COMMENTARY

What's Wrong with Shortening?

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When Bertrand Russell returned to the United States just before World War II to teach, he offered to lecture about "Words and Facts" as he had done in Oxford. In his famous *Autobiography*, he wrote later, "But I was told that Americans would not respect my lectures if I used monosyllables, so I altered the title to something like 'The Correlation between Oral and Somatic Motor Habits.' Under this title, or something of the sort, the seminar was approved," (Russell, 1975, p. 459).

Reading modern American geological literature frequently reminds me of Lord Russell's experience. In it, complicated foreign-sounding words are preferentially—and often unsuitably—used where simple English words would be perfectly adequate and often more suitable. There are undoubtedly cases where entirely new words are necessary. I myself have been responsible for introducing a number, now in current use. But there is no excuse whatsoever for using an unusual word when one from the everyday language will do equally well. The situation becomes more intolerable if the concept to be described is **better** represented by the common and simple word than by the uncommon and complex.

The word *contraction* is an example that may potentially lead to misunderstanding if improperly used. It is substituted increasingly more commonly in the American geological literature for *shortening*. This substitution rose to prominence in the 1980s as some editors objected to *compression* being used both as a stress and as a strain term. Contraction was then suggested as a strain counterpart of compression, as *extension* is the strain counterpart of *tension*. (That was when I regretfully used it once to mean shortening, yielding to editorial pressure! Subsequently, I have avoided it.) Some have judiciously objected to this choice, because contraction has a widely known connotation of volume loss in physics. Even if one leaves out the usage in physics, a perusal of the examples in the new edition of the *Oxford English Dictionary* (1989) makes clear that contraction always has a connotation of drawing together to a central point, or line, or surface—i.e., some kind of shrinkage.

Mud cracks, for example, which are extensional structures, form by contraction of the drying mud, as basalt (or andesite) columns form by extensional parting as a consequence of the contraction of the cooling lava. Some extensional joint sets in plutons come into being as a consequence of the contraction of the cooling intrusive. Until the early 1960s, it was thought that the contraction of our planet was the primary cause of the formation both of orogenic and taphrogenic belts (e.g., see Wilson, 1954, or the disclaimer in the 1957 and 1964 reprint editions by Hafner Press of Walter Bucher's *Deformation of the Earth's Crust*). Some still believe that contraction plays a role—albeit a subordinate one—in the tectonics of Earth (e.g., Solomon, 1987). Folds commonly form by shortening, which may result from contraction only in some instances.

There is no need to proliferate examples; they are ample and familiar. Whereas shortening is indeed one of the connotations of contraction, according to the *Oxford English Dictionary*, in none of the examples of that particular meaning that are cited in it can one substitute shortening for contraction without creating a feeling of uneasiness on the part of the reader. It is exactly the other way around in much of the American geological literature: In most places where contraction is written, if shortening is substituted, reading—and meaning—are improved. (Note that shortening can be used both as a noun and as an adjective.)

References Cited

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