Writing Science in Plain English

Anne E Greene's new book, *Writing Science in Plain English*, is a light volume, weighing in at just 124 pages, 32 of them belonging to appendices. But light is not the same thing as lightweight. In these 124 brisk pages, Greene manages to deliver a series of practical, hands-on lessons to make scientific prose more lucid, more direct, more immediately comprehensible, and, yes, more concise. In fact, had Greene explicated her lessons at too great length, she would have risked negating her message by the example of her own prose.

Greene's book is the latest in the University of Chicago Press series on writing, editing, and publishing. It draws heavily on an earlier book in the same series, *Style: Toward Clarity and Grace* by Joseph Williams. Greene openly admits her debt to her predecessor: “Williams’s principles and their linguistic history are at the heart of this book” (p 3).

Another way of putting that is to say that Greene gutted Williams’s book and repackaged it in condensed form with the omission of “grace”. Yet to call this book derivative does not mean that it doesn’t deserve publication. Few scientists are likely to come across Williams’s book or, if they do, think that it has anything to say to them, so Greene has taken the core of Williams’s text, balled it up, and bowled it straight at the audience least likely to get hit with it.

One reason that this audience needs nuts-and-bolts instruction on writing science plainly is that training in writing for scientists is seldom formal and explicit. Most scientists-in-training learn to write and you help her communicate once; teach a scientist what kinds of lessons does Greene teach? Perhaps the best way to preview her method is by illustration. Below are two sentences lifted (but masked by word substitutions) from a manuscript I copyedited recently. The manuscript editor who worked on this article before me tracked her changes in Word, hence the formatting: insertions are underlined, deletions struck through, and plain text unchanged.

Surgery is an effective treatment for X-Resistant Disease is an effective treatment for X-Resistant Disease. Surgery reduced seizures for Seizure freedom is approximately 50% of patients with Condition Y and Condition Z for patients operated on who present with Condition Y in the setting of Condition Z.

This editor was working with no knowledge of Greene’s book, but her editing illustrates four of its lessons. Take, for instance, the first sentence. Notice how the edited subject “surgery” directly precedes the verb “is” (struck are the intervening words of the original). The change illustrates Greene’s lesson to “place subjects and verbs close together.” The idea behind that rule is that a reader’s working memory is taxed when the reader has to wade through too many words before pairing subject with verb. Notice, too, that “surgery” replaces “surgical treatment”. In another of her lessons, Greene urges readers, in the interest of concision, to swap a phrase for a single word when the two are interchangeable.

Notice how the second sentence begins with the inserted subject “surgery”, the same subject as the first edited sentence. That illustrates two more of Greene’s lessons. The first is “old information first, followed by new information”. A reader, says Greene, finds it easier to assimilate new information when it comes near the end of the sentence, on the heels of what the reader already knows. In the original sentence, new information—“seizure freedom”—begins the sentence rather than following the old information. The final lesson that this sentence illustrates is to “keep terms the same.” Greene cautions against introducing synonyms for the sake of vocabulary variety; the risk is that readers might forget that the synonyms refer to the same thing. Beginning both sentences with “surgery” keeps the terminology identical.

The ideal audience for Greene’s book is scientists-in-training when they are learning to write for publication. But, as was acknowledged above, novice scientists rarely receive explicit, formal training in writing and are far more likely to learn mostly through imitating existing literature. That being the case, those in a position to give editorial assistance to working scientists might put this book to use to the extent that they can manage to work some instruction into their editor-to-writer correspondence. My illustration of Greene’s lessons by using an editor’s tracked changes suggests that there are moments—teaching moments—in which editors can fold mini-lessons into the feedback that they give to writers. Such an idea suggests a twist on an old adage: Edit a scientist’s paper and you help her communicate once; teach a scientist to write and you help her communicate over a career.

ROBERT BROWN is a copyeditor with the Journal of Neurosurgery Publishing Group in Charlottesville, Virginia.

—Robert Brown