

Open Peer Review

Essential Background

With the advancement of information and communication technologies, science is entering a new epoch. The proliferation of online, open access data, software and article repositories now enables scholars to use and share information more efficiently than ever before. As a result, we are witnessing the transformation of traditional research conducted by localized groups depending on their own resources and merits, to a more dynamic and globally interconnected effort, where ideas, data and scientific software are instantly accessible to the entire academic network. This transformation bears significantly positive consequences both for science and society. Free online access to academic material means that scientific research can now be built on firmer ground, be more visible, and have a greater impact. Open access to scientific knowledge also benefits society by allowing policy-makers, institutions, grant-awarding bodies and the general public to make better-informed decisions.

There is, however, an essential ingredient missing from this emerging scientific landscape; a mechanism for the open and transparent qualitative assessment of scientific contributions. At present, the formal qualitative evaluation of academic articles—the end-product of scientific research—depends on undisclosed reviews by few anonymous referees assigned by the editors of academic journals. Traditional journal peer review has been repeatedly criticized as slow, unreliable and susceptible to bias or even fraud. There is a growing conviction among scholars that science and society would profit from the scrutiny of original scientific ideas and results by the entire academic community whose collective knowledge is likely to result in more accurate and objective evaluations.

Objective

The present protocol has been elaborated to provide a formal framework for the Open Peer Review of published and unpublished scientific articles posted on any article repository supporting open peer review. The terms of the implementation of open peer review are described in detail in the protocol below. Authors and Reviewers are kindly requested to familiarize themselves with these terms before initiating a review process. The Open Peer Review Protocol is not proposed as a substitute for traditional journal peer review. Instead, it should be thought of as an additional evaluation system designed to meet the need of the emerging global academic network for open and transparent qualitative assessment. We always welcome your suggestions for improvements of the present protocol. For any questions, recommendations or other comments please contact us at: [info \(AT\) openscholar.org.uk](mailto:info(AT)openscholar.org.uk)

The Open Peer Review Protocol

1. Definitions

For the purposes of this Protocol, unless the context requires otherwise, the following terms shall have the following meanings:

1.1 “Article” means any manuscript reporting an original research, or a review of a specific scientific topic. Articles can be already published in journals or books, in which case they are referred to as “Print articles” or can be manuscripts that have not yet been submitted to a formal publication process, in which case they are referred to as “Preprint articles”.

1.2 “Author” means an identified scholar responsible in part (in the case of co-authorship) or in full, for the content of an article.

1.3 “Peer” means an identified scholar who can present credentials demonstrating his or her expertise in the scientific area(s) pertaining to an article under assessment.

1.4 “Review” means a full-text qualitative and quantitative assessment by an peer in the scientific area of the article.

1.5 “Open” means that: (a) the public has free online access to the full text of the review, (b) reviews can be submitted by an unlimited number of peers over the lifetime of the article, (c) The identity of authors and peers is disclosed during the entire peer review process.

1.6 “Repository” means an online archive that provides free access to full-text versions of deposited articles.

1.7. “Protocol” means the present document.

2. Implementation

The implementation of Open Peer Review, understood as applied to articles submitted to repositories as defined in the protocol, shall proceed as follows:

2.1 The author shall submit the article to a repository that explicitly supports the protocol.

2.2 Upon submission, the author shall sign a formal statement provided by the repository that warrants the following:

(a) he/she is the exclusive author, or has the right to represent all co-authors of the article,

(b) no person other than the author and co-authors has contributed to the article in any way which would, customarily or otherwise, entitle such person to be named as author or co-author,

(c) the article is the result of original work (even in the case of review articles), is free of plagiarism, and all references to other sources have been properly cited,

(d) the author has the entire and unconditional right to deal in the intellectual property rights in the article, or that—for example in case of print articles where the author has transferred intellectual rights to an academic publisher—the current copyright owner allows the author to host the article in repositories (For the policy information of many publishers, see the [SHERPA/RoMEO](#) site),

(e) all patent applications and similar procedures requiring confidentiality have been completed prior to submission of the article,

(f) all experiments on live vertebrates or higher invertebrates on which any part of the article are based have been performed in accordance with relevant institutional and national guidelines and regulations. The author has identified in the article the committee approving the experiments and has confirmed that all experiments conform to the relevant regulatory standards. Regarding any experiments on human subjects, the author has identified the committee approving the experiments and the article includes a statement confirming that informed consent was obtained from all subjects,

(g) the article contains a clear declaration of any financial, commercial or other relationships which might be perceived by the academic community as representing a potential conflict of interest,

(h) The article was produced in compliance with all applicable local, national or international laws and regulations, it does not contain unlawful information, infringe or violate any copyright, database right, trademark or other intellectual property right of any other person, organization or company, and it does not include any advertising, spam or other form of unsolicited promotional material,

(i) the author agrees to make the article available online under an open license of his or her choice, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

2.3 Once the article is available online, authors can invite peers to submit to the repository a review of the article based on the directives of the protocol. Peers can also request a review invitation by the author acting on their own initiative. Each peer can submit only one review for each version of an article.

2.4 All reviews submitted to the repository shall be accompanied by a signed formal statement disclosing the reviewer's identity and credentials that demonstrate their status as peers. In their statement, peers shall also declare that their review is the result of original work, is free of plagiarism and that all references to other sources have been properly cited. In addition, peer reviewers shall provide a detailed account of possible financial or other conflicts of interest that could potentially bias either positively or negatively their review. Finally, peer reviewers shall agree to make their review available online under an open license of their choice, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

2.5 The full text of the submitted reviews shall be posted online under an open license, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

2.6 Reviews shall be tagged to the original article and constitute a citable item subject to meta-data harvesting using suitable technical standards, such as the Open Archive Initiative for a Protocol for Meta-data Harvesting (OAI-PMH). The format for citation of a review shall be of the form: “[Name of peer] (Year). Open Peer Review of: [Name of article]” by [Name of author(s)]. url. DOI.

2.7 Reviews will be open to commentary and evaluation by the entire community.

2.8 Authors may submit at any point an updated version of the article that cites relevant reviews, and which will also become available at the repository and be tagged to the original article.

