How to write a review

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Why is a review necessary?

- Finding deficiencies in:
  - Technical approach and analysis
  - Computation
  - Ignorance of related research
  - Valid assumptions
  - Relevance
  - Significance
- Reviews are useful to detect a second kind of problem. Two examples are:
  - Style and grammar that confuse the reader
  - Patent or legal issues

Types of reviews

- **Anonymous**
  - Editor solicits a reviewer and the reviewer's identity is remains anonymous to author
- **Friendly**
  - Authors send drafts of articles to other experts and solicit their comments
- **Internal**
  - Internal reviews prior to submission to a journal or proceedings.

Most reviews have 4 parts

- Referee's review form
- Additional comments
- Original paper
- Cover letter to editor
  - It reminds the editor of your review an associated paper.
  - Gives you a chance to summarize the review in one or two sentences.
  - Provides a location for you to write any "off-the-record " comments.

What to write if there is no form

- Title and author of paper
- Summary of paper (1-3 sentences)
- Good things about the paper
- Major comments
  - Discuss the author's assumptions, technique approach, analysis, results, conclusions, reference, etc.
- Minor comments
  - Comments on styles, figures grammar, etc.
- Recommendations
  - Publish as is; publish after corrections have been made; Reject

Note: **Don't** write your name, because editor may forget to conceal your name.

What makes a good paper?

- Abstract
  - Does it actually summarize the paper?
  - Does it include the conclusions as well as the statement of the original problem?
  - Is there information not presented elsewhere in the paper?
- Introduction
  - Should explain why the topic is important
  - The audience for the paper determine the scope of the introduction
  - Does author only cite own work?

What makes a good paper

- Body of the paper (techniques, results, discussion)
  - If the approach and analysis are clearly described.
  - Are the assumptions made by authors valid?
  - Has the author integrated discussions of errors and uncertainties in his analysis at suitable points?
  - Presentation? (what's important? What's irrelevant? etc)
  - Is the level of detail reasonable?
  - Are too much data presented?
  - Is this the right amount of work for a paper?
  - Is the paper premature? Should it be divided into two papers?

What makes a good paper

- **Conclusions**
  - No new material introduced.
  - Some authors try to broaden their conclusions by "reaching" for results produced elsewhere. This is unacceptable.
- **References**
  - Are all references too old?
  - Has the author forgotten important references?
  - Check for number of references.
  - Check to see if cited authors are recent.
  - Check if author included other people's work besides co-authors.

What makes a good paper

- Tables, graphs and figures (and captions)
    - Is every table and graph necessary?
    - Do the tables contain more digits than are actually significant?
    - Can the table data be presented better in a graph?
    - Check that all figures and tables are appropriately captioned and are referred to in the text.
    - Good to have one sentence in the caption summarizing the results.
    - If the graph is too small
    - Caption have to communicate enough information when possible.

Reviewer's responsibilities

- Do
  - The reviewer should provide an hones, critical assessment of the research.
- Don't
  - Reviewer should not manipulate the process to force the authors to address issues interesting or important to the reviewer but peripheral to the objectives of the study.

Reviewer's responsibilities

- Do
  - The reviewer should maintain confidentiality about the existence and substance of the paper.
- Don't
  - Share the paper or to discuss it in detail with others or even to reveal the existence of the submission before publication.
  - One exception is that the reviewer want a junior colleague to collaborate on a review. This have to be approved by the editor.
  - When doing collaborative review better send the paper via email.

Reviewer responsibilities

- The reviewer has responsibility of reporting suspected duplicate publication, fraud, plagiarism, or ethical concerns about the use of animals or humans in the research being reported.

- The reviewer should write reviews in a collegial, constructive manner.

Reviewer ethics

- The reviewer must not participate in the plagiarism.
- The reviewer should always avoid, or disclose, any conflicts of interest.
- The reviewer should accept paper for review only in his/her areas of expertise.
- The reviewer should agree to review only those paper that can be completed on time.

When to decline

- You may realize that you are not competent to review the paper

- Good editors keep lists of referees. One goal is to avoid asking people to review papers too frequently, but the lists often include information about the quality of the reviews and how often one declines. It is sometimes believed that a good referee gets preferential treatment when he submits his own paper. This belief may have some justification.

Book review

- **Introduce the subject, scope, and type of book**
  - Identify the book by author, title and publishing information
  - Specify the type of book
  - Mention book's theme
  - Background
- **Briefly summarize the content**
  - Provide and overview and primary supporting points

Book reviews

- Provide your reactions to the book
  - Describe the book
  - Respond to the author's opinions
  - Explore issues the book raises
  - Relate your argument to other books or authors
  - Relate the book to larger issues
- Conclude by summarizing your ideas

References

- http://eetd.lbl.gov/EA/Buildings/ALAN/PUBLICATIONS/how.to.review.html

- http://advan.physiology.org/cgi/content/full/27/2/47

- http://www.jmlg.org/guides/how_to_review_a_paper.htm

- http://leo.stcloudstate.edu/acadwrite/bookrev.html

Thank you!

Questions