Writing A Paper

Justin Zobel

University of Melbourne, Australia

Paper vs. thesis

A paper is more concise than a thesis, and will often be written to strict time and space constraints.

A thesis can be relatively conversational, and to some extent is a showcase of the ability of the student. A paper is solely concerned with the results and their significance.

A strong thesis can be built on research that is unsuccessful, but such research is unlikely to be publishable as a paper.

A thesis is the work of a student, and there are constraints on how involved supervisors and peers can be and on what they can contribute. Most papers are collaborations between peers.

Working with other authors

Agree on a process for co-authoring:

- Does everybody each write a separate section? If so, whose job is it to stitch the document together and edit it into a consistent whole?
- Alternatively, does each person contribute to the whole document, with each person having a turn?
- Is one author allowed to delete another's text?

Most people have a sense of ownership of their writing. Without agreed rules it is easy to have disagreements.

When to submit a paper

Publish the minimum reportable increment?

Or wait until every last avenue is explored and complete?

- Most research projects are never absolutely completed typical successful investigations lead to answers that also pose new questions.
- Small increments published in minor venues are of low value and have low readership. (And attending a small conference can be an unjustifiable expense.)
- Presentation of (refereed) conference papers gives visibility to researchers and projects.
- Presentation of minor results or work in progress at local conferences has benefits beyond the publication itself, such as networking and initiation of collaboration.
- Expanded (?) conference papers in journals can be of value but require strong additional material. Why expand rather than submit a fresh paper?
- Publication delay can reduce the value of the work.
- Long or 'bucket' papers are hard to digest.



When to submit a paper ...

A good principle: aim to create papers such that:

- Each reports a single, significant outcome;
- Each is at least moderately independent of your other work.

A secondary principle: take advantage of appropriate publishing opportunities.

Not all minor outcomes are worth publishing. It may be sufficient to include a remark or paragraph in a paper on a larger result.

Most researchers are under pressure to publish, but insignificant papers, and papers in venues of low quality, can degrade a CV and undermine reputation.

Don't waste the time of reviewers or editors by submitting work that you know is not ready.

Where to submit a paper

Conferences:

- Reviewing and publication on a fixed, public timetable.
- Strict length constraints. (Many authors compromise by removing too much background and too many references.)
- One-shot reviewing process, often highly competitive.
- Some inexpert reviewing and some drastically wrong reviewing outcomes.
- Moderate degree of oversight of the reviewing process.
- Once-a-year deadline for the top conference in a given area. (There are many less significant conferences.)
- An author must attend (and funds need to be available).

Where to submit a paper ...

Journals:

- Submit at any time, reviewing timelines are uncertain, paper publication can be delayed by years (immediate online publication).
- Length constraints are variable.
- Not as competitive as top-tier conferences.
- ► Relatively little inexpert reviewing, but even experts can be wrong.
- Opportunities for review responses, and editorial judgements can be flexible.
- Low cost, widely viewed as first-class, higher impact than conferences.

Where to submit a paper ...

Chapters in edited books?

- Often an easy publication, but usually remain unread and uncited.
- Typically (not always) a vanity project for the editor.

Workshops, minor symposia?

- Can be worthwhile as an opportunity to interact with other local researchers or others in a tightly focused area.
- May provide a justification to attend a co-located major conference.

Neither is likely to be refereed to a high standard.

- Reviews can be aggravating, but that does not mean that they deserve an angry response.
- Discuss the comments, not the reviewer.('The reviewer does not understand ...'?)
- ► Take every comment seriously. Attempt to address every comment through changes to the paper. Where changes or the comments are unarguably wrong, explain why in as much detail as it takes.
- Do not be reluctant to make substantial changes.
- Explain your changes in detail with exact page references to the new version, to make your responses easy to read.
- Don't spend the editor's limited patience.