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1829

 SLD
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Science Writing — Workshop

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Outline

- Function(s) of writing
- Attributes of good writing
- Style/'register'
- Specific Scientific Writing Tasks
- Editing Your Own Work
- How can I improve?

Disclaimer: If anything I say contradicts your style guide,
follow the guide!

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Functions of Writing

Communication


- to convey information efficiently
- i.e. clarity of meaning

We should not write so that it is possible for the reader to understand us, but so that it is impossible for him to misunderstand us.

Quintilian (Marcus Fabius Quintilianus), rhetorician (c. 35-100 CE)

Remember the Reader!

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Attributes of Good Writing?

The Aim is Clarity of Meaning

- Simplicity of language
- Correct use of technical language
- Concision (brevity)
- Simplicity of structure

K.I.S.S

Keep It Simple, Stupid!

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Attributes of Good Writing

Simplicity of Language

- Clarity is more important than sounding learned
- You may get long words mixed up:

"Illiterate him quite from your memory"
(obliterate) [Mrs Malaprop, Sheridan's *The Rivals*]

"Our watch, sir, have indeed comprehended two auspicious persons"
(apprehended two suspicious persons)
[Shakespeare, *Much Ado About Nothing*].

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Attributes of Good Writing

Concision (brevity)

- Get rid of all the extra words

Example: '~~By all means this is problematic when striving to achieve~~
[giving?] an accurate representation of society ~~as a whole ...~~'

- Keep sentences reasonably short
– See *'How Can I Improve?'*
- Don't repeat yourself (unnecessarily).

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Attributes of Good Writing

Simplicity of Structure

- Keep the flow of paragraphs/ideas as simple as you can
- From time to time remind the reader of the structure of your essay.

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Attributes of Good Writing

Style/Register

'Register' reflects the target group
Think of some different target groups and the different styles you use —

- Texting your peers
- Emailing a Lecturer
- CV or job application.

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Attributes of Good Writing

Style/Register

- Science writing is formal and impersonal
- No abbreviations (don't, can't etc) — except jargon
- Avoid dialect usages: 'loose' for 'lose', 'been' for 'being'
- Impersonal — no 'I', use passive voice


Example

NOT 'I kept the rats in cages with lots of food.'

BUT 'The rats **were kept** in cages with food *ad lib.*'

ad lib. ad libitum

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An Example of Bad Writing

"Human beings are completely exempt from undesirable behaviour-patterns only when certain prerequisites, not satisfied except in a small percentage of actual cases, have, through some fortuitous concourse of favourable circumstances, whether congenital or environmental, chanced to combine in producing an individual in whom many factors deviate from the norm in a socially advantageous manner."

Re-written
"All men are scoundrels, or at any rate almost all. The men who are not must have had unusual luck, both in their birth and in their upbringing." [Bertrand Russell, *How I Write*.]

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Science Tasks

- Lab Reports
- Essays/Exam Q
- Dissertations
 - Same principle as Essays/exam Q — just bigger!

Any others?

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Science tasks — Lab Reports

<ul style="list-style-type: none">• Introduction<ul style="list-style-type: none">– Purpose of experiment: principle, research question• Methods<ul style="list-style-type: none">– Materials– Design/protocol– Measurement methods– Analysis/statistics methods• Results<ul style="list-style-type: none">– A simple description of the results– Simple comparisons <i>within</i> the observations	<ul style="list-style-type: none">• Discussion<ul style="list-style-type: none">– Were the aims of the experiment achieved?– Compare with published/expected results– Sources of error– Significance of observations– Future work• Conclusion.
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Science Tasks — Essay/Exam Q

<p>Planning!</p> <p>After Research/recall</p> <p>Decide structure:</p> <ul style="list-style-type: none">- what you are going to say- in what order	<p>Advantages of Planning</p> <ul style="list-style-type: none">- Control of material<ul style="list-style-type: none">• Sequence• Where to add info, figs• Keeps focus/relevance- Allows focus on <i>writing</i>.
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Academic Writing — Essay/Exam Q

<p>1. Introduction</p> <p>Definitions/range</p> <p>Structure/sequence</p> <p>Conclusion (briefly)</p>	<p>2. Body</p> <p>Write as lucidly as you can</p> <p>Link sections</p> <p>3. Conclusion</p> <p>Review the above</p> <p>State conclusion.</p>
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Editing Your Own Work

Allow time to copy-edit

<p>1. Spelling</p> <p>2. Grammar</p> <p>3. Structure</p> <p>Incl. <i>links</i> between sections</p>	<p>4. Clarity</p> <p>Simplicity of language</p> <p>Correct use of technical language</p> <p>Concision</p> <p>No redundancy.</p>
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Editing — things to look out for
CHECK THEM EVERY TIME

Apostrophes

<p>It/it's</p> <ul style="list-style-type: none"> - Never write 'it's' in formal writing - use 'it is' - <i>Its</i> = belonging to it <p>Plurals Never babys', beer's etc</p>	<p>Possessives</p> <ul style="list-style-type: none"> - <i>Singular</i> – apostrophe <i>before</i> the s <ul style="list-style-type: none"> • Alan's presentation - <i>Plural</i> – apostrophe <i>after</i> the s <ul style="list-style-type: none"> • The boys' entrance, i.e. for <i>all</i> the boys) • i.e. apostrophe after the possessor.
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Editing — things to look out for
Awkward Pairs*

*Spell-check is no use for these!


Principal/principle

The *principal* component of a cup of tea is water.
(Synonyms: 'main', 'chief')

The *principle* of the experiment is that gases expand when heated

- That is, the underlying idea.

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Editing — things to look out for
Awkward Pairs*

*Spell-check is no use for these!

Practice/practise

<p>I must go to my piano <i>practice</i></p> <p><i>Practice</i> is a noun (i.e. a thing)</p> <p>I <i>practise</i> the piano for an hour every day <i>Practise</i> is a verb ('action')</p>	<p>Note. US usage is opposite! <i>Licence</i> and <i>license</i> work the same way.</p>
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How Can I Improve?

<p>Practise</p> <ul style="list-style-type: none">• Keep at it <p>Reflection</p> <ul style="list-style-type: none">• Think about it	<p>Reading Good Writing</p> <p><i>'Literature'</i></p> <ul style="list-style-type: none">• Ernest Hemingway• George Orwell• Sebastian Barry• Joseph O'Connor <p><i>Technical Writing</i></p> <ul style="list-style-type: none">• Bertrand Russell• Richard Dawkins• John Gribbin• Carl Sagan
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