

Revision, Part II

Last time we talked about 1) Putting the action in the verb, and 2) keeping the subject near the verb. Today we'll talk about a few principles involving the subject of the sentence.

Material taken from <https://cgi.duke.edu/web/sciwriting>.

Put the character in the subject

The character is the actor (the entity performing the action). Readers expect the main character in a clause to be found in the subject. Characters can be (and often are) abstract nouns, like “expression level” or “usage.” The grammatical subject of the sentence should be the answer to the question: What is this sentence about?

Find the subject in each sentence. Is it what is performing the action, or what the sentence is about?

1. The movement in the liquid medium of the bacteria was accomplished by microflagella.
2. The bacteria move themselves in the liquid medium with microflagella.

Within a paragraph, the subjects should reflect the topic.

Find the subjects in these paragraphs. What is the topic? Do the subjects reflect the topic?

1. To understand human evolution, genomes from related primates are necessary. For example, several primate genomes are needed to identify features common to primates or unique to humans. Fortunately, such genome-wide exploration is now a reality; in the past 5 years, genome sequences of several nonhuman primates have been released.
2. To understand human evolution, genomes from related primates are necessary. For example, identification of features common among primates or unique to humans will require several primate genomes. Fortunately, scientists can now do such genome-wide exploration; in the past 5 years, the community has released several nonhuman primate genome sequences.

In those examples, the paragraph discusses a single topic. Sometimes a paragraph will discuss a series of related topics that build on one another. Consider this example. Find the subjects in these sentences. Do they shift as the topic shifts?

1. Technology often drives science. Among the most impressive recent technological advances is DNA sequencing. More efficient sequencing has reduced the cost of generating sequence data significantly. Cheaper data in turn enables more researchers to do data-intensive experiments, which results in a huge amount of data being released into the public domain. Dealing with data in such large quantity will require a new generation of scientists.

Put old information first

Most readers will find your writing more clear if you consistently begin sentences with familiar (old) information and conclude sentences with unfamiliar (new) information. Find the old and new information in these sentences.

1. Farmers try to provide optimal growing conditions for crops by using soil additives to adjust soil pH. Garden lime, or agricultural limestone, is made from pulverized chalk, and can be used to raise the pH of the soil. Clay soil, which is naturally acidic, often requires addition of agricultural lime.
2. Farmers try to provide optimal growing conditions for crops by using soil additives to adjust soil pH. One way to raise the pH of the soil is an additive made from pulverized chalk called garden lime or agricultural limestone. Agricultural limestone is often added to naturally acidic soils, such as clay soil.

Use passive voice judiciously

For whatever reason, many scientists rely on passive voice excessively. But scientific journals would rather you use active voice: “Nature journals like authors to write in the active voice...” (Nature); “Choose the active voice more often than you choose the passive...” (Science)

Because passive voice sentences necessarily add words and change the normal doer-action-receiver of action direction, they may make the reader work harder to understand the intended meaning. (<https://webapps.towson.edu/ows/activepass.htm>)

However, passive voice can be helpful in accomplishing the previous principles we’ve discussed; keeping the subject as the main character, and putting old information first.

Name: _____

Which principle was most interesting to you, or do you think will be the most helpful? Why?

Please leave this sheet, your nametag, and your playing card on the tables by the door when you leave. The other sheet is for you to keep; this sheet will not be returned except by request.