CORRESPONDENCE

mercury, which are abbreviated "37 mmHg" or rarely "37 mm Hg," but never "37mm Hg." The reason, of course, is that the Centigrade scale ("C") directly modifies the temperature unit ("°"), which in turn modifies the numeral. The Council of Biology Editors⁴ and the International Union of Physiological Sciences Thermal Commission⁵ both designate "37°C" as the proper format.

Requiring a space between the "°" and "C" characters produces ambiguity and confusion in the case of compound units. Consider the expression for the coefficient of heat transfer, having the units $J \cdot s^{-1} \cdot m^{-2} \cdot {}^{\circ}C^{-1}$. If written $J \cdot s^{-1} \cdot m^{-2} \cdot {}^{\circ}C^{-1}$, the integrity of the expression is lost, potentially confounding both the meaning and the reader. Adding to the confusion, the term "C" appears so separate from the rest of the expression that typesetters sometimes interpret it as a discrete term and place it on a separate line or as the beginning of a new sentence.

Having established that the term "°C" is a unit, this leaves the matter of whether the degree symbol or a space should follow the numeral—degree or not degree, that is the question. The journals publishing most thermoregulatory research (i.e., Journal of Applied Physiology, American Journal of Physiology, Journal of Thermal Biology, Aviation Space and Environmental Medicine) leave no space between the numeral and degree symbol, i.e., they format "°C" and "%" similarly (37°C or 4%). Other journals leave a space between numeral and degree, treating "°C" as they do units such as "kcal" (37°C or 14 kcal). Either is acceptable, although I prefer the former.

In summary, I urge ANESTHESIOLOGY to format temperature units properly, just as "The heavens themselves, the planets, and this center, Observe degree, priority, and place."

Anesthesiology 80:488, 1994 © 1994 American Society of Anesthesiologists, Inc. J. B. Lippincott Company, Philadelphia

In Reply:—Sessler is both correct and persuasive, and henceforth the Journal will designate temperature as _°C rather than _° C.

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References

- 1. Holmes OW Jr: LeRoy Fibre Co. v. C., M, & St. P, Ry., 232 U.S. 34°, 354, 1914
- 2. Boileau-Despreaux N: Le Satire. Naples, Tipografia Nella Pieta de Turchini, 1826
- 3. Gilbert WS, Sullivan A: Ko-Ko, the Lord High Executioner, recounting the alleged beheading of Nanki-Poo to the most humane Mikado, The Mikado. Byceson Treharne, D'Oyly Carte, 1940
- 4. CBE Style Manual Committee: CBE Style Manual: Guide for Authors, Editors, and Publishers in the Biological Sciences. 5th edition. Bethesda, Council of Biology Editors, 1983
- 5. IUPS Thermal Commission: Glossary of Terms for Thermal Physiology. 2nd edition. Eur J Physiol 410:567–587, 1987
- 6. Staunton H: The Complete Illustrated Shakespeare: Troilus and Cressida, Act 1, Scene 3. Originally published in 1609 under the title The Famous Historic of Troylus and Cresseid: Excellently Expressing the Beginning of Their Loves, with the Conceited Wooing of Pandarus Prince of Licia. New York, Park Lane, 1974

(Accepted for publication December 3, 1993.)

Lawrence J. Saidman, M.D. Editor in Chief

(Accepted for publication December 3, 1993.)