Author's Toolkit

Writing Better Technical Papers

Ron Read

Kurdyla and Associates Co., Ltd.

About five years ago here I wrote about the significant power of pronouns: using “it” or “they” not only saves words but, more importantly, avoids the risk of your reader missing the connection between a “thing” used in one sentence and the same “thing” used in the next one. This strength also applies to pronouns for people, but there are a few more complications in using such personal pronouns.

Your Own Personal Pronoun

The first common problem is a fear of using “We” due to an outdated “rule.” Every important journal in English contains excellent papers using “We” at the head of a sentence. This is particularly useful for avoiding awkward passive-voice expressions:

- × Both nighttime light, including shadows and lunar glare, and motion, such as that by nocturnal animals, could be monitored.
- We could monitor both nighttime light, including shadows and lunar glare, and motion, such as that by nocturnal animals.

Naturally, you should not *overuse* “We”—such as at the head of several consecutive sentences— or strictly avoid passive-voice sentences. Just don’t fear “We.”

A second problem is the now decades-old issue of gender bias: should we use “he,” “she” or “he or she”? This can get sticky.

This is easy if all of your subjects are male (female): when you discuss a subject in general, just use he (she). When the subjects, users, involved persons, etc. can be of either gender, then you have to decide on a strategy.

Only using “he/his” for a “generic person” throughout your paper is not really acceptable these days. A viable solution is “he or she,” but if excessively repeated, this can seem awkward. Using “they” for a person is sometimes reasonable, but it seems odd for a human action or

state that is highly individualistic.

One solution that is particularly effective is to use “he” for one experiment, condition, or observation and then “she” for the next one, alternating their usage throughout your paper.

The solution you choose will depend on your content and how you write about people, but do not forget that humans come in two genders.

A question raised by many of our clients is the use of “We” or “I” in referring to a *single* author. This is a rare problem, since most modern research is done through collaboration. Some consider “We” a bit old-fashioned or illogical, while others consider “I” arrogant-sounding or overly personal. One solution is to check single-author papers in journals where you want to be published. Generally, however, it’s probably safest to use the editorial “We” for me.

Don’t Write Skimpy Summaries!

Recently, I’ve noticed extremely vague summaries (abstracts) in many manuscripts submitted to IEICE as papers or letters.

A summary should be concise and direct, *but* it must also touch on the problem, method, results and significance in concrete expressions:

- × We use a novel encrypting method.
- We use an encrypting method based on...
- × Then, we obtained many interesting results.
- Consequently, we found that...

Your summary or abstract should not be a “teaser” for a mystery story but rather a simple and clear roadmap to your paper. Let your reader know what he or she is getting into!

Grammar Questions? read@kurdyla.com

Mini Quiz: What’s Wrong?

- 1) ... by Mass Ray Scan (MRS for short).
- 2) ... Scan, which is often abbreviated to MRS. (Answers: 1) ... by Mass Ray Scan (MRS). 2) ... Scan, which is often abbreviated as MRS.)