by Lynn Dirk

Brave New Text

As early as 1969, there was a vision of what computers could do for science communication. As is often the case, once the future arrives, it is not as colorful as imagined but rather is stranger than expected.

BURIED TREASURE: Gravenstein JS. New computer revolutionizes writing. JAMA 1968;204:149-53.
This whimsical satire addresses with sly humor problems in academe that remain unsolved today. It is required reading for anyone needing fresh insight into those problems or needing a good laugh (the latter, I'm sure, means everyone!). The revolutionary computer described here "transtylates" dry, technical, multiauthor texts (MATs) into the language of great authors. Before and after examples are included. "Before" prose is provided courtesy of a classic anesthesiology textbook. Excerpts on the stages of anesthesia are transtylated into the style of classic authors, such as Milton, Macaulay, Hemingway, and James Joyce. For example:

> The clinical signs of anesthesia and electroencephalographic patterns have been correlated with the concentration of anesthetic determined in arterial blood.

Becomes transtylated into James Joyce as:

> Hoopsa, gasablood, hoopsa! Inward the weary watcher the wavey wiggles that encephalon electrons eminate had the levels of loward lilt learn did.

The article ends with a brief discussion of the need for a patent and the plans for the royalties. (The article includes a priceless photograph of the revolutionary computer.)

Carr TR, Buchanan RC, Adkins-Heljeson D, Mettille TD, Sorensen J. The future of scientific communication in the earth sciences: the impact of the Internet. Computers & Geosciences 1997;23:503-12.
Increases in the volume of scientific literature, the costs of archiving paper publications, and the power and availability of electronic technology are reshaping traditional scientific communication. "As emphasis shifts from ownership to access, models of information provision and reproducibility permit, in principle, a degree of resource sharing [far greater than] traditional scientific communication." Experimental forms of online publication may improve the application of research results to societal problems.

Grammars
A new journal, *Grammars*, was initiated in 1999. The journal is intended to "bridge the gap between linguists and computer scientists". Could that gap be similar to the one between linguists and editors? The journal's editor hails from the Research Group in Mathematical Linguistics and Language Engineering. Its articles have such titles as "Why grammar systems?" and "Cut-and-Paste Languages". For further information, see *www.kluweronline.com/issn/1386-7393*.

Wood E, Willoughby T, Specht J, Porter L. An examination of how a cross-section of academics use computer technology when writing academic papers. Computers & Education 2002;38:287-301.
Some 361 faculty and graduate and undergraduate students were surveyed about computer availability, experience, attitudes toward computers, and use of computers in academic writing. Undergraduates in mathematics and computer science were most comfortable with computers, but experience with computers increased with academic level, which suggests that academics have been using computers throughout their careers. Reasons for using computers versus written or hard copies to write academic papers differed. The two formats may each facilitate the writing process in unique ways. Rather than there being a transition to increasing computer use, hard copy may offer cognitive support that is unavailable with word processors.

Barile AL, Durso FT. Computer-mediated communication in collaborative writing. Computers in Human Behavior 2002;18:173-90.
In this study of using computers to communicate during MATing (multiauthor textualizing), three-person teams wrote term papers over 6 weeks using one of three communication modes: face-to-face (FTF), synchronous computer-mediated communication, or e-mail. E-mail groups produced shorter rough drafts than FTF groups, which may indicate that the rough drafts with e-mail were "rougher". Lack of expressiveness did not appear to deter group work. E-mail alone may not be an ideal mode for writing collaboratively. Teams using synchronous computer-mediated communication, such as Netmeeting, should be able to produce work as satisfactory as that produced through FTF collaboration.