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Hydrology and Earth System Sciences
Discussions

Interactive comment on "Joint Editorial

"On the future of journal publications in hydrology"" *by* G. Blöschl et al.

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We would like to thank Günther Blöschl and colleagues for their synopsis on the situation of publishing in hydrology. We also enjoyed reading the provoking suggestions of Axel Bronstert as a referee. In that context, we would like to comment on the role of the reviewer. We feel that if the peer-review system is to survive against competing concepts (e.g. blog-style forums like as being implemented in stackoverflow, ResearchGate, Arxiv), the position of the reviewer needs to be strengthened: more benefits, but also more responsibility. In that regard, only a concerted effort between multiple journals can improve the reviewing process in the future (Ling, 2011)âĄă. A common editorial statement of the leading hydrological journals – as the one presented - would be

an excellent opportunity to stimulate a discussion in that direction. In order to prepare a review, a scientist is expected to do a thorough analysis of a study, which can consume a full working day or more. Weeks, or even months later, he may be asked to repeat this effort in the course of one or multiple iterations. While there is an unwritten consensus on the obligation of preparing reviews, the personal benefits are limited: firstly, the reviewer may gain some reputation in the eyes of the editors – usually renowned and influential scientists. In anonymous reviews, however, this remains invisible to the public. Secondly, there may be some information advantage for the reviewer concerning current research. However, exploiting this may easily lead to unethical misconduct like stealing or suppressing ideas and information, favouritism, and misleading reviews (Lee & Bero, 2006). In economical terms, the costs of preparing a review are, at the level of the individual reviewer, apparently higher than the benefits (for economy enthusiasts: there is also a subtle analogy to the Tragedy of the Commons (Hardin, 1968) with the reviewers being the common resource). This explains the general shortage of both qualified and willing reviewers, as also confirmed by Blöschl and colleagues. Obviously, reducing the costs is not an option, as it would decrease the quality of the review which surely is the key for a successful system. Thus, we would like to initiate a discussion on how the benefits for the individual reviewer could be increased, and in this context, also their responsibilities.

To our knowledge, the following options exist:

- partial or fully abolition of anonymity of reviewers (unblinding after reviewing process or fully open review)

- paid reviews (offered by only few journals) - non-anonymous reviews (see above), which allow the recognition of the performed work - academic credits (e.g. "scientific credits" as used by OMICS publication group)

While the effect of open reviews on the quality of the final article remains disputed (Walsh et al., 2000 see an increase; van Rooyen et al., 1999 observe no effect), the

willingness of researchers to perform a review may decrease (van Rooyen et al., 1999, Nature editorial, 2006). Anonymity, however, can facilitate the objective assessment of the works of highly-reputed scientists and befriended colleagues, making it a desirable option in many cases. Paying reviews is not only likely to hit financial limits, but is, more importantly, a questionable incentive as it might motivate reviewers to accept requests for reviews although they might not be sufficiently qualified. Thus, to our understanding, the implementation of academic credits (ACs) appears to be the most favourable option. We suggest ACs to be granted by editors based on the merits of performed reviews, i.e. thoroughness, constructiveness, keeping of timelines. ACs should be managed in a common database of the participating publishers. While they may be combined with any of the other measures, they could be used as an additional academic metric to be considered by institutions and funding agencies when evaluating academic activity. Additionally, publishers and editors may consider redeeming ACs for page charges, granting priority in the review process, or even make them as a prerequisite for submitting manuscripts (free contingents for young scientists should be ensured). We do not have insight into the practice of editorial work in the field of hydrology. However, for the field of medical sciences Caelleigh et al. (2001)âĄă state that many journals already rate the reviews they receive. These ratings could be shared among the journals and with the community (e.g. as advocated by Ling, 2011) in the form of ACs, similar to the use of h-factors. This would not only better acknowledge reviewing activities of scientists, but also facilitate finding suitable reviewers and addressing the problem of rejected manuscripts being re-submitted to other journals without changes, as also criticized by Blöschl and colleagues. We hope that this comment might stimulate a discussion particularly in the hydrological community. “Journals are not simply out there and ready-made – they are what we all make them.” - we think that everyone will agree to this statement by Blöschl and colleagues. It would be great if this Joint Editorial could spark some specific steps in that direction.

Kind regards Till Francke and Maik Heistermann

Caelleigh, A. S., Shea, J. A., & Penn, G. (2001). Selection and Qualities of Reviewers. Academic Medicine, 76(9), 914–916. doi:10.1097/00001888-200109000-00016 Hardin, G. (1968). The Tragedy of the Commons. Science, New Series, Vol. 162, No. 3859, 1243-1248 Lee, K., & Bero, L. (2006). Ethics: Increasing accountability. Nature. doi:doi:10.1038/nature05007 Ling, F. (2011). Improving peer review: increasing reviewer participation. Learned Publishing, 24(3), 231–233. doi:10.1087/20110311 Nature editorial, Anonymous. (2006). Peer review and fraud. Nature, 444(7122), 971–972. Retrieved from http://dx.doi.org/10.1038/444971b Walsh, E., Rooney, M., Appleby, L., & Wilkinson, G. (2000). Open peer review: a randomised controlled trial. The British Journal of Psychiatry, 176(1), 47–51. doi:10.1192/bjp.176.1.47

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