Author’s Toolkit

Writing Better Technical Papers

Ron Read
Kurdyla and Associates Co., Ltd.

The world’s myriad languages have many ways of handling, or not handling, expressions of plural usage. Trying to understand them in a second language is not easy, but it is easy to make erroneous assumptions about them.

Over-logical Plural Usage

Plural nouns, expressing “more than one” of something, are usually formed by adding “s,” for example, “two circuits,” or in particular cases a Latin plural, such as “two stimuli.”

At that simple level, most non-native writers of technical English can handle plural usage correctly. But more complicated singular-plural distinctions can cause confusion. Typical examples include idiomatic phrases:

- These samples revealed their luminance to some extents.
- Evidences of deterioration were clearly observed.
- Taking advantages of the material’s advanced properties, we attempted...

Without considering real-world English usage, all of the sentences above seem logical from a purely analytical viewpoint: “each sample has its own extent of luminance”; “there are different types and instances of evidence”; “the material’s properties have various advantages.”

But that’s not how these phrases operate: “some extent” is an indefinite range; “evidence” is the entire body of proof; “advantage” is the good use of something. So we have

- These samples revealed... to some extent.
- Evidence of deterioration was clearly ...
- Taking advantage of the material’s ...

Another type of sentence structure that can be tricky is when the verb “to be” (“is,” “are”) connects a plural subject with a singular complement:

- Lost connections are a major problem in reverse-passive networks.

While this sentence is grammatically correct, it sounds awkward due to the “are + a problem” combination. This uncomfortable expression can be fixed by modifying the subject:

- The occurrence of lost connections is a major problem in reverse-passive networks.

Or it can be improved by using a different verb than “be”:

- Lost connections pose a major problem in reverse-passive networks.

Viewpoint of Acknowledgment(s)

Typically, between the Conclusions and References sections, authors insert their “Acknowledgments” to thank those who assisted them, either with money or with skills/advice.

A common error is mixing the viewpoint of the author between “first-person” and “third-person” styles:

- The authors appreciate the contributions of Dr. Wu of... We also wish to thank...

Most readers can easily recognize that “authors” and “we” are the same people, but still this is improper usage that should be avoided.

As in most writing, aim for consistency here:

- The authors appreciate the contributions of Dr. Wu of... They also wish to thank...
- We appreciate the contributions of Dr. Wu of... We also wish to thank...

Of course the passive voice can be used, in moderation, to add variety without disturbing the viewpoint:

- We appreciate the contributions of Dr. Wu of... Gratitude is also extended to...
- The authors appreciate the contributions of Dr. Wu of... Gratitude is also extended to...

Grammar Questions? read@kurdyla.com

Mini Quiz: What's Wrong?

1) An equalizer is incorporated into the system.
2) Two new items were added into the list.
3) A weak solvent was blended into the mixture.

(Answers: 1) “in the”; 2) “to the”; 3) OK)