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Ms. Particular Presents: Validity vs. Veracity

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Statements by people have *veracity* if the person is being truthful.

“Results” have no free will—they cannot be “truthful” or “untruthful.” They are what they are. Period.

Bryan Garner (*Garner’s Modern American Usage*, Oxford University Press, 2003), calls the use of “veracity” to mean “truth” or “accuracy” a “slipshod extension” that began in the 18th century but is now fairly common in legal writing. We have higher standards in physics.

Don't confuse these two "v" words

"veracity" means "truthfulness"

"validity" refers to the "accuracy" of a measurement [for scientific results] or the appropriateness of the instrument used for the measurement, e.g., a thermometer would not give you "valid" results if you were trying to measure the length of something.

The confusion of "veracity" for "validity" is becoming increasingly common in physics writing, which Ms. Particular views with alarm.

Some recent examples from *PRL*:

"The experimental data for NiO are rather old and substantially broadened [34], and, assuming the veracity [should be validity] of these data, both TDDFT and BSE [39] overestimate the peak height."

"The T_e profiles in tokamak *H*-mode plasmas frequently exhibit roughly spatially constant T_e gradients in the steep gradient region of their pedestals, e.g., as in Fig. 1; however, significant measurement error bars prevent definitive conclusions about this prediction's veracity. [should be *validity*]"

"While very different materials and point defect types were indeed considered in this study, the veracity [should be validity] of the emerging notions for an even larger variety of point defects and insulators needs to be ascertained in the future." (The neediness of this sentence is the subject of another rant; q.v. <http://online.physics.uiuc.edu/courses/phys499/Fall12/MsParticular/Need.pdf>)

Don't use "veracity" in scientific writing—the probability it's wrong approaches 1

If you really *mean* "truthful"—voluntarily and with free will telling or disposed to tell the truth—use "truthful"

"Particle physics made headlines around the world in September [2011—*cme*] with the announcement that researchers at the OPERA experiment recorded neutrinos traveling faster than the speed of light. Within the scientific community it sparked a heated debate not only about the **veracity** of the results, but also about when controversial scientific results should be released to the public. Voices from across the spectrum have spoken up, some supporting the research team's decision to release the information to the public, and others decrying it."

The use of the wrong "v" word in this news article added even more unfortunate innuendos to this case of a mis-plugged fiber-optic cable and inaccurate clock (q.v. http://en.wikipedia.org/wiki/Faster-than-light_neutrino_anomaly).