

Writing an Academic Piece

Types of Piece

- External
 - articles and general interest pieces
 - conference papers/posters (with/without proceedings)
 - journals, chapters in books, books
- Internal
 - assignments, programs, etc.
 - projects (eg, BSc, etc.)
 - dissertations (eg, MSc, etc.)
 - theses (eg, MPhil, Phd, etc.)
- ... but some overlap ...
 - many PhDs and good MScs are cited elsewhere!



Focus and Content

- The paper needs to have a meaningful introduction and conclusion, as well as related content in between
 - So, you won't simply be able to lift parts of your research and call them a paper!
- Plan what you want to include
 - Identify the most appropriate issues from your research, and then plan a section structure
 - Get your supervisor to agree the proposed structure

Focus and Content

- The paper must focus upon something **you** have done
 - Not just a review of literature or a set of unproven ideas
- The paper must be standalone
 - You are writing for people who have no prior knowledge of your work
 - People should not have to read the rest of your research in order to understand it

Language

- With the exception of general interest media pieces (which aren't really 'academic' anyway), *all* academic work should have the same formal style
- Be clear and concise
 - Say it once – once only – don't say it again
 - use the best/clearest grammar/vocabulary you can
- Assume that your reader is intelligent – they *will* understand what you are saying
 - even if in truth they have to read it several times
 - only if you are actually *unclear* are you responsible for your reader's difficulties



Person

- Never say ‘I’ or ‘me’ (first person)
- Some people are happy with ‘we’ or ‘us’
 - but it’s better if this means the *author* and the *reader* rather than just ‘we’ the *authors*
- Some people prefer ‘the author(s)’ (third person)
- Best to avoid the issue all together
 - and, yes, it *can* always be done ...
 - for example. ‘I/we noticed that ...’ becomes ‘It became apparent that ...’
 - or, ‘I/we wish to thank ...’ becomes ‘Thanks are due to ...’
 - actually, this is a good exercise in English!



Format

- Use the template of set of guidelines when available ...
- ... or devise your own consistent formatting and style for other times
- Pay attention to:
 - Margins, columns, headers & footers
 - Font sizes for text, headings, captions
 - Title, author details, abstracts & keywords
 - Tables and figures
 - use of references
 - length restrictions
 - how to submit work



Structure

- Typical ...
 - Title, authors (and affiliations*) (contents*)
 - Abstract
 - Keywords*
 - Introduction (to subject^)
 - ... other sections(^)
 - Conclusions (and future work^)
 - Acknowledgements*^
 - References
- ... but not all have to be included (*) and the order can change (^)



Abstract

- This may be the only bit that the reader initially gets to see
 - browsing electronically through Tables of Content
 - searching by keywords (if used)
 - flicking through journals
- They will decide whether (or not) to read the piece on the basis of the abstract
- So it must be a clear description of the contribution your work makes
- it's a summary of what you've done but is not a route-map through your paper
 - that's for your 'Introduction'



Introduction

- May fulfil one or both of the following ...
 - A ‘route-map’ through your work ...
 - Section 2 does this ...
 - ... is considered in Section 2
 - ...
 - ... Section 11 concludes and suggests future work
 - sentence/paragraph for each
 - do *not* repeat what you’ve said in the abstract
 - An initial discussion/overview of the topic/subject area in question
 - any in-depth analysis gets saved for the next section
 - (can be in either order)



Other Sections

- As required by the nature of the paper. eg ...
 - (1: Introduction)
 - 2: Whatever the current way is
 - 3: What's wrong with the current way
 - 4: Inspiration for my new system
 - 5: Detail of my new system
 - 6: Implementing my new system
 - 7: Testing my new system
 - 8: My new system is great
 - (9: Conclusions)



Other Sections

- As required by the nature of the paper. eg ...
 - (1: Introduction)
 - 2: What I'm trying to figure out
 - 3: Where I've looked and what I've found
 - i.e., the literature review
 - 4: What I've done with these results and what I think they mean
 - 5: What I'm still not sure about
 - (6: Conclusions and future work)



Tables and Figures

- Remember ‘a picture paints a thousand words’
 - but only if it’s clear and relevant
 - otherwise it’s just a picture!
- Be sure to *explain* what the numbers, terms, etc. actually *mean*
 - either in the text (typical)
 - or in the caption (IEEE)
- Use a consistent numbering system
- (Maybe) include tables of figures/tables



Conclusions

- A summary of what you've done
 - AND what it means, what has been achieved
- May include a 'future work' section
 - things either not completed in your work or new questions raised by your work
 - to be considered by you in your next venture
 - or as suggestions to others for their research
- May (for a dissertation for example) include a 'critical review' of the artefact or yourself
 - ... how good was the final product
 - ... how you managed the project



Referencing

- Your paper will be supported by references
- Do not list sources that you have not cited in the text
- Cite references that readers would have a chance of obtaining
 - e.g. MSc lecture notes are not a valid reference!
- Use credible and authoritative sources where possible
 - E.g. citing journal or conference papers is better than citing online news sites or vendor websites

References

- Do it the way you're told to ...
 - by the conference/journal/editor
- Be consistent
- Be complete
- Be correct



STYLE *and* SYSTEM (or Method)

- STYLE: rules used to describe a source / bibliographic details
- SYSTEM / METHOD:
 - - Running Notes
 - - Numeric
 - - Harvard

Why reference?

- Enable others to follow-up your sources
- Acknowledge the work of others
- Avoid pretending the ideas/words of others are yours (plagiarism)

When to reference

- Source of an important specific idea or example
- Referral to a body of work
- Source of a Quotation

Running notes

- Bryant has challenged the systems method.[\[1\]](#)
- Footnote or Endnote:
 - 1. Anthony Bryant, All systems are go. London: Thunderbirds Publishing, 1991.

Numeric referencing

- Bryant has challenged the systems method [2]
- References:
 - [1] Ball, Shirley
 - [2] Bryant, Anthony

Harvard referencing

- Bryant (1996) has challenged the systems method.
- In references give details in full:
 - Bryant, A. (1996) All systems are go. London: Thunderbirds Publishing, 1991.

Mistakes with referencing

- Too little or too much referencing
- Inconsistent style
 - Jones, A. (1996), *Foxes are brown*, London: Cape and Cope.
 - Jones, A. 1996 Foxes are Brown.
 - Cape and Cope, London
- Full reference given in text
 - This argument is countered by Ann Jones, in her article *Some trees are green* (Harvard Botanical Review, 12:2, July-August, pp. 43-9), who offers the opinion that not all trees have green leaves.

Mistakes (continued)

- Failing to reference a source which contains the source you've used
 - E.g. Jones quotes Owen and references this source. You then use the quote by Owen.
 - Your reference should read: (Owen in Jones, 1996, p. 43)
N.B. Both Owen and Jones to appear in the references
- Double naming of authors
 - Jones and Hill argue that 'most grass is yellow in colour' (Jones and Hill, 1993, p. 12)
 - Should be: Jones and Hill (1993, p. 12) argue that
- Not citing page numbers in book references
 - Most grass 'would appear to be contaminated' (Jones, 1990).
- List of References
 - - not in order
 - - missing a source named in the text

Exercises

- Read, and compare the styles of, ...
 - A journal paper
 - A book chapter (in an edited academic book)
 - A professional magazine article
 - A student assignment
 - A project report
 - A dissertation
 - A thesis



Language problems

- Avoid informal language (e.g. don't, can't etc)
 - It's OK to speak like it, but we don't write like it . . . except in PowerPoint slides! ;-)
- Avoid writing in first person style
 - Rather than say "I investigated ..." say "The research project investigated..."
 - So, no mention of 'I' or 'my' in the text!

Language problems

- Make sure that acronyms are defined
 - Only define them **once** (the first time they are used in the paper)
- Poor spelling and grammar
 - Make use of the spellchecker!
 - Read the paper yourself – does it read well?
 - Try to get someone else to read it, and give you feedback

Plagiarism

- The paper **must** be **your** work in **your** words
 - Even for parts relating to literature survey
 - Read something, then write down your understanding
- If you are quoting from other sources:
 - “Put the quoted text within quotation marks and include a reference” (Author, 2005)
 - You should not need to quote large segments of text
- If in doubt about something, ask your supervisor for an opinion

(Ab)use your supervisors

- It is extremely unlikely that you will create a suitable paper at the first attempt
- Your supervisors should give you feedback
 - this does not mean they will write it for you!

Addressing corrections

- Papers often require a lot of (additional?) work
- Expect to receive feedback from your supervisors

