



Doing peer reviews of research papers

March 29, 2022 Babak Farshchian

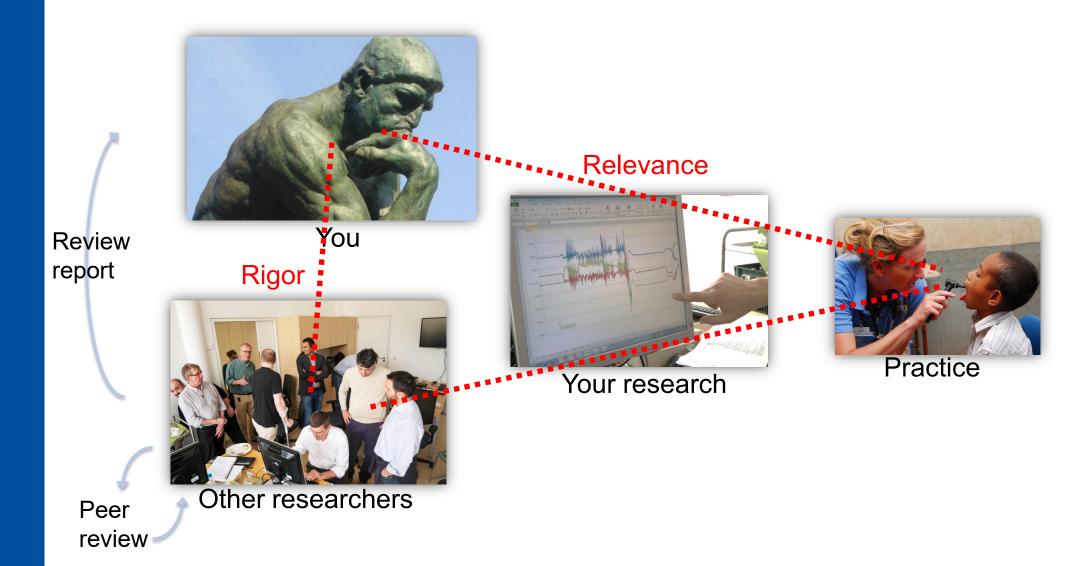


Agenda

- 1: Why peer review?
- 2: The reviewer.
- 3: The peer review report.
- 4: How to write one?
- 5: What happens to review reports?
- 6: Some common pitfalls, and how to deal with them.
- 7- Questions.



Why peer review?

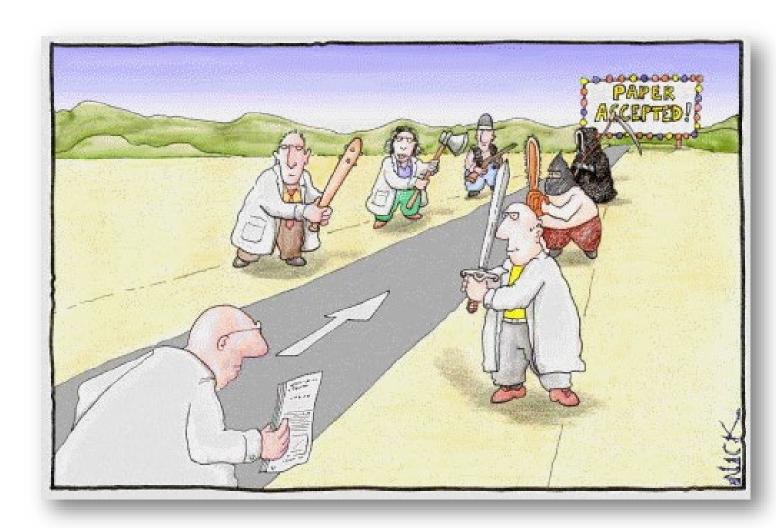




Other researchers as gatekeepers









The reviewer (or referee)

- Helps a journal editor to decide:
 - Whether the paper makes a significant enough contribution to the field
 - Contributions can be of many different types (a system, a theory, new knowledge about existing topics, new applications of old ideas, new methods, etc.).
 - Whether the paper has followed a proper research method in a rigorous way.
- Communicates his/her evaluation through a <u>review</u> report (also called a referee report).
- Plays a crucial role in research ecosystems:
 - Reviewers are the gatekeepers to the world of research-based knowledge.
 - It can harm the research field if peer reviews become too critical or not critical enough.
- Reviewing is a community service:
 - Not paid and normally not (formally) acknowledged.
 - However, a good way to enter a research community and to build networks.



Single- and double-blind reviews





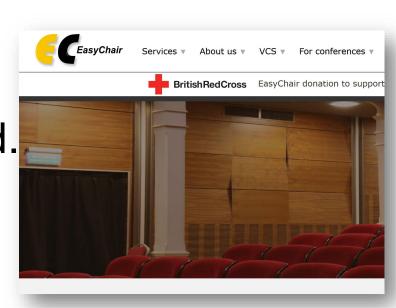
What is a peer review report?

- Similar to exam evaluations.
- Normally consists of:
 - A short summary of the argument and contribution of the paper as understood by the reviewer.
 - A short evaluation of how relevant, important and novel the research goal is.
 - Evaluation of the quality of the work (methods, validity, accuracy, presentation, results, discussion):
 - Is the paper relevant for Eremcis, and does it address an important question/problem?
 - Are the methods described well, and are they appropriate for the research question?
 - Are the data presented in enough detail? Are the conclusions based on the presented data?
 - Is the paper well-written and understandable?
 - A list of recommendations for improving the paper.



How you will deliver a review report

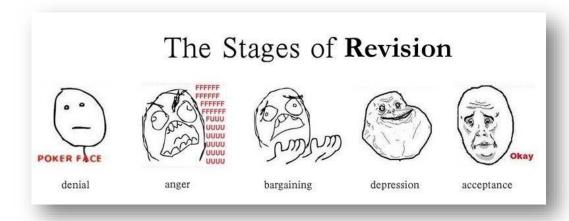
- Review report is Assignment 3 in IT3010 and DT8111.
 - It is an individual deliverable.
- Review report is delivered in EasyChair AND in Blackboard.
- Each student writes one report.
- Each group receives several reports.
- The report in Easychair is form-based.
 - We recommend you write it in a Word document first and then copy and paste to Easychair.
 - You can then upload the document in Blackboard.





What to do with the review reports?

- They help you improve your research and your papers.
- Journal papers normally go through several revision cycles.
 - Major revisions.
 - Minor revisions.
 - Accept or reject decisions.





What to do with the review reports?

- In IT3010/DT8111 they are used to improve Assignment 2 the draft paper.
- Final version of the paper is delivered as Assignment
 4, along with a change table.

#	Review comment	Group response	Changes to paper
1	Your data not presented well.	We have created some graphs.	Se the new Section 3.1.
2			

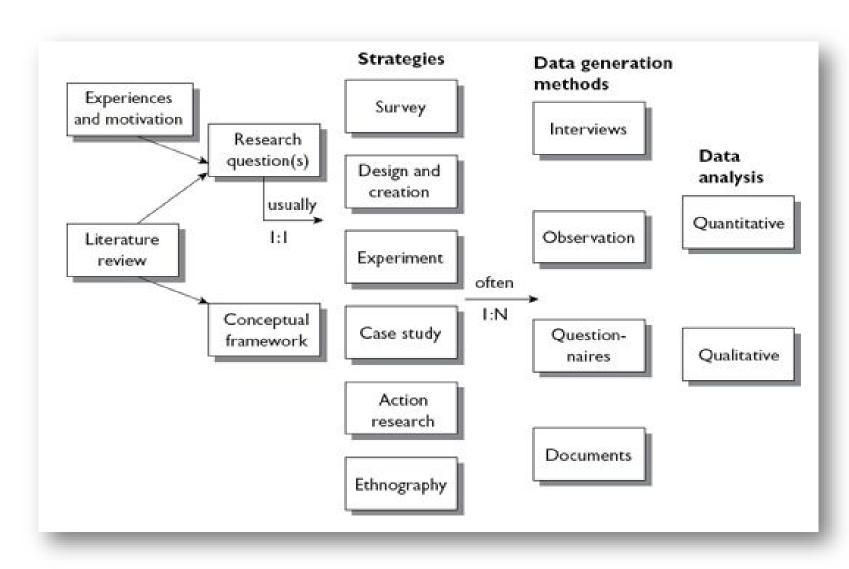


How to write a good review report

- Avoid being too critical but do point out the paper's major shortcomings.
- Have an improvement mindset.
- Propose realistic improvements (that are doable during the course's timeframe).
- Justify your proposals in the paper's content, e.g. "quote text from the paper".
- Don't ask for a completely different paper!
- Be structured:
 - Use bullet points, enumerate your improvement proposals.
 - Separate major issues from minor ones. Present major first, minor if space allows.
- Use terminology from the course textbook!

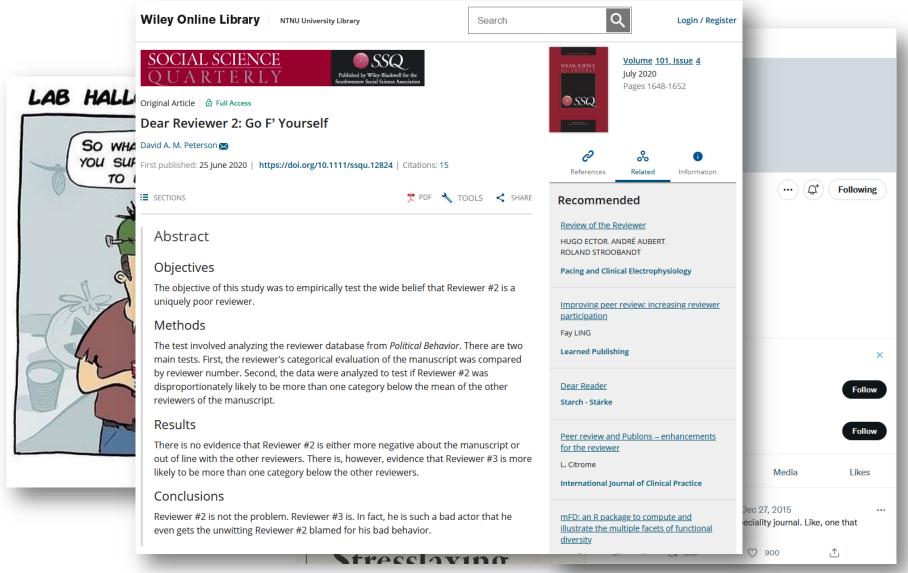


Everything is subject to review





Becoming reviewer number 3 (or 2)





Example reviewer comments (that we want to avoid)

The biggest problem with this manuscript, which has nearly sucked the will to live out of me, is the terrible writing style.

Hopeless – Seems like they have been asleep and are not up on recent work on metagenomics.

The abstract and results read much like a laundry list.

Merry X-mas! First, my recommendation was reject with new submission, because it is necessary to investigate further, but reading a well written manuscript before Xmas makes me feel like Santa Claus.

I usually try to nice but this paper has got to be one of the worst I have read in a long time. I suppose that I should be happy that I don't have to spend a lot of time reviewing this dreadful paper; however I am depressed that people are performing such bad science.



Questions?

HAPPY EASTER!

