annoyed by a wait of six months between acceptance and publication of an article. Although he had found an article in *Nature* (2002;420:15) which showed a graph of median time from submission to publication of 14 journals, he was interested in the time from the date of acceptance, and in journals other than biology journals.

John Glen reported that from his records the average longest time between acceptance and publication in his Journal of Glaciology over the past two years (six issues a year) had been seven months, and the average shortest time three months. The quarterly Journal of the History of *Philosophy* gives detailed submission statistics on its website (http://philosophy.wisc.edu/jhp/submissions.html), which Dale Richardson had found while searching the internet. The average time between acceptance and publication had been one year for the past three years. Grace Townsend, who works for a medical communications agency, said that from their experience of medical journals, the lag time between acceptance and publication in print was 8-24 weeks, and 24 weeks was not unusual. She also pointed out that putting articles online before print had of course shortened lag times. Reme Melero referred to an editorial on the influence of online posting on publication delay of papers submitted to 14 selected food research journals (available at http://digital.csic.es/ bitstream/10261/3640/3/Manuscrito_Scientometrics.pdf). Helle added in reply to Grace that there must also be a close correlation between lag times and publication frequency.

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References

1 Loder E. Who gets to be an author? BMJ Group Blogs, 14 March 2011. http://blogs.bmj.com/bmj/2011/03/14/ elizabeth-loder-who-gets-to-be-an-author/?utm_ source=feedburner&utm_medium=feed&utm_campaign =Feed%3A+bmj%2Fblogs+%28Latest+BMJ+blogs%29& q=w_bmj_podblog#

This Site I Like

Information and advice for researchers from the "scientific periphery"

www.publish-in-medicine.com

"Even the longest journey begins with the first step," says an ancient Chinese proverb, and the recently established website *Publish in Medicine* provides an example of how this wisdom applies to the world of medical writing and editing in a country from the so-called scientific periphery.

Publish in Medicine is the first bilingual (English-Croatian) website in southeastern Europe dedicated to providing up-to-date information, guidance, and advice related to writing and publishing scientific articles, primarily in the field of biomedicine. The idea behind this site is that everywhere in the world, but especially in transitional and developing countries, scientists are struggling to adequately present their research in a written report and publish it in a highly visible journal. These researchers may be experts in their profession (for example, clinical medicine) but may lack English language and writing skills needed to properly communicate their research findings to an international audience.

Easy-to-digest, plain language, practice-based

Language inadequacy is often not the most difficult obstacle to be overcome in a pursuit of publication. For many researchers, the greatest challenge is to present all the components of their study in a clear, structured, and complete manner. Of course, many useful reporting guidelines, manuals of style, and handbooks on writing in medicine are available, but how many researchers actually have the time to study them in detail? *Publish in Medicine* aims to provide them with easy-to-digest, plain language,



practice-based tips and advice that will improve their writing and increase the chances of success in publishing.

The site includes a section on basic concepts such as "medical literature", "scientific journals", and "structure of an original scientific article", which builds a general background for the site and orients lay readers. Even experienced researchers may not be familiar with some of the details presented in this section (for example, that the number of items added to the PubMed bibliographic database increased almost 30% in between 2000 and 2005).

The editor's column shares personal opinions, experiences, and some less known facts from the history of scientific writing and editing. The news and events section aims to update readers on the latest developments and guidelines in medical writing, editing, and publishing, and to announce relevant events and meetings. Useful links are presented, with screenshots and short descriptions, which gives this section a "personal touch" and helps readers to identify the needed resource. *Publish in Medicine* also connects the readers who need professional help in writing and editing with someone who can provide such services.

Long journey or fall into oblivion?

This site has been established very recently, as is obvious not only by the date of the oldest entries (late February 2011) but also by the relatively small number of articles that have been published so far. The impression improves slightly when we take into account that there is a Croatian version of almost all the articles that are available in English. The Croatian version is comprehensible by the great majority of researchers from the countries of former Yugoslavia, many of whom are scientifically active, but proficient neither in the English language nor in scientific writing. For such people, this site potentially opens a new window into the world of high-quality publishing.

Time will tell if the establishment of the *Publish in Medicine* website was the first step on a long journey – or a noble, but short-lived, initiative that ended up in the oblivion of cyberspace. As with many other noble initiatives – past, present and future – this website's destiny will be decided by how long the enthusiasm of its makers is sustained. Let's hope this enthusiasm is time-proof, for the benefit of all the researchers in the "scientific periphery".

Dario Sambunjak

Senior Editor, *Croatian Medical Journal* Director, Croatian Branch of the Italian Cochrane Centre Editor-in-chief, *Publish in Medicine* Member of *ESE* publications committee dsambunj@mefst.hr

My Life as an Editor – Moira A Johnson



When I stepped down from the role of chief editor of *European Science Editing* there was a sense of loss, like saying goodbye to an old friend at a railway station, but also a sense of relief – the burden of responsibility had been lifted from my shoulders – and placed firmly on someone else's. That's not to say that being chief editor was a particularly onerous

task, but life moves on and in the four years since I became editor a lot of things have changed in my life – location, employment, health, and family. I had to rationalize my life, and there were a few casualties of the "down-sizing".

From academia to editing

When in education I had no intention of becoming an editor. I did a degree in microbiology and virology, and got entranced by the world of Petri dishes and cell culture. I stayed at the same university (Warwick) to do a PhD. After graduation, interestingly, a contemporary of mine went to work as a writer for Nature, and this was poorly regarded as a career path by the academics in my department. In any case, cancer research called and I went on to do a post-doctoral fellowship, followed by a second one in HIV molecular biology. By this time I was working near to my hometown in the medical school at Leicester, and fortuitously (or so it seemed) a lectureship in a new department became available. Hence I became a medical school lecturer, and led a small research team looking into the immunological processes underlying atopic skin diseases. My publication record grew, but after five years of toiling away at the bench I reached the conclusion that the scientist's life was not for me. Besides, I wouldn't wear sandals with socks - I just didn't fit the mould.

I cast around for ideas of a career change, and decided to give editing a try. I had always enjoyed writing up results and preparing grant applications more than doing the experiments, so it seemed somehow natural to investigate the world of scientific publishing. I have to confess to being entirely self-taught in the craft of editing – I guess I had a bit of a flair for making words flow, and I built on this by studying various style guides and (in particular) Judith Butcher's copy-editing bible. I contacted several publishers of scientific journals, relying on my science-heavy CV to get me noticed, and indeed I was offered some proofreading by a microbiology journal, and then by a virology journal. After several months of reading proofs I was offered copyediting work by those same journals, and business took off. I found that my range of subjects expanded – at one time I was editing for a food technology journal alternately with another on imaging, and a third on veterinary science. The life of work became varied, and I joined EASE and SfEP in 1998. I enjoyed reading my copies of *European Science Editing*, and joined the EASE Forum. After a while I got involved in a discussion about structured abstracts and as a result got asked to review a number of articles that had been submitted.

EASE and beyond

It wasn't long before I was convinced by Jenny Gretton to consider joining the publications committee, so in 2000 at the conference in Tours, France (and heavily pregnant with my now 10 year old younger son), I attended my first meeting. Initially I edited the Reports of Meetings, and when the Webwatch was initiated by Hervé Maisonneuve (the chief editor at that time) I looked after that too. When Hervé decided to step down as editor in 2006 I was asked to succeed him. Ironically, at the time I was about to re-enter the world of full-time employment; moving back from a period in Canada I took an in-house job as a medical writer in Oxford.

So my professional life started to move away from editing and towards writing, although my job still involved a fair amount of proofreading. This became even more the case when I moved to my present post at the University of Oxford, within the Human Immunology Group. These days my job is a hybrid of writing and portfolio management: writing up research, preparing grant applications and reports for funding bodies, and managing the external funding that the group receives from charities such as CRUK and the Wellcome Trust, among others. Life has indeed moved on.

The perfectionist in me is reflected in my main hobby, campanology – the art of ringing church bells. It's an excellent form of both mental and physical exercise (the patterns in change ringing are based on Braid Theory, and there are all those ropes to pull and bell towers to climb). The more sceptical of my friends and family say they always knew I had bats in the belfry!

My life as an editor, including as chief editor of *European Science Editing*, has been rewarding, and I am looking forward to the challenges of semantics for many years to come.

On behalf of the EASE Council, Publications Committee, and all our members, I would like to thank Moira for the tremendous work she did on the journal in her years as chief editor. We are delighted that she will continue as a member of the Publications Committee, with responsibility for the Book Reviews section, and that we will thus continue to benefit from her experience for some time to come. *Joan Marsh, EASE President*

News Notes

News Notes are taken from the EASE Journal Blog (http:// ese-bookshelf.blogspot.com). Please email items for inclusion to John Hilton (hilton.john@ gmail.com) or Lionel Browne (lionel.browne@sfep.net), with "News Notes" as the subject.

TinyURLs may be given to save space and aid reading; full URLs (clickable links) can be found on the EASE Journal Blog.

Review registration ...

Well-conducted systematic reviews are generally considered highercalibre evidence than individual trials in decision-making for clinical practice and health policy. But there is increasing evidence for publication bias, with nonpublication of completed studies as much of a problem as it is for trials. Increased clarity surrounding the conduct and reporting of systematic reviews would be possible if the protocols for systematic reviews, just like those for trials, were registered. Until now there has not been an overarching registry for recording the existence and development of systematic reviews from inception through to completion. The Centre for Reviews and Dissemination, based at the University of York in the UK, has announced PROSPERO, an international Prospective Register of Ongoing Systematic Reviews (www.crd.york.ac.uk/prospero). Registration is free and generates a unique identifying number for each systematic review, which should be reported in any publications that arise from the study. Investigators should use the registry to record the existence of the protocol for a planned or ongoing systematic review of health care interventions even before screening studies for inclusion in the systematic review.

... but troubles with trials

It has been five years since the

International Committee of Medical Journal Editors issued a statement on the requirement to register clinical trials, and about 120,000 trials are now registered. However, a study published in *PLoS One* (6(2):e1470) found several deficiencies in the provision of key information in trial registry records in the World Health Organization's International Clinical Trial Registry Platform. This rather undermines the aims of the registries.

Outsourcing check-up

A report compiled by Kathleen Lyle, a founder member of the UK Society for Editors and Proofreaders (SfEP), offers a valuable insight into the outsourcing of editorial work to overseas suppliers. In 2010 SfEP asked members to report their experiences of editorial outsourcing. The relevant parts of their replies are quoted and commented on in the report (What price quality? Overseas outsourcing of editorial services), confirming that British publishers have been using overseas suppliers for many years. What remain relevant are linguistic ability and editorial skills. SfEP's concern is that some overseas suppliers whose staff do not have English as a first language are offering editorial services, often based on a rigid, rule-bound approach.

New editor for JAMA

The new editor-in-chief of JAMA (the journal of the American Medical Association) will be Howard Bauchner, a paediatrician at Boston University School of Medicine. Dr Bauchner, who takes over from Catherine De Angelis in July, will also oversee the association's nine *Archives* specialist journals.

Ethical considerations

Despite the best efforts of journals' press officers to inform the world about their journal's exciting new articles, it often seems to be ethical issues that hit the headlines. So it's the job of journal editors and publishers to pick up on such issues *before* the offending article is published. But

screening for such issues can be timeconsuming in a world where there is increasing demand to publish quickly. In an editorial in the April 2011 issue of Learned Publishing (24(2):84-85), Diane Scott-Lichter explains how journals should screen for, prevent, and treat ethical issues, and calls for authors to be more involved, because "the responsibility for ethical behavior that underlies work published under their names rests with them." Help is at hand from the Committee on Publication Ethics (COPE), which has recently revised its Code of Conduct for editors (see www. publicationethics.org).

New open offerings

February saw the launch of Wiley Open Access, a programme of open access journals publishing primary research in life and biomedical sciences, including neuroscience, microbiology, ecology, and evolution. The new journals are being launched in collaboration with international professional and scholarly societies, and each will appoint an editor-inchief and editorial board responsible for the peer review process. The journals will be published under the Creative Commons Attribution Non-Commercial License, which permits use, distribution, and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes. The first journal, Brain and Behaviour (www.brain-behavior.com), charges a publication fee of €1520. Elsevier will soon launch Elsevier Medical Case *Reports*, with a similar open-access publishing model and an author processing fee of €500.

Hey, you, get off of my cloud?

Cloud computing is widely seen as the top technological priority for the coming 12 months, with an ever-increasing number of public cloud providers, such as Google and Dropbox. According to a Gartner report of January, 2011 could be the "Year of Cloud". But Vaultium, provider of online file-sharing

solutions, has warned that businesses risk falling foul of UK and European legislation if they store sensitive information in the public cloud. According to the company, public cloud providers do not offer any specific guarantees on the physical location of their servers, which could lead to sensitive data being stored at locations that contravene current legislation such as the UK's Data Protection Act. Vaultium is advising caution when choosing a cloud-based storage provider. The company notes that many cloud providers' storage facilities could be compromised by uncertainty over location: business data stored in the public cloud can be stored in any number of countries, often in the USA, as well as other legal jurisdictions, which can contravene European legislation. In fact, the EU has suggested that government agencies should deploy public cloud services only for applications that do not process sensitive data.

WHO and Cochrane

The World Health Organization (WHO) has awarded the Cochrane Collaboration a seat on the World Health Assembly, allowing it to influence the way WHO uses research evidence in policy-making and planning. The Cochrane Collaboration, a global network of researchers producing high-quality systematic reviews of medical evidence, will look at ways of ensuring that its reviews are relevant to low and middle income countries.

Peer review in the UK

The UK parliament's Science and Technology Committee has launched an inquiry into the operation and effectiveness of the peer review process. The committee has a broad remit and has sought submissions from scientists and other interested parties. The Association of Learned and Professional Society Publishers (ALPSP) issued a 51-point statement strongly supporting the peer review process (http://bit.ly/dJhGdp) and concluding "no credible replacement has been identified. Peer review is evolving and will continue to do so. Rather than trying to disrupt this

established process ALPSP believes it is more useful to supplement and support it ... and encourage continued scientific debate once the literature is published". Others have urged the committee to look at the evidence supporting the peer review process and investigate alternatives and variants.

Peer review in the US

Elsewhere, the US Center for Studies in Higher Education has issued a very long report entitled "Peer review in academic promotion and publishing: its meaning, locus, and future" (escholarship.org/uc/item/1xv148c8). It concludes that "creating a wider array of institutionally acceptable and cost-effective alternatives to peer reviewing and publishing scholarly work could maintain the quality of academic peer review, support greater research productivity, reduce the explosive growth of lowquality publications, increase the purchasing power of cash-strapped libraries, better support the free flow and preservation of ideas, and relieve the burden on overtaxed faculty of conducting too much peer review." (For those of you who want something more digestible, the Research Information Network has produced a handy guide for researchers, available at www.rin. ac.uk/peer-review-guide.)

Journals and journalism

At the ScienceOnline2011 conference, held in Research Triangle Park, North Carolina, in January, John Rennie, a former editor of Scientific American, asked delegates to consider what would happen if all science reporters and bloggers decided to ignore new scientific findings until six months after their publication. In a follow-up article published in The Guardian (Time for a change in journalism?, 26 January 2011), Rennie explains that the "what did the journals publish this week?" model is difficult to break from and writers are unlikely to have time to revisit stories and see how they've evolved. A move away from novelty might result in more informed reporting and a better choice of stories. You can read

more coverage of Science Online 2011 at scio11.wikispaces.com/ blog+and+media+coverage. At a recent panel discussion hosted by the BBC College of Journalism (and online at networkedblogs.com/gjVfN), journalists were encouraged to quote primary sources in the interests of accountability and usefulness, while journals came in for criticism for not publishing articles promptly after an embargo was lifted and for not including DOIs on press releases.

From Serials to Insights

At the UK Serials Group (UKSG) annual meeting, held in Harrogate in April, the society announced the change of title of its journal Serials to Insights: connecting the knowledge *community*, reflecting the wide range of topics covered. UKSG held a competition to choose the title, and Insights was the winning entry. The change will take effect from volume 24, 2012. The journal also has new co-editors, with Lorraine Estelle (JISC Collections) and Steve Sharp (University of Leeds) taking over from Hazel Woodward and Helen Henderson.

Metadata is key

At the UKSG in April, Rufus Pollock from the Open Knowledge Foundation (okfn.org) explained how metadata will become increasingly important. A report of his presentation on the UKSG's LiveSerials blog (liveserials.blogspot. com) explains how data and content are not commodities to sell but platforms to build on. Metadata is the "easy way in; everything attaches to it", whether that's for republication, selling, or analytics. An example is JISC OpenBib project (openbiblio.net/ jiscopenbib), an open bibliography with three million records from the British Library. It links with Wikipedia and incorporates a social network to allow users to edit and add to the data.

PRISMA and CONSORT in Spanish

A Spanish medical journal, *Medica Clinica*, has published Spanish language translations of the CONSORT statement on the reporting of clinical trials (*Medica*) *Clinica* 2011; epub 14 Jan) and the PRISMA statement on reporting of systematic reviews (*Medica Clinica* 2010;135:507–511), with accompanying editorials. The journal has also announced a collaboration between the Pan American Health Organization (PAHO) and the EQUATOR Network and the development of a Spanish Library for Health Research Reporting.

Getting to GRIPS with risk

The rapid progress in discovery of genes linked to diseases has led to an interest in the development of genetic risk models to inform clinical practice, but the quality and completeness of reporting of such models vary. At a workshop sponsored by the Human Genome Epidemiology Network (HuGENet) researchers from the USA, Canada and Europe developed a checklist for reporting genetic risk prediction. The GRIPS statement, which has 25 recommendations and builds on established reporting guidelines, was published in PLoS Medicine (2011;8(3):e1000420).

Unpublished results

The decline effect, whereby published scientific effects seem to diminish with time, goes back to the 1930s when it was observed that psychic ability became less statistically significant as studies were repeated. Jonathon Schooler, a psychology professor at the University of California Santa Barbara explains (Nature 2011;470:437) how this decline effect cannot be solely attributed to regression to the mean, because we rarely have access to "negative" results that weren't published. Not knowing about unpublished data also hinders assessment of publication bias and reporting bias. Schooler joins others in calling for an open-access database of research findings, so that "we can know how well the current scientific process, based on peer review and experimental replication, succeeds in distinguishing grounded truth from unwarranted fallacy".

The long tail of science publishing

Do you know how many journals

there are in the world? A post on the Research Information Network blog (bit.ly/gEBu4u) puts that figure at 24,000-25,000, with about a third of these coming from the top 10 publishers. At the other end of the scale, many publishers publish only one or two journals. A recent article in the First Monday online journal (2010;15(12)) compares the distribution of open-access and subscription-based journals. The study's author, Jan Erik Frantsvag from the University of Tromsø, based this on data from the Directory of Open Access Journals (www.doaj. org) and from Ulrich's Periodicals Directory. Once difficulties with the DOAJ data had been overcome, he found that the distribution of publishers by number of titles published was similar across the two sectors, albeit on a smaller scale in the open-access world.

Open access: growing up

The Imaginary Journal of Poetic Economics (poeticeconomics. blogspot.com) is a blog "mostly written" by Heather Morrison, based at Simon Fraser University in Canada. In a series of posts under the banner "The Dramatic Growth of Open Access", linked to data stored using the Dataverse data publishing tool (thedata.org) and her institutional repository, Morrison shows that open-access journals are growing faster and are more likely to remain active than their subscription counterparts. There are currently about 6000 open-access journals, with a growth rate of about four a day.

Access and understanding

In January, several major publishers pulled out of the HINARI (Health Inter-Network for Access to Research) programme in Bangladesh and other countries, putting an end to free access to journals in those countries. The move was widely criticized, not least by *The Lancet*, who were unhappy not to be consulted by their publisher, Elsevier, one of the companies involved, and HINARI access was reinstated (although without long-term commitments). The HINARI programme was launched in 2001 to provide lowincome countries with access to otherwise prohibitively expensive publications. In an essay in PLoS Medicine called "Towards Open and Equitable Access to Research and Knowledge for Development", members of the Electronic Publishing Trust for Development argued that access and distribution of knowledge follows North American/European standards, an increasingly inaccurate reflection of the global science community. True open-access publishing may provide the answer but much remains to be done in meeting information needs outside the English-speaking bubble.

Open access: showing off?

Open access is certainly having an impact, but how you measure that impact is by no means clear. A "randomized controlled trial of scientific journal publishing" from The FASEB Journal (published online 30 March 2011) found that while open access does increase readership (up to twice as much) it doesn't increase citations. This finding goes against earlier studies that suggested that open-access articles were referenced more frequently. Both "sides" in this debate are of course arguing about the methodology, and the relative importance of readership and citation. There's also the issue of self-selection bias, whereby authors publish their best work as open access, thereby favouring citations of the open-access work. Here the debate is between causation and correlation. Of more concern perhaps is a possible link between open access and industry funding, as highlighted in a recent BMJ rapid response (http://bit.ly/e5HEPj).

Style guide Q&A

The *Chicago Manual of Style* remains one of the most widely used style guides, certainly for American English publications. The guide's editorial team receives many questions from users, and responses to the most interesting queries are published regularly on its website (www.chicagomanualofstyle.org). As well as dealing with familiar questions on hyphenation, lists, and quotation marks, the latest Q&A muses entertainingly on the names of smart-phone apps and how to style text-message content.

Sibling rivalry

PLoS ONE, the general science journal set up by the Public Library of Science, has been the subject of much debate since its launch. Some see it as a pioneer journal making the best use of open access, while others see it as bulk (low-quality) publishing. In March, British journalist Richard Poynder published a detailed analysis of PLoS ONE's history and future on his blog (poynder.blogspot.com), prompting even more debate, much of it focusing on the role of peer review. Richard Smith, former editor of the BMJ (and PLoS board member), says that PLoS ONE will change everything and hasten a move away from carefully filtered journals and towards databases, with post-publication peer review having more significance (blogs.bmj.com, 29 March 2011). But a recent study by Davis Schirger and colleagues (Annals of Emergency Medicine 2011;57:153-160) showed that online commenting is in decline. On another BMJ blog, Liz Wager, chair of the Committee on Publication Ethics, is more concerned about what we call journals such as PLoS ONE, BMJ Open, and Scientific Reports, which are online, fully open-access, larger-scale, less-filtered siblings of major journals. Any suggestions?

Impossible science

Scientific American magazine has launched a new series, "Too Hard for Science?" The aim is to "interview scientists about pet ideas they would love to explore that seem impossible to investigate in real life". How many of these ideas will make it into science journals of the future? Do you think they would pass peer review? Do they need their own journal?

Science publishing networks

A new report from the UK Royal Society shows that China, Brazil, India, and other countries are emerging as major scientific powers to challenge the "scientific superpowers"

(USA, Western Europe, Japan). The report, Knowledge, Networks and Nations, produced in cooperation with Elsevier, also shows that science is becoming more interconnected and more collaborative: over a third of all articles published in international journals are internationally collaborative. New technology and cheaper air travel have of course contributed to this growth in collaboration, but the report also highlights how access to complementary resources and knowledge can improve quality and efficiency of research. And collaboration is clearly essential when addressing global challenges such as climate change or infectious diseases. You can view the data, created using Google's free Motion Chart gadget, at royalsociety.org/ knowledge-networks-nations-graph.

Publishing Open Data Working Group

Open-access publisher BioMed Central is seeking to organize a meeting of editors, publishers, and funding agencies to investigate the details and practicalities of scientific data sharing, data reuse, and open data. This follows several policy statements from research funders and the European Commission in favour of open data. In a letter posted on the BioMed Central Blog (blogs. openaccesscentral.com; 21 March 2011), the publisher proposes an Open Data Working Group with three goals: a licensing agreement to keep research article data in the public domain; a consensus on peer review of supplementary data; and best practice for implementation of data sharing policies.

Who's paying whom?

Free journals seem more likely to recommend drugs than do journals with sources of revenue that are mixed or based solely on subscriptions. That was the finding of a recent study in *CMAJ* (2011;183:544-548), which looked at the influence of pharmaceutical advertising on drug recommendations made in published articles in 11 German journals frequently read by doctors. The researchers found 313 issues containing at least one advertisement for the selected drugs, and 412 articles in which drug recommendations were made. Free journals almost exclusively recommended the use of the advertised drugs, whereas journals financed entirely with subscriptions tended to recommend against the use of the same drugs.

Repository progress

The past few years have seen a huge rise in the number of academic open access repositories. The Directory of Open Access Repositories (www. opendoar.org) was launched in 2006 as a searchable catalogue of repositories worldwide, and by the time you read this will probably have reached a total of 2000 repositories. Reflecting this growth, the Scholarly Publishing and Academic Resources Coalition (SPARC) is hosting a new discussion forum for the subjectbased digital repository community. The SPARC Subject Repositories Forum (SPARC-SR) is the first formal discussion group of its kind and will enable repository managers to share best practices, discuss collaborations, and support each other (see www.arl. org/sparc).

Publishing awards

The Association of Learned and **Professional Society Publishers** (ALPSP) is seeking applications for its 2011 awards for publishing innovation and best new journal. Applicants for the publishing innovation award should explain how their approach helps its users or consumers, and the prospects for long-term development plans. The new journal award is open to any peer-reviewed journal launched within the past three years, and judges will assess editorial strategy, marketing, and commercial success. Application instructions are available at http://www.alpsp.org/ ngen_public/default.asp?ID=251&g roupid=192&groupname=About+A LPSP; closing date is 13 June 2011. Both awards will be presented at the ALPSP International Conference in September.

Also, SPARC Europe, an alliance of research libraries and institutions, is seeking nominations for its Award for Outstanding Achievements in Scholarly Communications and Open Access, to be presented at the LIBER Conference in June 2011. Nominations are due by 15 May; see http://www.sparceurope.org/ about-us/sparc-europe-awardfor-outstanding-achievements-inscholarly-communications.

Excuses for plagiarism

Any editor who has encountered plagiarism in submitted articles will probably have heard a range of excuses from guilty authors. On the iThenticate blog (blog.ithenticate. com), there's a handy compilation of the most common excuses: (1) the misunderstanding ("I didn't know I was doing anything wrong"), (2) the lapse of judgement ("it won't happen again"), (3) the big escape ("surely no one will notice"), (4) forces of nature ("I was under pressure"), and (5) the "honest" mistake ("oops"). Readers are invited to submit their own favourite excuses.

Déjà vu publishing

A journal may retract an article for many reasons. Although cases of scientific misconduct or plagiarism may originate with the authors, sometimes the journal itself causes the problem. The Retraction Watch blog (retractionwatch.wordpress.com) has recently reported on a series of retractions due to accidental duplicate publication. In most cases the journals simply republished an article in a later issue, but in other cases the duplication was technical, caused by incorrect classification or failing to marry up print and online versions. Some authors expressed irritated

exasperation, while others seemed happy with the journal's handling of the situation.

Abstract TV

The structure, style, and content of abstracts has caused plenty of debate, not least here in the pages of European Science Editing. But the New Journal of Physics (iopscience. iop.org/1367-2630), an open-access journal from IOP Publishing, now includes video abstracts alongside the more traditional text abstracts. The aim is "to enable authors to go beyond the constraints of their written article to personally explain the importance of their work to the journal's global audience". The journal has encouraged authors to use a range of presentation styles while asking them to follow guidelines and technical specifications (available at http://bit.ly/hYyN2U).

Research failings

In a video posted on the Faculty of 1000's Naturally Selected blog (blog.the-scientist.com), Sir Iain Chalmers, a founder of the Cochrane Collaboration and editor of the *James Lind Library* (www.jameslindlibrary. org), explains why there are systemic and long-standing failings in the way scientific research is carried out: a lack of understanding of what is known, a lack of a clear statement of what research adds, and not publishing negative results. A poll on the blog indicates that about twothirds of readers agree with Sir Iain.

Copyright for graphics

The publishing division of the University of Michigan Library, now rebranded as MPublishing, has prepared a useful resource for authors who wish in their papers to make use of other people's tables, graphs, charts, and other datarich graphics. This document, Copyrightability of Tables, Charts, and Graphs, is available at http:// publishing.umich.edu.

The author-editor partnership

The Society for Editors and Proofreaders held its first-ever seminar at the London Book Fair on 13 April 2011. "The partnership between author and editor" explored how the relationship between author, in-house editor, and freelance editor can work to mutual advantage. The panel comprised two trios, one in fiction and the other in general/popular medicine. Details are on SfEP's website (www.sfep.org.uk).

Tips for writing boring papers

- Avoid focus
- Avoid originality and personality
- Write l-o-n-g contributions
- Remove implications and speculations
- Leave out illustrations
- Omit necessary steps of reasoning
- Use many abbreviations and terms
- Suppress humour and flowery language
- Degrade biology to statistics
- Quote numerous papers for trivial statements

As reported in *Naturally Selected*, a blog from Faculty of 1000. From: Sand-Jensen K. How to write consistently boring scientific literature. *Oikos* 2007;116:723-727.

> John Hilton hilton.john@gmail.com Lionel Browne lionel.browne@sfep.net

The Editor's Bookshelf

Please write to annamaria.rossi@ iss.it or pennylhubbard@gmail. com if you wish to send new items or become a member of the EASE journal blog (http://ese-bookshelf. blogspot.com) and see your postings published in the journal.

ECONOMICS AND FUNDING

Giglia E. **Public access to publicly funded research: how and why mandatory policies by funders?** *European Journal of Physical and Rehabilitation Medicine*

2010;46(4):603–607. In recent years several funders and public organizations at national and international level claimed, with public statements, for free access to publicly funded research. This contribution presents the principles upon which the mandatory open access policies of over 40 funding organizations worldwide rely. The European Union also mandates open access for researchers with grants within the 7th Framework Programme.

EDITORIAL PROCESS

Bornmann L, Daniel H-D. The manuscript reviewing process: empirical research on review request, review sequences, and decision rules in peer review. Library & Information Science Research 2010;32:5–12.

This study investigates which review requests are assigned by editors to external reviewers, which sequence of review steps typically occur, and which rules are used by editors to decide whether to accept or reject a manuscript for publication. It is based on 1899 manuscripts, reviewed for the year 2000 by the editors of *Angewandte Chemie International Edition*. The majority of the manuscripts were accepted for publication only if they had been positively assessed by two independent reviewers. doi: 10.1016/j.lisr.2009.07.010

Bornmann L, Mutz R, Marx W, et al. A multilevel modelling approach to investigating the predictive validity of editorial decisions: do the editors of a high profile journal select manuscripts that are highly cited after publication? Journal of the Royal Statistical Society - Series A (Statistics in Society) 2011;174(4):1-23. Scientific journals need not only to assess the quality of manuscripts but also to examine the predictive validity of their decisions in selecting the best manuscripts. One question of concern is whether selecting the best manuscripts also means selecting papers that after publication show top citation performance within their fields. This study proposes a new promising approach for assessing the predictive validity of editorial selection decisions. This new methodology has shown many

advantages but also some limitations that need to be addressed by future research studies.

Groves T, Khan K. Is open peer review the fairest system? *BMJ* 2010;341:c6424.

Trish Groves (deputy editor at the BMJ) argues that telling authors who has reviewed their paper has helped to make the process fairer. Open peer review at the BMJ currently means that all reviewers sign their reports, declare their competing interests, and desist from making additional covert comments to the editors. Most BMJ authors and reviewers seem happy with this approach. Perhaps open peer review has succeeded at the BMJ because it is made clear that editors, not reviewers, decide whether to accept or reject submissions. On the other side of the debate, Karim Khan is concerned that open peer review could stop reviewers from being completely frank. doi: 10.1136/bmj.c6424; doi:10.1136/ bmj.c6425

Lyle K. What price quality? Overseas outsourcing of editorial services. *SfEP* 2011;February

Compiled by Kathleen Lyle, a founder member of the Society for Editors and Proofreaders, this report offers a valuable insight into the outsourcing of editorial work to overseas suppliers. In 2010 SfEP asked members to report their experiences of editorial outsourcing. The relevant parts of their replies are quoted and commented on in this report, confirming that British publishers have been using overseas suppliers for many years. What remain relevant are linguistic ability and editorial skills. SfEP's concern is that some overseas suppliers whose staff are not native speakers of English are offering editorial services, often based on a rigid, rule-based approach. http://www.sfep.org.uk/pub/news/ outsourcing.asp

Shashok K. Who's a peer? Improving peer review by including additional sources of expertise. Journal of Participatory Medicine 2010 2:e15. To strengthen the review process, the Journal of Participatory Medicine proposes to enlarge peer expertise to include experts outside the academic and professional communities (such as health care users and other lay experts), who have a stake in the quality of the evidence. According to the author, this can improve the valuable source of knowledge and help rebuild evidence-sharing conduits among patients, physicians, and researchers.

ETHICAL ISSUES

Beisiegel U. **Research integrity and publication ethics**. *Atherosclerosis* 2010;212(2):383–385.

This commentary describes the international problem of research integrity and publication ethics from the view of a German ombudsperson who has been actively involved in the topic since 1997, with experience from several cases of authorship conflicts. Possible explanations for the observed misconduct are discussed, as well as ways to prevent it. doi: 10.1016/j.atherosclerosis.2010. 01.050

Bornmann L. Mimicry in science? Scientometrics 2011;86:173-177. Scientists apply strategies that should enable them to comply to bibliometric accountability and to secure funds to their own research. Some changes in scientists' publication behaviour have been reported in the literature: they tend to do research in accordance with the mainstream in their fields and avoid unusual research; they pursue short-term rather than longterm research; they provide their paper to low-quality journals as these are indexed by databases used for bibliometric analyses in research evaluation; and they submit their findings to different journals instead of presenting them in a single paper. Often the pressure to publish has been seen to cause scientific misconduct. doi: 10.1007/s11192-010-0222-8

Etemadi A, Golozar A, Malekzadeh R. Editorial independence and ethics of research publication. Archives of Iranian Medicine 2010;13(6):465-468. Though the process of publication involves many individuals, the integrity and credibility of a journal are ultimately in the hands of the editor. Editors' independence is thus vital to good publication practice. Not only journal owners may press them for acceptance or rejection of a manuscript; scientists themselves may try to influence editors, and politics often finds ways to control journals' editorial decisions. It is necessary to provide equal publication opportunity for high quality research regardless of political, economic, and personal concerns.

Krag Jakobsen A, Christensen R, Persson R. **And now, e-publication bias.** *BMJ* 2010;340:c2243. In open access (OA) publishing, scholarly communication is made available free of charge on the internet. In biomedical research, authors or sponsors often pay a fee to a publisher to enable immediate free online access. Other journals use a hybrid model, allowing authors to choose between subscription access and author-paid OA. Results from a study on OA publishing in a journal published by the BMJ Group show that author-paid OA publishing preferentially increases accessibility to studies funded by industry. For this emerging type of publication bias in OA hybrid journals, the term e-publication bias is suggested. doi: 10.1136/bmj.c2243

Marusic M. **Croatia moves away from fostering research integrity**. *The Lancet* 2010;376(9753):1627-1628. Croatia seems to be moving away

from a leadership position in research integrity regulation. A new law abolishes the National Committee on Ethics in Science and Higher Education, the highest national body on research ethics. The law leaves the regulation of ethics to individual institutions, obliging them only to publish related documents on their websites.

doi: 10.1016/S0140-6736(10)61999-X

INFORMATION RETRIEVAL

Su C, Pan YT, Zhen YN, et al. PrestigeRank: a new evaluation method for papers and journals. Journal of Informetrics 2011;5:1-13. This study aimed at finding a more exact method to determine the impact and value of a paper. The authors compared the current system, the PageRank algorithm, against PrestigeRank. PrestigeRank is used to rank all papers in physics in the Chinese Scientific and Technology Papers and Citation Database published between 2004 and 2006. Whilst the actual system is based on "citation count" of papers and journals, it is pointed out that the level of the work published in a journal might not always be up to the standard of the journal itself, resulting in an incorrect evaluation. Equations and examples calculated on both systems show more accuracy for the PrestigeRank algorithm, but with several limitations, due to the lack of

in-depth examination of the issues arising from the study itself. doi:10.1016/j.joi.2010.03.011

García-Pérez M A. **Strange** attractors in the Web of Science database. *Journal of Informetrics* 2011;5(1):214-218.

A database citation index, offered by the established Web of Science, is under scrutiny in this study. Sophistication in calculating algorithms seems not to be free of error and in Web of Science leads to "phantom citations" concentrating "strange attractors" around authors and sources, particularly non-English language ones. The Hirsch h-index is criticized for its robustness; it omits the number of authors and the placement in the list of authors and the number of publications. It penalizes new scientists with a short career, however important their discovery might be. These errors of commission, such as missing citations and stray references, "encourage the use of other platforms for the accrual of complete citation records". doi:10.1016/j.joi.2010.07.006

LANGUAGE AND WRITING

Weinert C. Are all abstracts created equal? Applied Nursing Research 2010;23(2):106-109. Investigators and clinical scholars need to know how to prepare a strong, convincing abstract. The scientific community reads more abstracts than full texts. The article explores each critical stage of abstract development: planning, drafting, reviewing, peer reviewing, editing, and packaging. It also gives hints on developing the six key elements of a structured abstract - background, purpose, sample, methods, results, and implications. doi:10.1016/j.apnr.2008.06.003

Singleton A. Scholarly communication – can we have our name back? *Learned Publishing* 2011;24(1):3–4. This editorial discusses the appropriateness of the use of the term "scholarly communication", which has over the past years been given an improper meaning. The properly defined term is much wider than the modern quasi-definition implies. As a misnomer it is used, for example, to talk about how libraries can persuade authors to retain copyright in any of their works or to deposit them in institutional repositories. "Communication" involves "imparting or exchanging information". Is any aspect of communication involved in retaining copyright, or in putting articles in a repository? Publishers are usually involved in only a part of the formal communication system, and sometimes "communication" is not the most important part of what they do.

doi: 10.1087/20110101

PUBLISHING

Fister B. The cash cow has left the room. What will it take for publishers to wake up to our reality? Libraryjournal.com 2011;13 January. This past year has seen some real progress on the open access front. Today nearly 6000 titles appear in the Directory of Open Access Journals, more journals participate in PubMed Central, and about 80 new open access mandate policies have been passed. There will always be an increasing amount of scientific reasearch to publish and more research that scientists will have to consult. Most publishers still affirm that libraries are perfectly capable of providing their users with all the published research they might need. However invisible it is to publishers, the only way to create a sustainable future for knowledge is to make sure that the open access movement is a force to be reckoned with. http:///www.libraryjournal.com/lj/ communityacademiclibraries/888795-265/the_cash_cow_has_left.html.csp

Gasparyan AY. Editorial. Thoughts on impact factors and editing of medical journals. *Inflammation & Allergy – Drug Targets* 2010;9(1):2–5. Editing of medical journals is gaining more importance as the driving force of science communication. The high quality of publications and their impact is a result of a process to which not only authors, but also publishers, editors, and reviewers, contribute in different wavs. Their combined efforts can speed up scientific progress and rapidly distribute valuable updated information throughout the world. Today more than ever before, an editor's task is that of improving the process of peer-review and editing, and increasing the number of publications with higher scientific value. As a result of changes in the spreading of scientific information and through increasing use of social networking services - new metrics of impact have emerged, such as the immediacy index. Expansion of online publication highlighted the importance of supplements and thematic issues, which can rapidly promote new journals.

Matarese V. Emerging concepts in high-impact publishing: insights from the First Brazilian **Colloquium on High Impact** Research and Publishing. Annali dell'Istituto Superiore di Sanità 2010;46(4):451-455. At the First Brazilian Colloquium on High Impact Research and Publishing (14-16 April 2010), editors of leading biomedical journals discussed aspects of scientific reporting that favour acceptance or lead to immediate rejection. Many of the issues raised at this meeting are relevant to researchers and authors, especially non-native English speakers, who wish to improve the impact of their own scientific writings. This commentary summarizes the editors' debate and uses the discussion that followed as the basis to analyze emerging concepts in high-impact publishing. doi: 10.4415/ANN_10_04_14

Theodorou R. **OA repositories: the researcher's point of view**. *Journal of Electronic Publishing* 2010;13:3. A study examined how researchers consider and use open access publications. A survey, addressed to research and academic institutions of social and natural science in Europe and North America, took place between June and August 2009. In general, respondents were in favour of open access institutional repositories and, especially, in having stricter acceptance procedures. This would enhance their trust and they would feel much more inclined to submit their works for publication. doi: 10.3998/3336451.0013.304

Vogel G. Quandary: scientists prefer reading over publishing "open access" papers. *ScienceInsider* 2011;14 January.

The EU-sponsored Study of Open Access Publishing (SOAP Project) surveyed 50,000 researchers for their opinions on OA journals. It found two main reasons researchers do not submit their work to OA journals: almost 40% said that a lack of funding for author fees was a deterrent, and 30% cited a lack of high-quality OA journals in their field. Scientists love OA papers as readers, but as authors they are still sceptical. http://news.sciencemag.org/ scienceinsider/2011/01/quandaryscientists-prefer-readi.html

RESEARCH EVALUATION

Benda WGG, Engels TCE. The predictive validity of peer review: a selective review of the judgmental forecasting qualities of peers, and implications for innovation in science. International Journal of Forecasting 2011;27:166-182. Some form of judgmental assessment is implied in the peer review process, often forecasting the impact of the work. The article investigates what the data on the predictive validity of peer review can add to the understanding of judgmental forecasting. The review part of the article focuses on manuscript peer review, its reliability and its predictive validity; groupbased peer review and its predictive validity; and the tension between peer review and innovation. Two proposals for enhancing the likelihood of innovative works are described. doi:10.1016/j.ijforecast.2010.03.003

Giglia E. The impact factor of open access journals: data and

trends. ELPUB 2010 International Conference on Electronic Publishing. Helsinki (Finland) 2010;16-18 June. This work tested the impact factor of OA journals, to verify the hypothesis that unrestricted access might turn into more citations - that is to say, good impact factor indexes. It focused mainly on the JCR 2008 science edition because of its large coverage of OA journals (about 5%). The collected data showed that the performance of OA journals is quite good in terms of citations. These preliminary data might be useful to further comparisons and in-depth analysis.

Griffiths P, Baveye PC. **Peer** review – beyond the call of duty?

International Journal of Nursing *Studies* 2011;48(1):1–2. Peer reviewing is a crucial component of the publishing process. Unfortunately, a high proportion, probably a majority, of review invitations are declined. The article identifies the outstanding problems and the need to find ways to convince researchers to peer review manuscripts more often. It suggests some options to raise the level of visibility and recognition of peer reviews. For example, scientometric indexes could include some measure to evaluate individuals' reviewing performance and impact. These data could be used to acknowledge and reward the researchers' efforts when judging the extent and quality of a scientific contribution. doi:10.1016/j.ijnurstu.2009.12.013

Lee K, Brownstein JS, Mills RG, et al. **Does collocation inform the impact of collaboration?** *PLoS ONE* 2010;5(12):e14279.

This study investigated whether the physical proximity of collaborators was a strong predictor of the scientific impact of their research, as measured by citations of the resulting publications. It was focused on life sciences research across three major Harvard University campuses. Despite the positive impact of emerging communication technologies on scientific research, the results provided strong evidence for the role of physical proximity as a predictor of the impact of collaborations. doi:10.1371/journal.pone.0014279

Mandavilli A. Trial by twitter.

Nature 2011;469:286-287. The idea of open, online peer review is hardly new. In some fields scientists seem unwilling to get involved in pre-publication discussion. Biologists, in particular, are notoriously reluctant to publicly discuss their own work or comment on the work of others for fear of being scooped by competitors or of offending future reviewers of their own work. Journals have had a little more success with postpublication peer review in the form of comments to the online versions of their papers. Yet, there is a growing interest in methods that would aggregate and quantify all of the online responses and evaluations of a paper – an online infrastructure that could support them. doi:10.1038/469286a

Schooler J. **Unpublished results** hide the decline effect. *Nature News* 2011;470:437.

Many scientifically discovered effects published in the literature seem to diminish with time. Some scientists attribute the decline effect to statistical self-correction of initially exaggerated outcomes. To validate this interpretation, "negative results" - that is, experimental outcomes that were not noteworthy or consistent enough to be published - should be available. The author suggests the creation of an open access repository of research methods and all research findings, published and unpublished, which would let scientists log their hypotheses and methodologies before an experiment, and their results afterwards, regardless of outcome. doi:10.1038/470437a

SCIENCE

Ceci SJ, Williams WM. Understanding current causes of women's underrepresentation in science. Proceedings of the National Academy of Sciences of the United States of America 2011;108(8);3157-3162. To better understand women's underrepresentation in math-intensive fields of science and its causes, a review of claims of discrimination in the past 20 years and their evidence base is presented. It shows that some of these claims are no longer valid. Despite frequent assertions that women's discrimination in science is caused by sex discrimination by grant agencies, journal rewievers, and search committees, the evidence shows women fare as well as men in hiring, funding, and publishing (given comparable resources). Potential interventions to increase gender fairness are suggested. doi: 10.1073/pnas.1014871108

Feijen M. **What researchers want**. Utrecht: SURFfoundation, February 2011.

As part of SURFfoundation's SURFshare programme, this study aimed at investigating what researchers need to enable them to store their research data and make that data accessible. The focus was on research conducted in Europe, the USA, and Australia in the years 2008-2010. Researchers have expressed a clear need for support as they do not have the skills, awareness, or knowledge to improve their day-to-day data storage. At the same time, they see preservation as a different step, and somewhat outside their immediate interest. Storage and preservation are two distinct issues for researchers. Most of them are unwilling to accept responsibility for preserving their data after publication; however, when the data are transferred to another party, researchers wish to remain in control of their data.

http://www.surffoundation.nl/nl/ publicaties/Documents/What_ researchers_want.pdf

Heidari S, Eckert MJ, Kippax S, et al. **Time for gender mainstreaming in editorial policies**. *Journal of the International AIDS Society* 2011;14:11. Despite proven sex and gender differences, women continue to be under-represented in clinical trials, and the absence of gender analyses in the literature is striking. In recent years, many initiatives have advocated gender mainstreaming in health and life science research, particularly in the HIV field, without much success. Editors, publishers, and peer reviewers should try to change the paradigm in scientific publication, and Instructions for Authors issued by journals should contain a policy on sex-disaggregated data and gender analysis. In particular, editors' associations could play an essential role in facilitating a transition to improved standard editorial policies. doi:10.1186/1758-2652-14-11

SCIENCE COMMUNICATION

Bailey CWJ. **Transforming scholarly publication through open access: a bibliography**. *Digital Scholarship* 2010:180. Can journal articles and other scholarly works be made freely available on the internet? This volume, available as a PDF, contains more than 1100 references providing in-depth coverage of published articles, books, and other works about the open access movement. Many references include links to freely available copies of the works. http://digital-scholarship.org/tsp/ transforming.pdf

Moja L, Banzi R. **Navigators for medicine: evolution of pointof-care evidence-based services.** *International Journal of Clinical Practice* 2011;65(1):6–11. Publishers of medical journals are focusing their efforts towards "information hubs", in which several information kits widely connected with other informatics systems can be assembled. Publishers should find a balance between information consumed at the point of care and fidelity to a cumulative and extended approach to information. Final users should value both dimensions: the action "what to do" and the reference content "why we do". doi: 10.1111/j.1742-1241.2010.02441.x

Radford T. Of course scientists can communicate. Nature 2011;469:445. Scientists, in particular, should be and often are good communicators. One reason is that most scientists work with enthusiasm, and this enthusiasm is infectious. The problems for the scientist as a public communicator start with academic publishing: the language, form, and conventions of the published scientific paper could almost have been devised to conceal information. To be effective communicators. scientists have to learn to stand back from their own work and see it as strangers might do. doi:10.1038/469445a

Thanks to Massimo Antonucci.

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Bruder General Hospital, Graz, Austria (2002, 2008) and postdoctoral research fellowships at the teaching hospitals of the University of Birmingham, UK (since 2007). He was awarded an academic title of Associate Professor of Medicine (2006) and Fellow of European Society of Cardiology (2010).

He is actively involved in reviewing for and editing high-rank biomedical journals (editorial board member of Atherosclerosis, Thrombosis Research, Rheumatology International, Current Vascular Pharmacology, World Journal of Cardiology, Vascular Health and Risk Management; associate editor of the American Journal of Biomedical Sciences, deputy editor-in-chief of Inflammation and Allergy Drug Targets; reviewer for The Lancet, Rheumatology, Platelets, Current Pharmaceutical Design, Seminars in Arthritis and Rheumatism). He was an executive editor of Archives of Medical Science (2007–2010).

Armen has been a member of the World Association of Medical Editors since 2008 and joined EASE in 2009. Over the past few years, he organized and lectured at biomedical editing and writing seminars at leading research and educational institutions in the UK, Turkey, Iran, and Armenia.

In his leisure time Armen spends some time watching British films (classic and new), traveling to Norway, Italy, Austria, and enjoying the company of family and friends.

Armen Yuri Gasparyan is a graduate of Yerevan State Medical University, Armenia (1990–1997), from where he received his PhD degree for studies of cardiovascular involvement in chronic inflammatory disorders (2000– 2003). He completed internships at the Barmherzigen

EASE Business

New members

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Raising the profile of European Science Editing

The new editor of *ESE*, Armen Gasparyan, has applied to indexing services and libraries, encouraging them to include *ESE* in their listings. This will considerably raise the profile of *ESE* globally, resulting in more visibility and hopefully more readers for our articles and generally benefitting both EASE and our authors. As part of this process, we are changing the appearance of articles in the journal, encouraging authors to write abstracts, submit key words, etc, as these all facilitate indexing.

Currently, *ESE* is indexed/archived in SCOPUS, SCImago Journal and Country Rank, SCIRUS, Genamics JournalSeek, Chemical Abstracts Service (CAS), Ulrich's Periodicals Directory, NewJour, Electronic Journals Library (EZB), the John Rylands Library of the University of Manchester, the British Library, Cornell University Library.

More applications are being considered and we hope to have additions to this list in the next issue.

Plenary speakers confirmed

Plans for our 2012 congress, Editing in the Digital World, in Tallinn (which coincides with our 30th anniversary) continue to develop, with all four plenary speakers confirmed.

- "National Journals in an International Context" Juri Engelbrecht, Estonia
- "Open Access and Digital Models" Natasha White, Wiley-Blackwell, UK
- "Social media and science editing/publishing" Alan Cann, University of Leicester, UK
- "The Editorial Office" Linus Svensson, Oikos, Sweden

In addition, Elisabeth Heseltine and Pippa Smart have agreed to present their courses, "Writing a scientific paper and getting published" and "How to be a successful journal editor", respectively.

Promoting EASE's Guidelines for Authors

We are proud that the EASE *Guidelines for Authors and Translators*, which were published on our website last year, are now available in 16 languages. The English original has been translated into Arabic, Bangla, Chinese, Estonian, French, Italian, Japanese, Korean, Persian, Polish, Portuguese (Brazilian), Romanian, Russian, Spanish, and Turkish, and other translations are in progress.

An article about the guidelines appeared in the October 2010 issue of *Learned Publishing*, and they are promoted on many websites, including the European Commission's Research & Innovation website (http://ec.europa.eu/research/science-society/science-communication/links01_en.htm). An updated version will appear in June.

We are very grateful to all the contributors, translators, and other people who help us promote good scientific writing. You can help by adding, in your journal's instructions to authors, a link to the EASE Guidelines website (http:// www.ease.org.uk/guidelines/index.shtml). This should help authors to write better manuscripts, and save time for editors.

Forthcoming Meetings, Courses, and BELS Examinations

CSE Annual Meeting

29 April–3 May 2011; Baltimore, USA http://www.councilscienceeditors.org

2011 Science Communication Conference

British Science Association

25-26 May 2011; London, UK www.britishscienceassociation.org

GAC-MAC-SEG-SGA Annual Meeting

25-27 May 2011; Ottawa, Canada http://www.gacmacottawa2011.ca

11th International Symposium on Landslides and Engineered Slopes

2–8 June 2011; Banff, Alberta, Canada http://www.ISL-NASL2012.ca

92nd Annual Meeting American Association of the Advancement of Science (AAAS),

Pacific Division 12-16 June 2011; San Diego, USA http://associations.sou.edu/aaaspd/

Association of Health Care Journalists European conference on health journalism

23-24 June 2011; Coventry, UK http://www.healthjournalism.org/

European Association for Health Information and Libraries "Health information without frontiers"

4-6 July 2012; Brussels, Belgium http://www.eahil2012.be/

Knowledge Globalization Conference 2011

15–17 July 2011; Beijing, China http://www.kglobal.org

2011 International Conference on Space Science and Communication (IconSpace2011)

11-13 July 2011; Penang Island, Malaysia http://www.ukm.my/ispace

ALPSP International Conference 2011

14–16 Sept 2011, Heythrop Park, UK http://www.alpsp.org/ngen_public/ article.asp?aid=335158

SfEP 22nd annual conference Skills, freelancing, education, practice

25–27 September 2011; Oxford, UK http://www.sfep.org.uk/pub/confs/ conf11/conf2011_advance.asp

National Association of Science Writers

Science Writers 2011 14–18 October 2011; Northern Arizona University, USA http://www.sciencewriters2011.org

IEEE Professional Communication Society: International Professional Communication Conference 2011 Communicating sustainability 17–19 October 2011; Cincinnati, USA http://ewh.ieee.org/soc/pcs/

METM11: Quality in English translation and editing – from research to practice and back 20-22 October 2011, Barcelona, Spain www.metmeetings.org

EMBO/EMBL Science & Society Conference

Making sense of mental illness: biology, medicine and society 4-5 Nov 2011; Heidelberg, Germany http://www.embo.org/science-societyconference-2011

COURSES

ALPSP training courses, briefings and technology updates

Half-day and one-day courses and updates. Contact Amanda Whiting, Training Coordinator, Association of Learned and Professional Society Publishers, Tel: +44 (0)1865 247776; training@ alpsp.org; www.alpsp-training.org

Publishing Training Centre at Book House, London

Contact: The Publishing Training Centre at Book House, 45 East Hill, Wandsworth, London SW18 2QZ, UK. Tel: +44 (0)20 8874 2718; fax +44 (0)20 8870 8985, publishing. training@bookhouse.co.uk www.train4publishing.co.uk

Society for Editors and Proofreaders

SfEP runs one-day workshops in London and occasionally elsewhere in the UK on copy-editing, proofreading, grammar, and much else. Training enquiries: tel: +44 (0)20 8785 5617; trainingenquiries@sfep.org.uk Other enquiries: SfEP, Erico House, 93-99 Upper Richmond Road, Putney, London SW15 2TG, UK. Tel: +44 (0)20 8785 5617; administration@sfep. org.uk; www.sfep.org.uk

Society of Indexers workshops

The Society of Indexers runs workshops for beginners and more experienced indexers in various cities in the UK. Details and booking at www.indexers. org.uk; admin@indexers.org.uk

University of Chicago

Medical writing, editing, and ethics are among the many courses available. Graham School of General Studies, The University of Chicago, 1427 E. 60th Street, Chicago, IL 60637, USA. Fax +1 773 702 6814. http://grahamschool.uchicago.edu

University of Oxford, Department for Continuing Education

Courses on effective writing for biomedical professionals and on presenting in biomedicine, science, and technology. Contact Leanne Banns, CPD Centre, Department for Continuing Education, University of Oxford, Littlegate House, 16/17 St Ebbes Street, Oxford OX1 1PT, UK. Tel: +44 (0)1865 286953; fax +44 (0)1865 286934; leanne.banns@ conted.ox.ac.uk

www.conted.ox.ac.uk/cpd/personaldev

BELS - Board of Editors in the Life Sciences examination schedule

See: www.bels.org/becomeeditor/ exam-schedule.htm

30 July 2011: Evanston, IL (Greater Chicago AMWA conference); register by 9 July 18 September 2011: Rowan University, Glassboro, NJ; register by 28 August