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An Unorthodox Guide to Actuarial Communication (Part 2)

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I n part 1 of this guide (Issue 40, May 2017; find it on the SOA website at *https://www.soa.org/sections/actuary-of-future/aof-newsletter/*) I confessed to having no formal academic training in writing, but a long history of writing experiences. This part of my guide is focused on how to write for English readers if you are Chinese, and how to write for Chinese readers if English is your primary language. Again, I claim no academic qualifications in either type of writing. These tips are based solely upon my experience as an editor—especially after my struggle to learn Mandarin.

First, let's address the issue of writing in English (specifically, American English). The English language contains more than half a million words and provides the ability to express nuances of meaning that are sometimes difficult to convey in other languages without a lot of extra words.

On the other hand, modern English is not a source language. It traces its roots to Latin (primarily via French), Germanic (possibly through Anglo-Saxon-Frisian) and Greek; and it also has assimilated many words and grammatical oddities from other languages over the years.

New words are being coined all the time by anyone who decides to use them in publications and tweets. The first time I heard the word *bigly* was in a speech by President Trump. This differs from French, for example, where new words generally have to be accepted first by the Académie Française. The result is that English is an amalgam of dozens of irregular verb conjugations, sometimes confusing parts of speech and counterintuitive usages. We drive on a parkway, park in a driveway and brag that a very desirable item is *cool* or even *hot*. Likewise, a new iPhone or other electronic device could be described as *sick*, meaning *really good* (or *really bad*, where *bad* is *good*!).

My impression is that English is a relatively easy language to learn to speak or write poorly, but a very difficult one to master. Fortunately for actuaries, complete mastery is not necessary, but

a few tips may help you avoid writing English so poorly that it changes your intended message or detracts the reader from understanding it.

I have been writing for a long time. Prior to my actuarial career, I was editor, publisher and owner of a weekly magazine, and later an engineer and technical writer who wrote a 3,000-page manual describing how to overhaul a military jet engine (which I no longer have the security clearance to read). I have authored or coauthored several chapters of Life Underwriter Training Council (LUTC) textbooks. When I was in the brokerage business, I was editor of the Redwood Empire Association of Life Underwriters (REALU) newsletter, which won the best in state award (California) for two consecutive years. I wrote the bulk of the boring patent wording for a process I coinvented involving predictive analytics and machine learning for underwriting (U.S. patent 8775218), but my preference is to write for readability.

TIPS FOR WRITING IN ENGLISH IF CHINESE IS YOUR FIRST LANGUAGE

Pay Special Attention to Pronouns

In English, pronouns are used a lot, and they matter a lot. This differs from Chinese, which now has separate characters for *he*, *she* and *it* (a long time ago they were the same character) but there is no separate character for *he* versus *him*, *I* versus *me*, or *she* versus *her*. Furthermore, *he*, *him*, *she*, *her* and *it* all sound exactly the same (*ta*) when spoken in Mandarin. Plus, the pronoun is usually implied in a Chinese sentence, so it often is omitted. For all these reasons, writing or speaking the wrong pronoun seems to be the most common mistake that a Chinese speaker makes in English. I won't try to establish grammar rules. You can read hundreds of good books on this already.

Back when I started studying Mandarin, I would try to practice with many friends. I would also give only Mandarin commands to one of our dogs. Once, I proudly mentioned to a Chinese friend that when I left our home, I would tell that dog 好好看家 (literally, *good*, *good*, *watch house*) and that she seemed to understand me. My friend started laughing so much that he almost fell off his seat. He told me: "A dog is not a *he* or *she*. A dog is an *it*." There was nothing wrong with my Mandarin phrase, but from his perspective I applied a nonsensical gender to my dog. Please keep this in mind when you write or speak in English. The use of *he* for a woman or *she* for a man is considered funny and nonsensical to an English reader or speaker. Likewise, other animals, such as dogs, are *it* in Mandarin, but they are *he* or *she* in English.

Verb Conjugations are Difficult and Sometimes Nonintuitive

Mandarin is so logical regarding verbs that English grammar seems, and is, unnecessarily complicated by comparison (I'll expand on this in the section of writing for Chinese speakers). I will give the example of the verb *to be*, but most English verbs have several forms depending upon how they will be used.

Just as an example of the complexity associated with English verb conjugations, consider the verb *to be*, which can be expressed as *am*, *is*, *are*, *was*, *were*, *being* and *been* depending upon the verb tense or mode.

Further adding to the confusion, the subjunctive and indicative forms of a verb can cause it to seem in conflict with the way we normally handle a plural or singular case. If the idea being expressed is that of a wish or desire to achieve an imaginary state that has never existed and probably never will, then it is proper English to write *were* instead of *was*. I wish I were perfect at grammar, but I was never that good at it.

English Plurals are Very Difficult: Learn Common Ones and Create Workarounds for Others

In English, we have one dog, two dogs, one cat, two cats, one deer, two deer, one mouse, two mice, one crisis, two crises, one person, two persons (but a group of people . . . or peoples if they are from many different countries), one phenomenon, two phenomena. The formation of the plural is usually, but not always, carried over from the source language for the noun involved. Mandarin is much more logical and consistent: one of dog, two of dog, one of cat, two of cat, one of mouse, two of mouse, one of crisis, two of crisis . . . you easily get the idea.[1]

So why would I not recommend you just memorize all the plural forms? Because they are often so confusing that your English-speaking reader will not know the correct form, and you might offend someone's sense of grammar even if you are correct!

Let's take the word *octopus*. The preferred English plural of *octopus* is not *octopi*, because unlike most words ending in *us*, *octopus* is not from the second declension Latin, so you do not change the *us* to *i* to form the plural. It is actually from the Greek, so one might think the plural would be *octopodes*. But no! The preferred plural in English is *octopuses*. This poses a dilemma for the writer who wishes to impress a manager with his or her mastery of English communication.

Assume you are describing a situation involving three octopuses. Which form should you write?

a. I saw three octopuses in the tank (flaunting your correct English but seeming incorrect to most Americans).

b. I saw three octopi in the tank (appealing to the majority of educated English speakers, but offending the minority that are more savvy about linguistics).

c. I saw more than one octopus in the tank. In fact, I saw three of them. (This creative workaround offends nobody. Yet it conveys the message unambiguously.)

Clearly, most actuaries do not have to write often about octopuses, but what if you have to write a report to your management and you want to describe more than one formula? Should you write *formulas* or *formulae*? Either one is currently considered correct, but readers have definite opinions on which is preferred. My advice is to get more creative and call them equations (or algorithms).

Be Careful With English Words That Take on Different Meanings in Different Situations

A Chinese friend of mine wanted to tell me how hard she worked at her job. She said, "I work as a dog." The immediate image this conveyed was that each morning she puts on a dog suit and perhaps stands in front of a Petco to attract customers. The words *as* and *like* are almost interchangeable. But sometimes they are not! Relating this to Mandarin, I humbly apologize for the times I have called someone's mother a horse because I applied the wrong tone to the same sound (*ma*).

These examples are merely the tip of an iceberg of errors I have encountered as native Chinese writers submit articles in English. I applaud you for your courage and merely want to help you to show your brilliant ideas more effectively.

In summary, be especially careful with pronouns, verb tenses, plurals, context (*like a dog* versus *as a dog*), articles (*a*, *an*, *the*—they do seem meaningless, but we expect them anyway) and words that take on opposite meanings (*hot*, *cool*, *good*, *bad*, *sick*). Always try to use a grammar checker and build a network of

native English-speaking friends who are willing to proofread your reports (at least until you feel confident with those reports).

TIPS FOR WRITING IN ENGLISH IF CHINESE IS YOUR READER'S FIRST LANGUAGE

Hey! If you grew up speaking and writing English, you don't need any writing tips, right? Perhaps that is true for you, but my experience was a bit different, and I'd like to share some ideas I learned to make my English reports and recommendations more readable by Chinese managers and others for whom English is a second language.

Construct Your English Sentence Using an Asian Ordering Format

One of the first insights I gained about English from studying Mandarin was that English grammar is unnecessarily complicated.

Let's talk about one of our favorite actuarial topics—taking an exam. In English, I might say that I plan *to take* the exam next week, or I *took* the exam last week, or I *am taking* the exam today, or I *have taken* similar exams recently or I *will have been taking* these exams for five years as of next week.

In Mandarin, there are no verb conjugations. What?! How can they possibly express when something happens? Actually, it is pretty logical and easy:

- Next week, I take the exam (it will happen next week).
- Last week, I take the exam (it happened last week).[2]
- Today, I take the exam (it is happening today).
- Right now, I take the exam.

OK, but how should that affect my recommendation or report?

Knowing the Asian tendency to place the time before the action, you can make your sentence much easier to understand by clarifying, at the beginning of your sentence, when the event takes place. I truly believe that the dominant language of the future will have the richness of the English vocabulary coupled with the far more logical grammar of Chinese.

Keep your sentences relatively short, and try to respect the

Time, Subject, Action

format.

Avoid Less-Common English Words

When you are writing for a person whose first language is not English, it is a good practice to stick to the more-common English words rather than flaunt your more extensive vocabulary. One of the worst wordings I ever encountered on an exam

was many decades ago on a Society of Actuaries exam. It was the old demography and graduation exam, and it was part multiple choice and part essay. We had to memorize a bunch of really useless facts to pass the exam. I did very well on it.

I studied with my friend, Shau, who was a much superior student. Whenever we encountered the phrase *it can be shown* in a study note, Shau would be able to prove it. He studied everything on the syllabus and was our resident expert for any questions we might have about the material. One of the essay questions was a really tough one for us. We were asked to describe the drawbacks of an obscure method that was mentioned only in a footnote of one of the textbooks. I, and most of my friends taking that test, came out and complained that we blew it because we had no idea how to answer that question. Shau joined us in this complaint, and we all teased him that he knew everything and was just trying to agree with us to make us feel better. However, Shau was seriously upset. He told us that he didn't study enough. He knew all the advantages and disadvantages of that method, but he neglected to study the drawbacks.

My heart went out to him as I realized that the smartest student among us got zero on that question because he did not know that *drawback* was a synonym for *disadvantage*.

I confess to falling in love, at times, with the many words in English, and how they can allow us to choose just the right shade of meaning to paint a memorable picture at times. I was reading an article in *The Economist* magazine that described the National Security Agency's "hoovering up" private data about us, and I thought it so clever that they picked a verb to describe
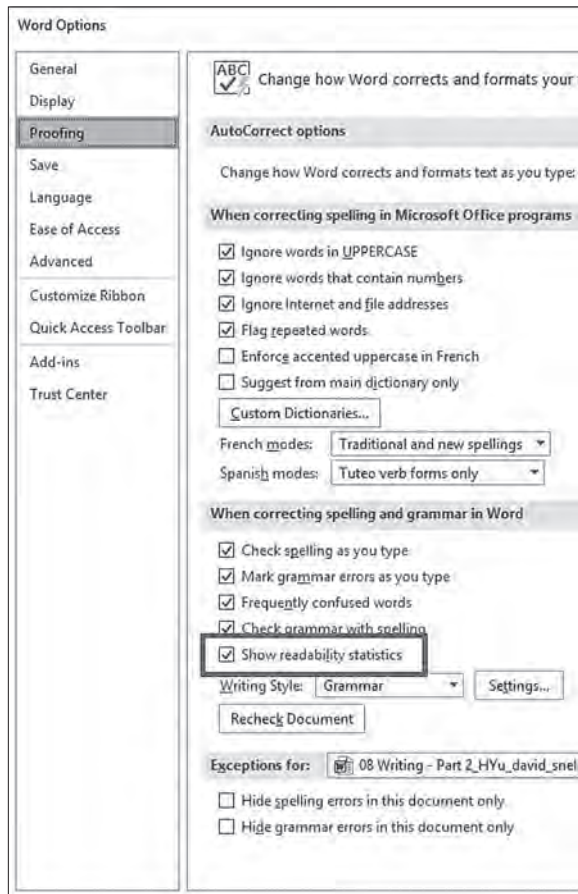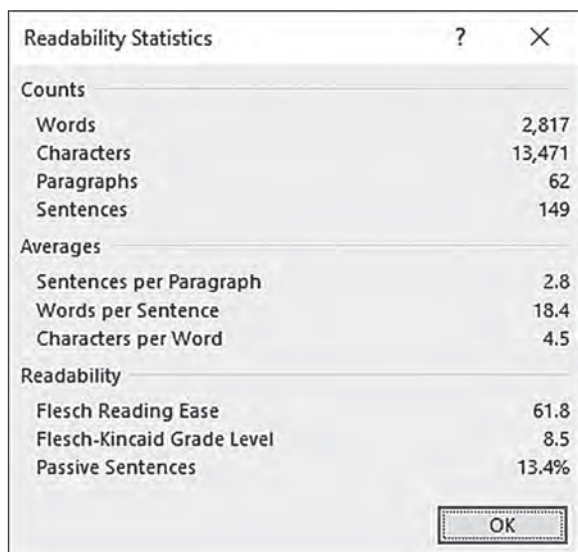
Figure 1
Options Screen

Figure 2
Readability Statistics

both a vacuum cleaner (the Hoover brand) and the first head of the FBI (J. Edgar Hoover) for this clandestine operation to suck up our personal information.

However, in a business environment, if you are writing for a primarily Asian (or any non-English) reader, please focus on clarity of communication. Save your favorite Norse mythology or baseball analogy for a different audience. Even early cartoon references or nursery rhymes can be confusing if the person did not grow up seeing those cartoons or reading those children's books.

One very handy tool you can use to check the readability of your document exists in Microsoft Word, but it is not shown by default. You can add it for free via File, Options (see Figure 1), Proofing, Show Readability Statistics (see Figure 2). Then, when you check your document for Spelling & Grammar (from the Review tab in Word), you will automatically get a summary of various readability metrics. This can be a good practice even when intended readers are native English speakers.

Quickly summarizing this section, try to:

- Keep your sentences reasonably short.
- Avoid unusual words or phrases if they are not needed.
- Use time indicators up front to clarify verb forms.
- Check your work for readability.

In retrospect, these are good ideas when you are writing for other native–English speakers as well.

Thank you very much for the feedback I received from Part 1 of this guide. If you enjoyed Part 2 as well, or if you have specific types of items you would like to see in a Part 3, please let me know. Also, special thanks to Haofeng Yu, who proofread Part 2 for me from a Chinese perspective. ■

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ENDNOTES

1 In fairness, Chinese uses measure words that complicate plurals a bit because the character for *of* dogs differs from the character for *of* fish and so on, but these are based on some logic (e.g., a fish is long and flexible like a belt so they have the same measure word). Even here though, English is much more confusing, and most native speakers do not know to write about a pod of whales, a pack of dogs, a dazzle of zebras, a parliament of owls, a murder of crows, a crash of rhinoceroses, a trumpet of unicorns, etc.

2 I oversimplified here. In Mandarin, the participle -le is usually added to a verb when the action is already completed. This clarifies whether I am planning to take the exam today or I actually took it today.