# Article information:

The Science of Scientific Writing | American Scientist
<https://www.americanscientist.org/blog/the-long-view/the-science-of-scientific-writing>

# Article summary:

1. The complexity of scientific writing does not have to lead to impenetrability of expression.

2. Readers interpret prose based on clues they receive from its structure, and writers can control the degrees of recognition and emphasis a reader will give to various pieces of information by being aware of these expectations.

3. Rhetorical principles based on reader expectations include following grammatical subjects with their verbs as soon as possible, ensuring every unit of discourse serves a single function or makes a single point, and placing information intended to be emphasized at points of syntactic closure.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article "The Science of Scientific Writing" by George Gopen and Judith Swan provides insights into how to improve scientific writing by understanding reader expectations. The authors argue that complexity of thought need not lead to impenetrability of expression, and they demonstrate a number of rhetorical principles that can produce clarity in communication without oversimplifying scientific issues.

One potential bias in the article is that it assumes that the purpose of scientific discourse is communication rather than presentation. While communication is certainly an important aspect of scientific writing, it is not the only one. Scientists also use writing to present their findings and arguments to other scientists, which may involve using technical language and complex concepts that are not easily accessible to non-experts.

Another potential bias is that the article focuses primarily on structural aspects of writing, such as sentence length and stress positions, while neglecting other important factors such as content and argumentation. While structure is certainly important for effective communication, it is not sufficient on its own. A well-structured piece of writing can still be unclear or unconvincing if the content or argumentation is weak.

The article also makes some unsupported claims, such as the assertion that improving the quality of writing improves the quality of thought. While there may be some correlation between good writing and good thinking, this claim seems overly simplistic and lacks empirical evidence.

Additionally, the article does not explore counterarguments or alternative perspectives on scientific writing. For example, some scientists may argue that technical language and complex concepts are necessary for precision and accuracy in scientific communication, even if they make the writing more difficult for non-experts to understand.

Overall, while "The Science of Scientific Writing" provides some useful insights into how to improve scientific writing by understanding reader expectations, it has some potential biases and limitations that should be taken into account when evaluating its recommendations.

# Topics for further research:

* Technical language and precision in scientific writing
* The role of content and argumentation in effective scientific writing
* Balancing communication and presentation in scientific writing
* The relationship between writing quality and thinking quality
* Alternative perspectives on scientific writing and language use
* The impact of audience and purpose on scientific writing style

# Report location:

<https://www.fullpicture.app/item/be93ff2011b5bb4d0a06ab1929f2d0da>