

Comments and Communications

Stress Indicators

IN THE third paragraph of their brief reply to my comments and those of Calkins (*Science*, 112, 476 [1950]), Dearborn, Johnston, and Carmichael miss the point I was making. That very *essence* of stress which they refer to is a matter of linguistic analysis. In English there happen to be four structurally significant levels of stress (four stress phonemes, as we say—though perhaps the term is too “elegant”!), four levels of pitch, and three ways of terminating phrases—i.e., three terminal junctures. In our work at the Foreign Service Institute training language-and-area specialists, we have found no difficulty in devising symbols to denote all these things, and in getting students to understand the symbols. Thus, we may write the sentence *How do they study?* in several ways:

- (1) *Hôw dô thèy ‘stúdy¹#
 - (2) *Hôw dô ‘théy stúdy¹#
 - (3) *Hôw ‘dô thèy stúdy¹#
 - (4) *Hôw dô thèy stúdy¹#
 - (5) *Hôw dô thèy stúdy||
 - (6) *Hôw ‘dô thèy stúdy||
 - (7) *Hôw dô thèy ‘stúdy¹#
- etc. etc

(1) is the ordinary question: medial pitch /²/ at the beginning, extending through *they*, high pitch /³/ on the first syllable of *study*, falling to low pitch /¹/ and ending in silence /#/; *stu-* has the primary stress /¹/, *how* the secondary /²/, *they* tertiary /³/ and *do* and *-dy* weak stress /¹/. In (2) the primary stress is shifted, and with it the high pitch, to *they*. In (3) *do* has primary stress and high pitch. In (4) it is *how* that has primary stress and high pitch. In (5) we have the echo question, all on high pitch, with a rise at the very end /||/. In (6) we have a way of asking the ordinary question that is usual in British speech; high pitch on *how*, but only secondary stress, while the rest of the sentence has medial pitch to the end, with a slight rise. In (7) we illustrate the first of a series of six repetitions of (1)–(6), but with highest pitch /⁴/ instead of high, as in excitement or for emphasis.

The symbols we use may not be the most practical for general use, but any system of punctuation, special type, etc., had better be based on such a controlled and tested analysis if it is to accomplish anything.

Of course, I agree with Dearborn *et al.* that Calkins is quite wrong in his objection to the use of indicative devices. Language is a system of communication, as they say. Writing (or printing) is a secondary symbol system based on language; the better we make the writing system, the better we communicate.

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Life Behind the Iron Curtain

THE letter from Nathaniel Kleitman in your October 20 issue interests me greatly because of a document recently received from the Charles University in Prague. This concerns the same question of academic freedom and the “Big Lie.” It is signed by the rectors of six Czechoslovakian universities and technical schools and is printed impressively in two colors. The text of the document follows:

We, the leading workers of the Czechoslovak universities and the representatives of the scientific and cultural life of our country, firmly convinced that work for peace and the fight to preserve it is one of the most basic duties of every true scientific and cultural worker who is conscious of his responsibility, express our deep indignation at the attack of American imperialism against Korea. This attack flagrantly violates the inalienable right of the Korean nation to self-determination and thus the principles of the Atlantic Charter.

It is a part of the policy of occupying and subjecting other nations of Asia and Europe, the countries of which are being changed into a springboard of the American armies in preparation for a new world war. This cynical violation of the principles and spirit of the Charter of the United Nations is hypocritically masked in the name of the United Nations Organisation, which is thus—under the pressure of dollar imperialism—estranged from its peace mission and turned into an aggressive bloc by its nonacceptance of the largest nation of the world—People’s Democratic China—and by its provocative boycott of all the constructive proposals of the greatest peace power, USSR, and the countries of the people’s democracies.

Therefore, together with all our people, who daily express their will for peace by their constructive work, and together with all the true friends of peace all over the world, we decisively condemn this criminal attack against the Korean nation and against world peace. We condemn the barbaric destruction of Korean towns and their flourishing cultural centres. We condemn most strongly the criminal intention to use the atomic bomb in Korea, which has been repudiated and condemned by world public opinion. We protest against the abuse of the United Nations Organisation and against its degradation, against the exclusion from its organs and its work of those very powers and countries that are the most reliable fighters for world peace. We demand the immediate cessation of the American intervention in Korea. We support (without reservation) the opinion of Generalissimo Stalin, expressed in his correspondence with Pandit Nehru, that the peaceful termination of the war in Korea and the solution of the Korean question are possible only through cooperation with People’s Democratic China and with the participation of the representatives of the Korean nation. We stand with all our sympathy on the side of the Korean nation and its people’s government, which by its policy has proved and is proving that it is the real and only representative of its nation, and which has given special care to the development of science and cultural life in its country.

We appeal to the scientific and cultural workers of all