EDITORIAL

Conversation, Computerization, and Communication

We have often pointed out that while Physical Review and Physical Review Letters are not literary journals, this does not mean that they should not be literate. The Editors and the copy departments make every effort not only to keep the grammar up to respectable standards, but also to avoid awkward structures, ambiguous expressions, foreignisms, and the like. In some of the more extreme cases, we even get occasional help from our referees. As a result, the readers are enabled to concentrate more on the physics aspects of what they are reading without having to work at digging it out of tortuous verbiage.

In the last few years, however, a new development has increasingly joined forces with an old tendency in making this part of our job more difficult. The old tendency is the natural inclination to write just the way one speaks. Now, most physicists are reasonably articulate speakers, in conversation if not in public. The very fact that personal contact is the most important source of information for many of us attests to this. But a speaker is not limited to words for conveying his meaning. Tone of voice, gestures, facial expressions—all play a significant part; and in conversation, the listener can ask for repetition or clarification if necessary. Moreover, the speaker can usually judge the extent to which any jargon that he uses is being understood. Consequently, some sloppiness can be tolerated in spoken language. These same features carried over to the same extent into written language would be intolerable, however, and even appearing with considerably less frequency they are bothersome. Yet more and more, it seems, they are creeping into manuscripts.

Meanwhile, more and more physicists have been dealing with computers; and this has served to heighten the problem, at least with respect to the careless use of symbols. The key point is that a computer has a very limited set of symbols available. For example, it

has no subscripts. At the same time, it has been designed to accept a group of symbols as a unit. Consequently, if the physicist wants to designate the fourth one of a set of counters, it is perfectly satisfactory for him to write "$C4$"; he would almost certainly say it that way in speech, anyhow. But for visual purposes, the form "C_4" is highly preferable. The computer version is allowable for the particular example we have chosen (though even then it can lead to typographic problems in designating anticoincidence logic); when carried over to, say, the use of "BW" to represent a function having Breit-Wigner form, it has gone beyond the limits of acceptability. Another problem of computer origin is the occasional appearance of an asterisk in place of a multiplication sign, originating in the fact that the computer cannot examine the context of a symbol "X" to see what it means. On the other hand, the reader of a journal in which the multiplication sign is typographically distinct is likely to be confused by the appearance of a substitute.

We have mentioned only some of the more flagrant examples. The problem, however, is a widespread one, and steadily becoming worse. We remind our readers and potential authors that if they want their message to come through, they should take care with the way in which it is expressed.

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The Editors and staff wish our readers a happy and successful new year.

<div align="right">George L. Trigg</div>