

# Ins and Outs of Peer Review for Manuscripts and Other Projects

# Peer review is important.

Clearly **conscientious** peer review is essential to the continued **advance** of science...

- Wilson 2002

# Reviewing is nice...

It is an **honor** and a **privilege** to be selected as a reviewer and to have an opportunity to work cooperatively and constructively as teacher or **mentor** to the author.

- Roberts et al. 2004

# ...but reviewing is not easy.

The task of the reviewer is... to **see what the authors have not seen...**

The process of properly reviewing a manuscript is not intuitive, but instead requires **training and experience**, which are not easily acquired.

- Provenzale & Stanley 2005

# Good quality reviews are nice...

The most important traits [of a reviewer] are **courtesy**, **fairness**, and **punctuality**...

...treat all manuscripts in the same manner that you would want your own treated.

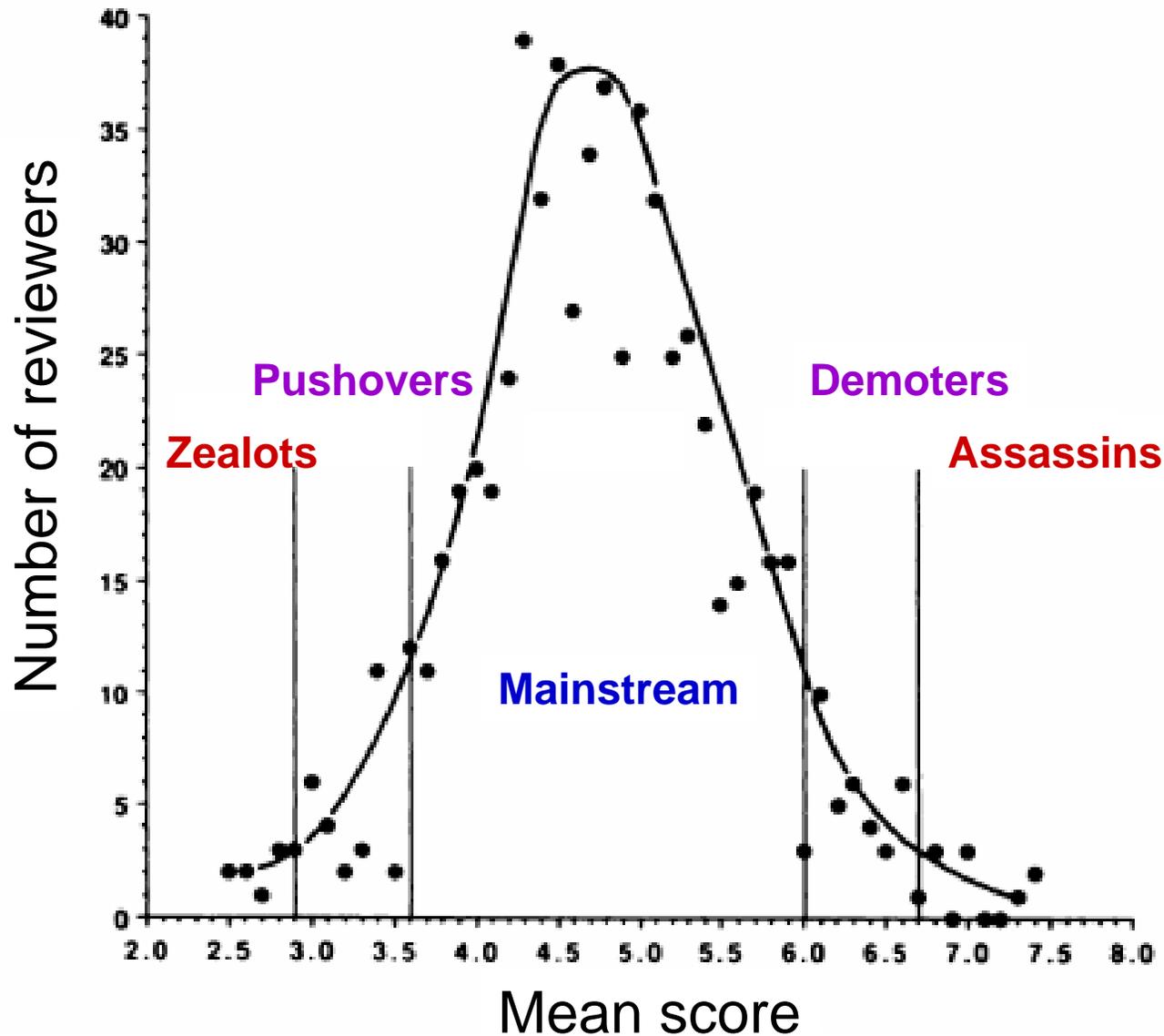
- Benos et al. 2003

...and bad quality reviews are not.

There is nothing more discouraging... than to receive a sarcastic, destructive review.

- Benos et al. 2003

# Some reviewers are unusually nice (or not)



From 660 reviewers sent at least 10 manuscripts each for *Radiology*, 1985-1990  
Siegelman 1991

# Good quality reviews are good for you.

Since the **best referees** generally receive the best papers and proposals to review, those individuals enjoy the benefits of continual professional **enrichment** and **renewal**.

- Wilson 2002

# Bad quality reviews are bad for you.

The most serious consequences of **bad refereeing** is the long-lasting **damage** to an individual's **reputation** in the eyes of editors and program managers...

- Wilson 2002

# Good quality begets good quality.

Some editors... maintain **two lists** of referees, say the “A” list of good referees and the “B” list of bad referees...

...when **authors** from either list submit a paper for review, the editor selects **referees**... from the list to which the author belongs.

- Wilson 2002

# Everyone gets papers rejected.

It is widely recognized that anyone pursuing a career in the arts needs a **thick skin** to cope with the frequent rejection....Less widely appreciated is that rejection is also a fact of life for scientists.

- Cassey & Blackburn 2003

# Why do papers get rejected?

- a) Poor referee/editorial process
- b) Scientific grounds
- c) Insufficient importance
- d) Inappropriate subject matter for the journal

Authors with higher % acceptances picked **b**.  
Authors with higher % rejections picked **a**.

- Cassey & Blackburn 2003

# Why reviewers recommend rejection:

No.	Reason	%
1	Statistics inappropriate, incomplete, etc.	11.2
2	Overinterpretation of results	8.7
3	Inappropriate, suboptimal [methods]	7.3
4	Sample too small or biased	5.6
5	Text difficult to follow or understand	3.9
5	Insufficient or incomplete problem statement	3.9

# Why reviewers recommend acceptance:

No.	Reason	%
1	Important, timely, relevant, critical <b>problem</b>	20.2
2	<b>Well-written</b> manuscript	18.3
3	<b>Well-designed</b> study	10.3
4	Thoughtful, focused, up-to-date <b>lit. review</b>	6.7
5	Sample <b>size</b> sufficiently large	4.4
5	Practical, useful <b>implications</b>	4.4
5	Study <b>limitations</b> accounted for	4.4

# A negative review is a challenge.

A negative review means the manuscript – either the argument or its presentation – has **not convinced** an expert in the field.

If the manuscript is **unintelligible** to the expert reviewer, it will be unintelligible to **everyone**.

Corollary: If the manuscript can be revised to **convince** this reviewer, it will convince **anyone**.

- M. A. Lewis 2006 (paraphrased)

# Reviewers' responsibilities

- 1) evaluating the ms **honestly**, objectively, and critically;
- 2) disclosing/avoiding any real/perceived **conflicts of interest**;
- 3) not engaging in **plagiarism**;
- 4) identifying to the editor areas in which you are **not expert**;
- 5) writing **constructive**, helpful reviews & not being derogatory;
- 6) reviewing **expeditiously**;
- 7) maintaining **confidentiality**;
- 8) reporting any suspected **ethical breach** to the editor.

- Benos et al. 2004

# Giving good reviews/feedback

## Get the big picture

For informal reviews -

1. Ask what the **goals** of the project are.
2. Ask what **scale** of feedback is requested: ideas? content? style? proofreading?
3. Ask what the **author** sees as the project's strengths and weaknesses.

For journal reviews -

1. Check the journal reviewers' **guidelines**.
2. Make sure you have no **conflict of interest** and enough **time**.

# Giving good reviews/feedback

## Offer your comments

For all reviews -

1. Keep it **impersonal** for the author, and **own** your comments. Try *“I find this...”* rather than *“This is...”* or *“You are...”*
2. Comment on the **positive** as well as on areas for improvement.
3. **Sandwich** your comments: **good** + **not-so-good** + **good**. This way the author is *much* more likely to hear the feedback.
4. Be **specific**, and **explain** your comments with examples.
5. Distinguish **major**/conceptual from **minor**/detailed comments.
6. If confused, try **summarizing** back to the author what you read/heard.
7. Provide **constructive suggestions**, not discouraging comments. Try *“I am confused – consider reordering these for clarity”* rather than *“This is confusing.”*
8. Be aware of your writing/body language. Convey your comments with **courtesy, respect, and sincerity**.
9. **Thank** the author/editor for the opportunity to review.

# Making the most of feedback

## Provide the big picture

### For informal reviews -

1. Explain the **goals** of the project for which you are requesting feedback.
2. Identify the **scale** of feedback you are asking for: ideas? content? style? proofreading?

### For journal reviews -

1. Make sure you are submitting to an appropriate **section** of an appropriate **journal**, and have followed all the **guidelines**.

# Making the most of feedback

## Encourage all feedback (discard later)

For informal reviews -

1. **Answer** any questions, but **wait** before responding to the feedback.
2. If the feedback is unclear, **ask** for clarification or examples.
3. Do **not defend** the project or **reject** the suggestions yet (save this for the privacy of your office).
4. **Summarize** the major and repeated comments.
5. Be aware of your body language; try to convey **openness** to feedback.

# Making the most of feedback

## Encourage all feedback (discard later)

For all reviews -

1. Assume the reviewers are being **courteous**, **respectful**, and **sincere**.
2. Remember that *anything* can be improved. The feedback is about the project, not you, so try not to **personalize** it.
3. Look/listen for **positive** comments as well as suggestions for improving.
4. Try to distinguish **major**/conceptual comments from **minor**/detailed ones.
5. Pay attention to **repeated** comments: there might be something to them.
6. **Thank** the reviewers/editor for the feedback.
7. **Wait** before dismissing comments out of hand. Comments that initially appear stupid may come to have merit.
8. Quietly **salvage ego** with chocolate/beer/hugs before tackling changes.

# References

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