Improving Your Academic Writing & Avoiding Plagiarism Issues

For M.Sc. Dissertations, etc

2014-15

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Notes:

- **If you read nothing else of these slides, then do read slides 27-35, about accidental plagiarism because of missing out quotation marks.**
- **Also, do not take your phone with you to your desk in an exam!**
  - It automatically creates an "academic offence" investigation.
- The lecture itself was preceded by a fragment of an "intentionally bad intro" – it was not meant seriously!! Then ...

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"HOW TO WRITE BAD"

- Remember your feelings after the "BAD INTRO"
  - Irritated? Confused?
  - Would you be inclined to give a good mark?

- Contains a vastly exaggerated version of some standard errors.
- Exercise: try to find and identify some of them now.
  - Continue to do so during the lecture.

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Overview

- Some help and guidance for:
  - Tips for `Better writing'
  - Avoiding allegations of plagiarism
    - Specifically "accidental plagiarism"
    - Not a lesson on how to cheat! ☺

- Note: This is not an English lesson.
  - Not doing "their" vs. "there", etc
  - Will focus on ideas that are independent of spelling and grammar

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Academic Standards for Written Works

- Academic standards are different to standards in the general world:

  "*Journals are not Journalism*"

- Academic standards can differ between countries and cultures, and between pre-University and (school) and University.

- At PG level we expect the highest standards.

- To avoid poor marks or (accidental) plagiarism it is vital to understand these issues.

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House-buyers vs. Writers

- What is 1st most important part of writing a dissertation?
  - Communication!!
- What is 2nd most important part of writing a dissertation?
  - Communication!!
- What is 3rd most important part of writing a dissertation?
  - Communication!!
- House-buyers mantra: "Location, Location, Location"
  - Think explicitly and at depth about the location of the house
- Writers: "Communication, Communication, Communication"
  - Think explicitly and at depth about the methods to communicate the ideas and achievements of your project
  - It will (probably) not happen without effort

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What kinds of Standards?

- Underlying the standards is a desire that the communication between writer and reader is as clear, accurate, precise and unambiguous as possible.
- Academic standards are well-tested methods that help this communication
- It is far better if the reader/audience "understands but disagrees" than if they "do not understand"

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Error 1: Writing for self

- Common Error:
  - Writing for your self
  - Usually done unintentionally

- "You" are not the intended reader of your dissertation
- Danger: you write things that only you can understand

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Error 1: Writing for self

- Common Error:
  - Writing for your current self
  - Usually done unintentionally
- Common Symptoms:
  - You have been intensively been working on the topic for 3 months, and so it is "all fresh in your mind"
  - You have the full context and so say things that make sense to you, but no-one else
    - Miss out including the needed background

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Tip 1: Know your reader

- **Have in your mind the intended reader(s)**
- Having a real specific person may help
- Examples:
  - A family member
  - You, but a year ago
  - A University friend, but in a different subject area
- Avoid assuming too much expertise
  - Academic staff do not know everything!
  - Do not assume that just because the marker has a PhD that they will know your area.
    - Most academics are relatively specialised

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Tip 1: Know your reader

- **Have in your mind the intended reader(s) and be consistent about writing for that audience**
  - Where did the "bad intro" fail?
  - Try to identify the levels of the reader assumed for each portion.
- But assume that intended reader will be able to learn your topic as they read your dissertation
- Example: when appropriate, write for your self but only for how you were before starting the project, and teach your old self the topic

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Accuracy vs. Precision in Science

- See http://en.wikipedia.org/wiki/Accuracy_and_precision

- Accurate: The measurement is close to the true value

- Precision: The measurement is reproducible and/or to finer resolution

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Accuracy vs. Precision in writing

(Note this is just a metaphor; these are not standard terms.)

- **Accurate**: The conveyed message is close to the true message
  - 'Sheep are mammals' vs. `sheep are mammoths'
- **Precise**: The conveyed message is measurement is reproducible is of "finer resolution"
  - `Sheep are even-toed ungalates and ruminants'

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Error 2: Erratic Levels of Precision

- Descriptions that vary randomly between
  - High-level, general, "accurate, but imprecise"
  - ...
  - Low-level details, "accurate and precise"
- Can arise of doing a
    "brain dump of everything you know"

- Higher Abstraction goes with Lower Precision
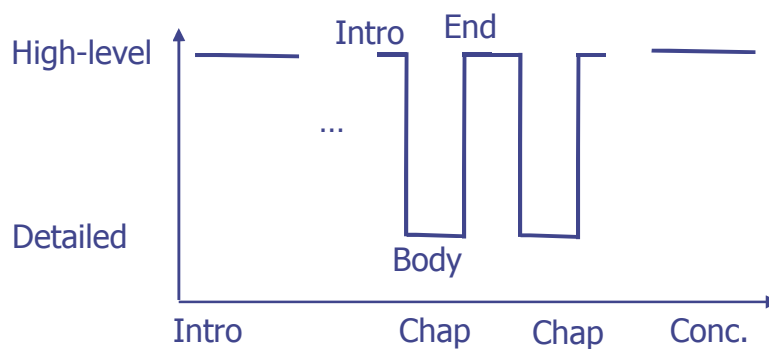 - The level of abstractions/precision should not be mixed and inconsistent

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Tip: Accuracy vs. Precision

- Always strive for high levels of accuracy
  - Though note a little inaccuracy regarding special cases can be appropriate at times in order to keep the story
- However the level of precision should be carefully selected according to the context

- In particular, the level of precision (details or abstraction) should be planned to depend on the place within the dissertation

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Tip: Plan the Levels of Abstraction/Precision

- Plan the levels and follow them consistently
- Exercise: does the "BAD INTRO" have bad levels?

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Tip: Tell a Story

- Aim to structure the orderings of topics so that there is a natural flow.
- Try to avoid having to refer too much to future chapters
- If needed then use careful choice of precision/abstraction to only have to make high-level references to later topics

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Tip: Avoid Undefined Acronyms

- It is irritating and confusing for the reader if an acronym (e.g. "TLA") is used before it is defined (or not defined at all)
- This is a very common error. It is understandable as it can easily happen:
  - When the content is re-ordered to tell a better story
  - Because you know all the acronyms
- Easy fix:
  - Carefully and explicitly check this on the final version
  - Consider adding a glossary – a table explaining the acronyms used

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Tip: Avoid Undefined Terms

- It is confusing for the reader if a technical term is used:
  - Before it is defined (or not defined at all)
  - Unnecessarily
- This can happen:
  - Due to the content being re-ordered
  - Thinking that "posh words" are automatically better
- Easy fix:
  - Carefully and explicit check this on the final version
  - Do not use posh words just for the perceived kudos

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Error: Ambiguous Statements

"Algorithm X applies a move N times"

- But does it apply it to the initial state N times, or instead does it chain them together?

  - Danger: when writing this, you know which one you mean; but the reader might not be able to determine which one is meant.

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No-one is Immune To Ambiguity ☹

For G52ADS exams, I have written equivalent of

"Given an initial state of a hash table then apply the following
1. Insert 1
2. Insert 3
3. Delete 2"

Then, based on feedback, have had to clarify this to:

"Then apply the following in sequence:
1. Insert 1, and from the resulting state
2. Insert 3, and from the resulting state
3. Delete 2"

The first version was consistent with what I meant, but also consistent with what I did not intend ☹
Getting this right is a challenge!

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Pick your words car fully   [sic] ☺

```
foo(x) {
  for ( i = 1 ; i <= 10 ; i++ ) {
    bar(x);
  }
}
```

"Foo performs bar" of "foo contains calls to bar" – but it can be confusing to say not "foo contains bar"

Tip: if non-native speaker then maybe use online translator to help check meanings

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Overall General Goal

"Think about what you mean"

but also

"Think about how you say it"

This seems obvious:

- But many discussions turn into "but I meant …" with the response being "but you wrote …"

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Plagiarism

- General definition:
- Gaining credit (extra marks) for work that was not your own
  - Deliberate
    - Copying from friends
    - Buying answers from the internet, etc.
    - Don't do this!! – there are good systems to detect this, and it is regularly detected. It is especially hard on dissertation as the demo and your supervisor are likely to catch it.
  - "Accidental" – "poor academic practice"
    - Poor citations and quoting standards

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Plagiarism

- http://www.nottingham.ac.uk/academicservices/qualitymanual/assessment/academic-misconduct.aspx

"2.1.1 Plagiarism: representing another person's work or ideas as one's own, for example by failing to follow convention in acknowledging sources, use of quotation marks etc. This includes the unauthorised use of one student's work by another student and the commissioning, purchase and submission of a piece of work, in part or whole, as the student's own."

And there is more: Read it!!

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Plagiarism Penalties

From the UoN Quality Manual:

"The penalties available to the Head of School are:

- i) A written warning. (Where relevant, the lower standard of the piece of work is likely to be reflected in the mark awarded but no further penalty will be imposed).
- ii) A mark of zero for the specific material which is the subject of the academic misconduct or where the material does not constitute a specific paragraph or section, an overall percentage reduction to the piece of work reflecting the percentage of the work which is the subject of the academic misconduct, as determined by the Head of School.
- iii) A mark of zero for the entire piece of coursework or assessment in which the academic misconduct has occurred
- iv) A mark of zero for the entire module in which the academic misconduct has occurred."

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Avoiding Accidental Plagiarism

- Accidental plagiarism
  - occurs when you to unintentionally fail to accurately and precisely communicate to the reader the source of your ideas and writing.
  - It is a failure of communication.
  - Avoiding it, again requires being careful and deliberative about communication

- Contrast with deliberate plagiarism which may be an accurate communication of a lie.

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Standard Rules

- If you obtain information from some external source then the source must be cited
- Exception: no need to cite sources for "common knowledge"
- Test: can you be very sure that reader will know you did not invent it
  - E.g. if it is a standard part of an core undergraduate course: no need to cite a source for bubble-sort, etc.
  - However, it might still be poor writing not to give a source for the reader to use to "revise"

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Example: Plagiarism?

The Android operating system is well-known, for example see [1], and is often used on smartphones. It is particularly useful as Android has a large community of developers writing applications ("apps") that extend the functionality of devices, written primarily in a customized version of the Java programming language.

[1] http://en.wikipedia.org/wiki/Android_(operating_system)

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Why is it Plagiarism?

- Cannot reasonably expect the reader to figure out that the phrase "Android has a large community of developers … in a customized version of the Java programming language." came from the Wiki site.
- Community standard is that quotes MUST be used. Otherwise the reader will assume that you wrote it all.

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Error: "Assuming Reader memorises the references"

- Failure to cite the sources of your materials is "obvious" plagiarism. However:
- **It is not enough that your dissertation cites the sources.**
- **It must also make explicitly clear which parts of your writing arise from which sources**
- You cannot assume that the reader will figure this out because they know all the source contents.

This is probably the biggest single cause of accidental plagiarism.

Exercise: Is this error in the "BAD INTRO"?

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Example: Plagiarism - fixed

The Android operating system is well-known, for example see [1], and is often used on smartphones. It is particularly useful as "Android has a large community of developers writing applications ("apps") that extend the functionality of devices, written primarily in a customized version of the Java programming language" [1].

[1] http://en.wikipedia.org/wiki/Android_(operating_system)

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Example: Plagiarism – better fix

The Android operating system is well-known, for example see [1], and is often used on smartphones. It is particularly useful as from [1]:

> *"Android has a large community of developers writing applications ("apps") that extend the functionality of devices, written primarily in a customized version of the Java programming language".*

[1] http://en.wikipedia.org/wiki/Android_(operating_system)

This seems to have too many uses of "[1]", but it is better as the reader cannot miss that the quote is external.

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Example: Is this Plagiarism?

The Android operating system is well-known, for example see [1], and is often used on smartphones. It is particularly useful as Android has a big community of developers implementing apps that increase the functionality of devices, written primarily in a version of the Java programming language.

[1] http://en.wikipedia.org/wiki/Android_(operating_system)

(Note: The wording is slightly changed from wikipedia)

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Plagiarism: Paraphrasing & Re-writing

- Merely changing a few words, or shortening, or slightly re-writing is NOT enough to avoid the need for proper quoting, and making the source clear.
  - The idea and general way of saying it will still be from the external source, and so this must be made clear
- Tip: Safest method
  - Never cut-and-paste, or when you do then ALWAYS IMMEDIATELY CUT-AND-PASTE INTO QUOTES
    - DO NOT ASSUME YOU WILL "FIX IT LATER"
  - Learn the material; then wait a day before writing your own version in your own words
  - Still cite the external source

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Plagiarism

- Note that this is an issue of communication
- The marker thinks that you did some work whereas you didn't

- The converse can happen:
  - The marker thinks that some part of the dissertation came from existing sources, whereas it was something that you added.
  - This will also lose marks for you

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Analysis of "BAD INTRO"

- See separate document

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Summary

- A well-written dissertation communicates your ideas clearly and effectively to the marker
- Good communication requires active conscious effort and does not happen by accident
- This includes "accidental plagiarism" from poor communication of the origins of ideas
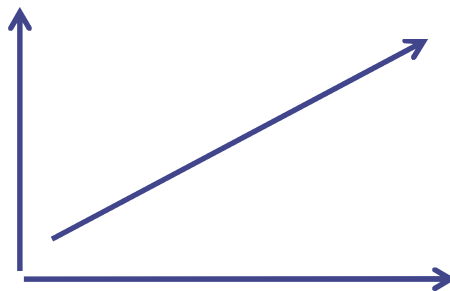
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Plagiarism:Contact Me if in Doubt What is Allowed
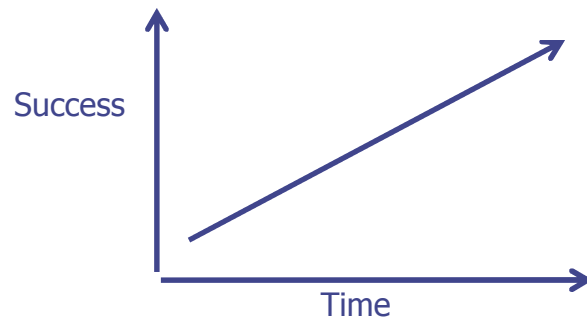
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My Finishing Wish for You

- ??

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My Finishing Wish for You

- And label your axes!

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