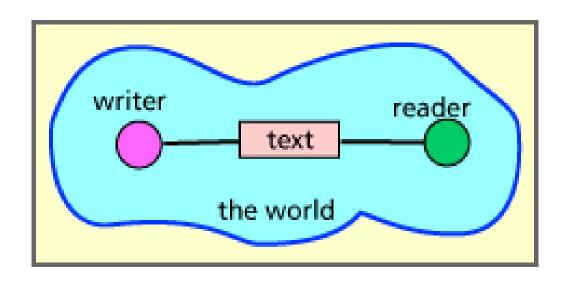






### Clear writing – key points + scientific conventions



### Good writing - Stanford Uni

What makes good writing?

Have something to say, clear thinking and writing

- 1. Good writing communicates an idea clearly and effectively think about what you are writing: think about each word, each sentence, each paragraph what is your message?
- 2. Good writing is elegant and stylish "craft" your writing

Takes time, <u>revision</u>, and a good editor

### What makes a good writer?

- Logical and clear <u>thinking</u>, translated into logical and clear <u>writing</u> – clear messages for your readers
- -What am I trying to say? Have I said it?
- Learnable rules of grammar, expression, style, layout and use of words
- Clear, effective writing can be learned
- Don't be scared!

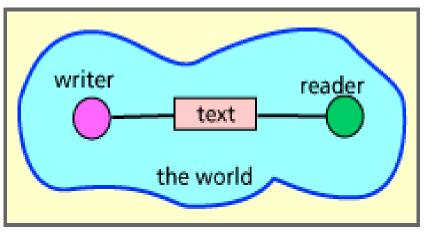
### Writing is a craft

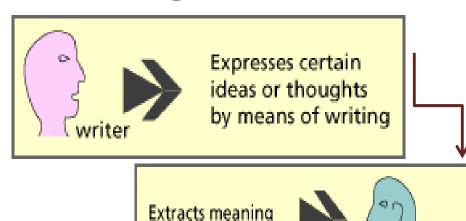
- What are you trying to say writing is for the READER - NOT for the writer
- Carefully put your words, sentences, paragraphs, sections and paper together
- Start with skeleton of report sections, paragraphs, dot points, then (and only then) fill in details
- DO NOT start at the beginning and 'dump' words in until you get to the end....

### Purpose of writing

- You expressing your results/ideas in words, sentences, paragraphs, sections and the paper so that the <u>reader</u> can.....
- Understand your results /ideas by reading your words, sentences, paragraphs,

sections and paper

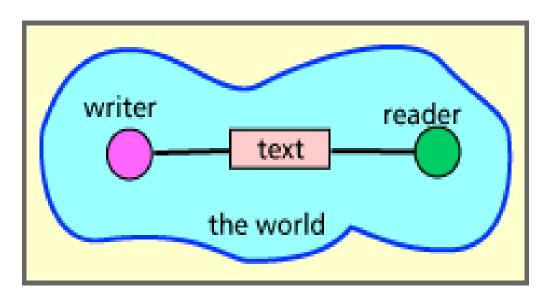


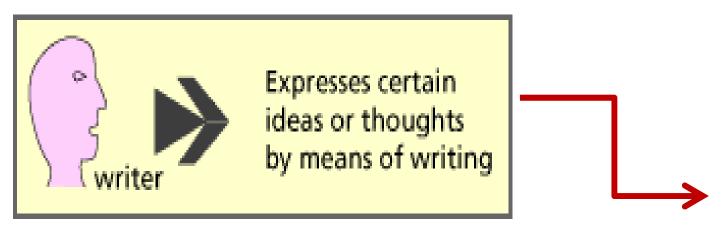


from a written text

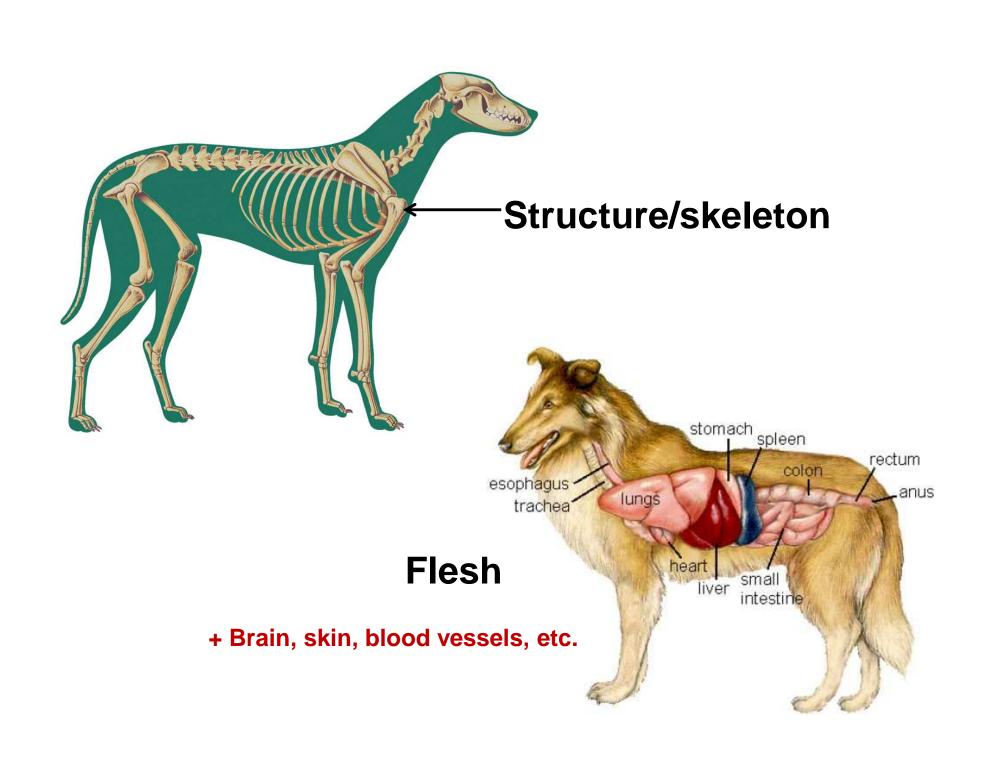
reader

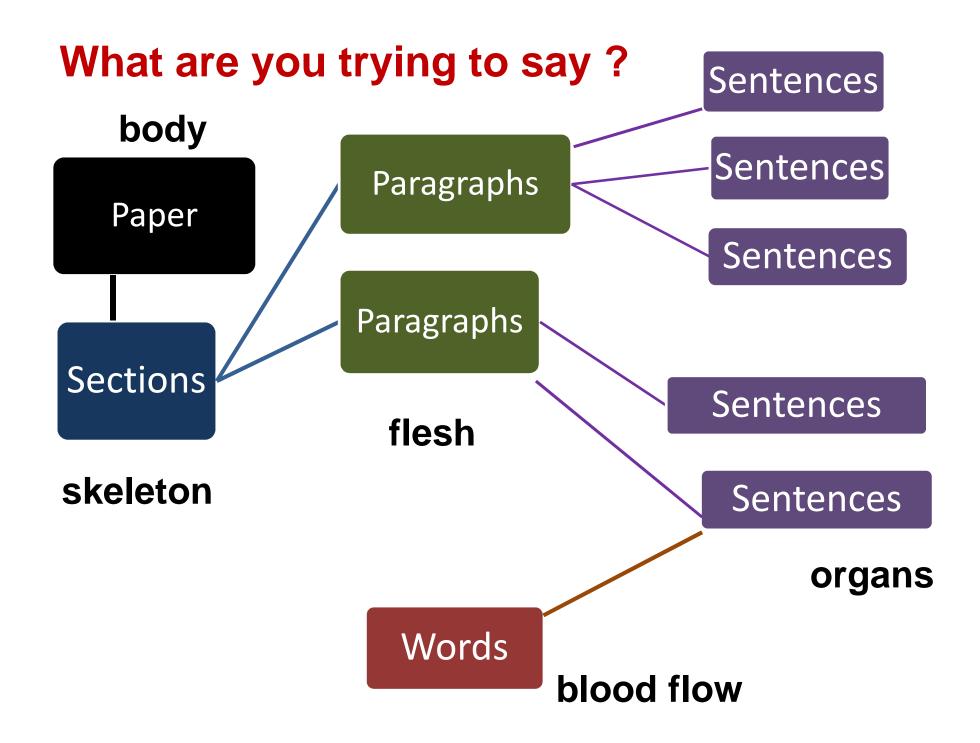
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- List sections and sub-sections
- Within sections/sub-sections, write dot points for paragraphs – check – is order of paragraphs logical ??
- Then, write sentences in logical order in the paragraphs, generally paragraph by paragraph – but write and can re-order
- Do not write stream of consciousness
- Leave draft go back to it

- Remove redundant words.
- Turn sentences around so they are direct – active voice
- Split sentences so they are short
- Check order of sentences in paragraphs, and order of paragraphs make sense
- Does your writing (your prose) flow or is it "jerky" or "rambly" or out of order?



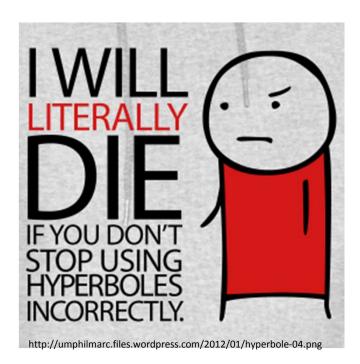
# Do <u>not</u> fall in love with junk words



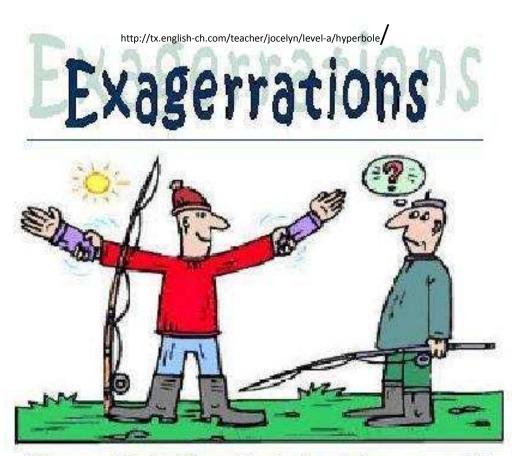
- Check <u>every word</u> to see if it can be deleted or replaced by a simpler word
- Use 'because' instead of 'based on the fact that', 'for' instead of 'for the purpose of'
- Don't use "however" twice in one paragraph
- Don't use "however" more than once every 10 paragraphs

- •Never write "furthermore", "moreover", "nonetheless", "in addition to", "it therefore follows", 'in terms of', 'in fact', 'in point of fact', 'in actual fact', 'in reality', 'in order to', 'as such'.. etc. These words are meaningless and redundant. They are junk words.
- Be careful with "also", "in addition", "therefore", "however", "includes".....
- Ask yourself is this word/are these words necessary, or are they "junk" words - delete

- Keep jargon and acronyms to a minimum.
   Explain any jargon or acronyms that you use
- Do not be sarcastic
- Avoid hype (hyperbole) and exaggerrated language. 'Extremely', "huge" etc. are rarely necessary
- Do not use emotional language, eg, 'catastrophic', 'devastating'.... Do not write polemics.... What is a polemic???







"It was so big that I need extra hands to measure it!"

What is a polemic???

## Use words according to their meaning understood by the average person

Beware of malapropisms -

- She's as headstrong as an allegory (instead of alligator)
- Suppository instead of repository
- Lavatories of innovation and democracy
- Make sure you know the meaning of words and how to use them – read novels and quality newspapers

#### Active voice and short sentences

- SUBJECT VERB OBJECT = ACTIVE VOICE
- The cat sat on the mat NOT The mat was sat on by the cat
- One point (or two) in each sentence
- "The cat sat on the mat and licked her paws", "The cat sat on the mat, which was beside the stove"
- No more than two clauses, or a clause and a phrase in a sentence

- Never use dangling phrases "Walking slowly down the road, he saw a woman with two children"
- Avoid phrases at beginning of sentences. Do not write "For the largest colony, we found X seals..." Instead "We found X seals in the largest colony" Don't start sentences with "For..."
- Avoid compound nouns. Say "a modified test of statistical significance" rather than "a modified statistical significance test"

- Do not go off on tangents. Do not "ramble"
- Do not make assertions. Do not go on "fishing exercises" – for one view or finding
- Do not generalize incorrectly. Do not say 'some' if only one instance
- Do not use semi-colons, and use commas and colons correctly

### Tangents rambling fishing







### Be VERY CAREFUL with pronouns – It, This, These, They.

Repeat the noun, if in doubt

"The cat sat on the cat. It was black."
What does "It" refer to ?? Ambiguous pronoun – do not use this construction

'This' on its own is ambiguous. Write 'This test' or 'This problem'.

Do not start sentences with "It" (also ambiguous)



#### **Tenses**

- Use simple past tense to refer to results (yours or others)
- Use simple present tense to discuss them.....
- •"Smith (1989) reported a similar result. Together, these findings indicate....."

- Generally use simple past tense when referring to results (yours or others) in the past "Jones (1999) found that..." or "This study showed that..."
- Generally use <u>simple present</u> tense when you are discussing or commenting on something, including your own results "My results differ (present tense) from those of Jones (1999) who found (past tense) that..."

### Affect or effect?

- "affect" is a verb (verbal)
- "effect" is (usually) a noun (noune)
- Temperature <u>affected</u> the outcome.
- Temperature had an <u>effect</u> on outcome.

Note: The new regime <u>effected</u> (i.e. caused) changes.

### How to refer to different types of literature

- Empirical evidence peer reviewed journal or book (or maybe peer reviewed report – be careful) – "results showed"
- Interpretation (Discussion) in peer reviewed document. "X concluded".....
- Results in non-peer reviewed document "results in D indicated or suggested"
- Discussion in documents <u>and</u> papers be careful – are statements based on findings or are they assertions ??

### Referring to different types of information

- Someone else's empirical results (usually in refereed literature) – X found, X showed, X provided evidence that, X's results indicated (if not clear cut) or X's <u>results</u> suggested
- Modelled data Modelling by X showed or modelling by X indicated (if not clear cut)
- Someone's interpretation X suggested,
   X argued, X considered, X concluded
- X considered, suggested, argued are NOT evidence, they are opinions X concluded...

- Blog usually assertions. Say X asserted, or X considered, or X stated if statement is measured, thought out, not just a rave
- Be careful with quoting modelled data do NOT quote modelled data as "fact"
- Never write "X mentioned". People do not "mention" things in academic literature or in most documents. People verbally mention things, not in scientific writing
- Do not use different verbs for the sake of it
- Verbs have meaning

- NEVER say "it is generally agreed...", or "it is well known" or "research has shown"
- "WHO generally agrees ??", "Why is it well known, and by whom?", "Whose research has shown ???"
- Can say "research by X and Y has shown"
- Always be specific as to who found, says, agrees, whose research has shown....
- Never, ever write "it is a well known fact..." or "it is well known that" or ......

#### Some scientific conventions

- Check rules for your target journal/s
- Use numbers for 0-10 and words for >10
- Reporting P values (what if "almost sig.")
- MUST REPORT df of statistical tests
- NEVER use dashes in tables or figures.
   Dashes are ambiguous. Write ND if no data
- Layout
- Order of authors on paper
- Decimal places

### **Do NOT report spurious accuracy**Rule of thumb -

- 0-<1: report 2-3 decimal places
- 1-10: report 1-3 decimal places depending on nature of data
- >10-100: report 1-2 decimal places depending on nature of data
- >100-1,000: report 0-1 decimal places
- >1,000 report 0 decimal places

Citing papers – when to start with citation/s, when to put citations/s at end of sentence –

eg, Specific - "Bloggs (1999) found that bird species richness in open woodland is related to..."

cf.

General - "Bird species richness in vegetation communities is related to ... (Smith 2000; Wagner and Trickett 2003)"

Never "dump" words from other documents

- "Amoeba species X are killed by ethyl alcohol (Jones 1967; Davies et al. 1989)
- cf. Marchant et al. (2002) found that 60% ethyl alcohol killed Y% of amoeba species X in Z minutes."
- Cite primary documents. What to do if cannot find primary document..
- CITE HONESTLY
- Order of citations in text
- Footnotes

### Your views and research writing

You will have your views and -

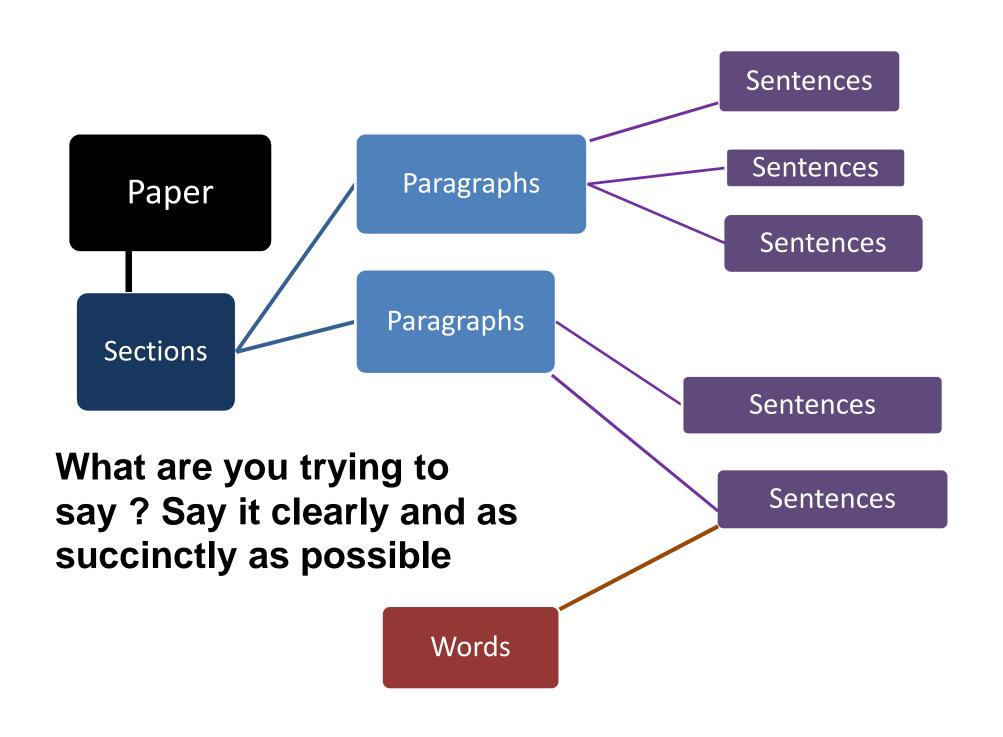
Drawing on these in <u>discussing</u> your results is fine but –

Ensure you distinguish between data (empirical results) and your views

Be balanced. Do <u>not</u> use your data/results (or of others) to back up your views. Instead -

Let your results speak for themselves and then honestly and fairly interpret and discuss them in the context of your research question/aims and the literature

Do not speculate without evidence



# Good writing starts with clear thinking

Before you start writing, ask:

"What am I trying to say?"

When you finish writing, ask:

"Have I said it?".....

... make sure your messages are logically and clearly expressed, so other people understand your writing

- Structure your writing: section, paragraphs, sentences, words
- Start with the structure dot points
- -Then prepare early draft
- Revise. Nobody gets it perfect the first time. Writing is hard for everyone
- Cut ruthlessly. Do not become attached to your words
- Do <u>not</u> "fall in love" with "junk words"
- Read your text out loud
- Use a good editor!