Written & Oral Presentation:
Tips for better writing

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A classic book “The Elements of Style” by Strunk and White goes through a lot of examples illustrating their key recommendations:

- always use **clear, precise language**, even when expressing complex ideas
- engage your reader’s attention through **examples, illustrations, and anecdotes**
- **avoid** opaque **jargon**
- **vary** your vocabulary, sentence length, and frames of reference
- favor **active verbs and concrete nouns**
- write with **conviction**, passion, and verve
Personal style

For some things there is no universal agreement or necessarily a right or wrong answer:

- **Personal pronouns**: Using I and we, or addressing the reader directly, say with “you” instead of “one”. (I recommend you do it)

- **Use of jargon**: Should you avoid jargon all together? (I suggest using it as needed if avoiding it distracts).

- **Personal voice**: Is the writer a person or does the paper exist in a separate objective impersonal frame of reference? (I suggest you should make yourself known and unique)

- **Nonstandard structure**: Is it OK to deviate from IMRAD? (I suggest yes but only once you become proficient and fluent in the standard form. For now use the standard form as a template to help you structure your writing.)

- **Creative expression, humor, puns, engaging titles**: Is it OK to be funny, at the risk of sounding “unprofessional”? (I suggest it is but only sparingly).
Sword points out that stylish academic writers:

1. employ plenty of **concrete nouns and vivid verbs**, especially when discussing abstract concepts.

2. **keep nouns and verbs close together**, so that readers can easily identify “who’s kicking whom.”

3. **avoid** weighing down their sentences with extraneous words and phrases, or “clutter.”
Sword writes “Many academics, however, give little thought to their verbs, favoring forms of be (is, am, are, was, were, been) and predictable scholarly verbs such as analyze, show, examine, and consider”

Example of a passive sentence:
“Although standard statistical methods are available for incorporating measurement error and other sources of variation, they are not commonly applied, and they have rarely been considered in the context of phylogenetic statistics in which trait values are correlated among related species.”
Can you rewrite this to be more active and lively?

By contrast, consider this active and vibrant sentence:
“Insects suck, chew, parasitize, bore, store, and even cultivate their foods to a highly sophisticated degree of specialization.”
Changing passive to active

Hingham gives some examples from math:

- **Passive:** The answer was provided to sixteen decimal places by Gaussian elimination.
  **Active:** Gaussian elimination gave the answer to sixteen decimal places.

- **Passive:** The failure of Newton’s method to converge is attributed to the fact that the Jacobian is singular at the solution.
  **Active:** Newton’s method fails to converge because the Jacobian is singular at the solution.

- **Passive:** A numerical example is now given to illustrate the above result.
  **Active:** The following numerical example illustrates this result.

- **Passive and indirect:** Verification of the optimality of y was achieved by checking that the Hessian matrix was positive definite.
  **Active:** We verified the optimality of y by checking that the Hessian matrix was positive definite.
Active vs. passive

- **When is passive voice useful?**
- **Answer:** If the subject is of secondary importance to the action itself.
  
  **Examples:**
  
  “Passive constructions can be employed by stylish writers” places passive constructions front and center, whereas an actively worded phrase such as “Stylish writers employ passive constructions” would have put more weight on the author’s role.

  “An ingenious proof of this conjecture was constructed by C. L. Ever”, emphasizes the ingenuity of the proof instead of the author.
Advice from Sword: “Measure the distance between nouns and their accompanying verbs.

When agent and action become separated by more than about a dozen words, readers quickly lose the plot.”

Example: “The knowledge that criminalization of marijuana use can lead to a wide variety of other social ills, including an increased risk of addiction to more dangerous and expensive drugs such as heroine and cocaine, has not prevented lawmakers...”
“Other contributors to clutter include *it, this, that, and there.*”

Example:

“It is now generally understood that constraints play an important role in commonsense moral thinking and generally accepted that they cannot be accommodated by ordinary, traditional consequentialism...Some have seen *this* as the most conclusive evidence that consequentialism is hopelessly wrong, while others have seen it as the most conclusive evidence that moral common sense is hopelessly paradoxical.”

Question: “Some *who* have seen this *what*? Isn’t it the author’s job, not ours, to make the sentence’s meaning clear?”

Why should we have to work so hard to figure out what this sentence is trying to say?

Even worse: “There are a number of studies that show that *this* is a bad idea because *it*...”
This, it, that

Sword summarizes the standard guidelines:

- Use **this** only when accompanied by a **modifying noun**:
  “This argument shows” rather than merely “This shows”

- Use **it** only when its referent—that is, the noun it refers to—is **crystal clear**.

- For example, in the sentence “The woman threw the lamp through the window and broke **it**,” **what** did the woman break, the lamp or the window?

- **Avoid** using **that** more than once in a single sentence, except in a parallel construction or for stylistic effect. Don’t write stuff like:
  “Sentences that rely on subordinate clauses that in turn contain other clauses that introduce new ideas that distract from the main argument that the author is trying to make...”