

Polychotomous or Polytomous?

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I grew up on *polychotomous*. Throughout my graduate training (I don't believe that I knew the word before that), Likert scales were referred to as an approach to measuring attitudes that used *polychotomous* rather than *dichotomous* items. Likewise, a multiple-choice item could be scored either *dichotomously* or *polychotomously*.

The first time I encountered the word *polytomous* was about ten years ago (after about a quarter of a century of exclusively using *polychotomous*). It was in a manuscript that I was editing for *APM* that had been written by an author in Europe from a country in which English is not the first language. Being a conscientious editor, I assumed that this European had obviously made an error with the use of English and dutifully changed all the *polytomous* to *polychotomous*. As usual, I sent the manuscript to the author for review before it was typeset. When the manuscript came back from the author, all the *polychotomous* had been carefully changed back to *polytomous*—and the author included a brief note saying that the latter term was correct and that they meant the same thing.

Of course, being a typical American I assumed that this person who spoke another language was wrong, and I went to my big Webster's International Dictionary (Neilson, Knott, & Carhart, 1961) to prove it. Much to my amazement, I found both words with the same definition, although they have different origins. *Polytomous* (p. 1915) is used primarily in botany, and *polychotomous* (p. 1911) appears to derive from biology.

When we began planning this Special Issue I knew that both words would be used and felt the need for standardization, so I queried the authors for their preference. Again, I received a lesson in English from a European from another country in which English is not the first language. Gideon Mellenbergh (personal communication, January 17, 1995) indicated:

The word "dichotomous" stems from the contraction of the Greek "dicho" (διχο = two) and "tomous" (τομοσ = a cut). The word "polytomous" is a contraction of the Greek "polus" (πολυσ = many) and "tomous." Therefore, the correct contractions stemming from Greek are "dicho-tomous" ("two-cut") and "poly-tomous" ("many-cut").

My dictionary, of course, confirmed this and further indicated that *polytomous* and *dichotomous* are opposites of each other (Neilson et al., 1961, p. 1915). As a result, *polytomous* is used in this Special Issue and will become the standard usage in *APM*; *polychotomous* will be laid to rest, except when it slips out by habit in my class lectures and conversations.

Who said that Americans have nothing to learn from Europeans?

Reference

Neilson, W. A., Knott, T. A., & Carhart, P. W. (Eds.). (1961). *Webster's New International Dictionary of the*

English Language (2nd ed., Unabridged). Springfield MA: G.C. Merriam Company.