

Technically speaking

This column is intended as a commentary on the current commotions in the English language, with particular emphasis on the usages of our own technical community. Because few who care about the language are neutral, it will probably be seen as a laudable effort, badly misinformed, stunningly correct, dead wrong, essential, or trivial. Comments, commendations, and condemnations will be accepted, often cheerfully. Readers' pet peeves are of particular interest.

Alphabet soup communication. It is our idea to help bring readers up to date about the confusing new abbreviations and acronyms that continue to appear on the scene in such numbers, often going undefined. (An acronym, as distinct from an abbreviation, is a pronounceable word formed from the initial letter of each of the successive parts or major parts of a compound term—used mainly for economy in communication but also, if it is catchy, to publicize a concept or product.) In this issue we will confine ourselves to the communications field.

It is ironic that the telecommunications field is notorious for *not* communicating—or at least for putting obstacles in the way of communication between itself and outsiders [see the box "Telephone talk as the specialists use it," *Spectrum*, October 1979, p. 58]. To the uninitiated, a glance at the industry literature seems to indicate that an elaborate and impenetrable code has replaced the English language. To take a recent example, Bell Laboratories' new digital switching system, the No. 5 ESS (for electronic switching system), has brought with it a fresh crowd of shortened forms to snare the unwary. Meanings of some commonly occurring ones are given here to help outsiders find their way through the maze.

- IOP—input/output processor
- MCC—master control center
- MSGS—message switch
- IM—interface module
- Borscht, for several time-division functions—battery feed, overvoltage protection, ringing, supervision, coding/decoding, hybrid, and testing
- TSU—time slot interchange unit
- DSU—digital service unit
- MSU—metallic service unit
- SPC—stored-program-controlled

Bell's Essex (for experimental solid-state exchange) was the basis in 1959 for succeeding ESS systems. Abbreviations that came in its and its successors' wake include SXS—step-by-step (common control system); SMAS—switched maintenance access system; ETS—electronic translator system; TSPS—traffic service position system; ADF—arranged with data features; IDDD—international direct distance dialing; and AIS—automatic intercept system.

Among operations systems acronyms (these get more whimsical) are Airpap—air pressure analysis program; COIN—coin-phone operational and information network; Patrol—program for administrative reports on line; Unicap—universal cable circuit analysis program; and Carot—centralized automatic reporting on trunks. One wonders, though—admitting that "traffic service position systems real-time capacity" is a mouthful—if the abbreviation TSPSCAP is really any better?

Acronym and abbreviation style. The overall *Spectrum* style for acronyms is to uppercase any of four letters or less and to initial-cap those of five letters or more—COIN, but Carot or Patrol. Abbreviations may be made up of the first letters or parts of compound words but are not really acronyms because they are unpronounce-



able—they must be said by calling out all the letters, as in TSPSCAP above, or ESS, or IEEE. These *Spectrum* uppercases no matter how many letters they have. We also uppercase all non-English-language abbreviations and acronyms, such as CCITT, regardless of their length.

Bêtes noires. Regarding the "About the author" on page 47 of the July 1980 issue, which states that Henry B. Garrett "has consulted on the same subject for several space projects," Frank W. Roberts of Niagara-on-the-Lake, Ontario, writes:

"Surely 'consult,' like 'degrade' [see *Technically Speaking*, October, p. 30] is becoming inverted. I am sure that Dr. Garrett is a well-respected consultant and I would expect that he has been consulted frequently on, for example, spacecraft charging. I doubt that he has consulted, other than his peers, in that field of work. Let's stop this word from being degraded."

We wish we had caught that one before Mr. Roberts did. Those who defend the intransitive form of degrade will probably be cheered to know that Webster's also gives "to serve as a consultant" as one meaning of consult, but to us it sounds awkward.

Norman Houlding of Winchester, Mass.,

sends the following list of peeves: (1) "impact" used as a verb meaning to affect or influence; (2) "impact" used as a noun meaning the long-delayed consequence or other vague effect ("This vague word has had such an impact on my nervous system that I have been impelled to write this letter, even though its import is unlikely to impinge upon the minds of many disciples"); (3) "parameter" when used for a variable that is not controlled; (4) the use of "alternate" for "alternative" ("How can an engineer not know the difference?"); and (5) the unnecessary use of adjectival nouns ("We need many qualifications in our writing, but some portmanteau terms are grotesque, especially when the adjectival noun is derived from the verbal form of the adjective").

"Phased arrays" is a "tautologism" that annoys W.R. Patton, Menlo Park, Calif.: "Terman says that an array is an arrangement of antennas so spaced and phased that the fields add in some directions and cancel in others. We have broadcast arrays, radar arrays, end-fire arrays, broadside arrays, rhombic arrays, and a host of others. All by definition and implementation involve control of the phase relation between the fields radiated by the various elements.

"Since there are no such things as unphased, nonphased, or random phased arrays, the expression 'phased array' is redundant."

Any comments from readers?

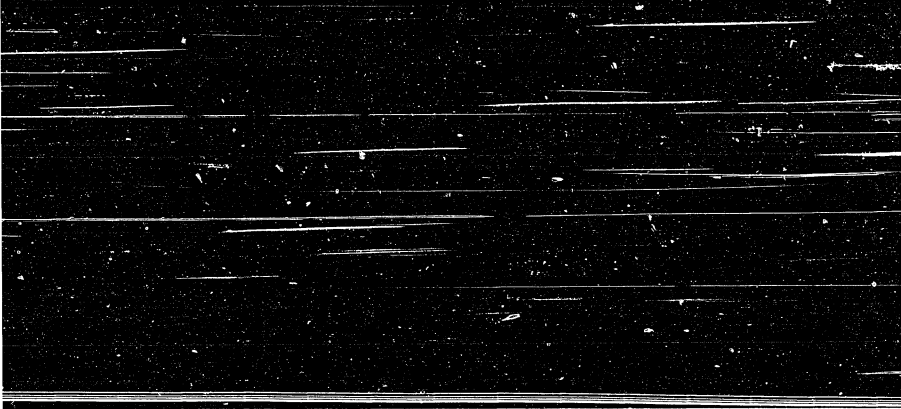
Sophistry or sophistication? A number of readers protested Sidney V. Soanes' contention in this column [December, p. 20] that "sophisticated" should not be used to describe devices because the word connotes adulteration rather than refinement. Among them is Vito J. Longo of San Francisco, who writes:

"Up to (or is it more than?) one out of two ain't bad. Mr. Soanes was spot on target with 'unique.' But his discussion of 'sophistication' was somewhat sophistical [that is, 'plausible but fallacious']. Possibly he's pointing out an English English/American English difference. Webster (in both the 2nd College Edition New World Dictionary of the American Language and the Third New International Dictionary) includes urbane, subtle, and highly refined, complex, and developed as definitions."

Warren K. Schoonmaker of *Mainly Marketing* in Coram, N.Y., mentions (also from Webster's Third) the meanings of "devoid of grossness" and "intellectually appealing."

Readers may enjoy a quote on "sophisticated"—"one of our most erratic words"—from Theodore Bernstein in *The Careful Writer*: "Successively it has meant wise, oversubtle, adulterated, corrupted, worldly wise, and highly complex. Its latest meaning is refined, not in the social sense but in the sense of an advanced stage of development. These new meanings of the word are not so far removed from the old as might appear. An underlying element has always been the notion of change from the original condition, or complication of the artless state. Such alterations sometimes have had bad associations and sometimes good ones. At present good has triumphed over evil, but no one knows what the next mutation will bring."

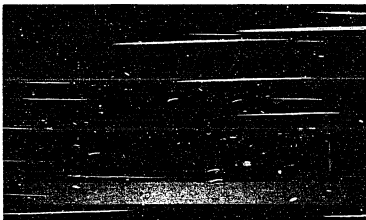
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