

# Comments and Communications

## Taste Reactions to Antithyroid Substances

The very interesting recent communication by W. C. Boyd (*Science*, 112, 153 [1950]) concerning possible connections between differences in tasting ability, antithyroids, food, and thyroid function has been anticipated, and to some extent exceeded, by publications from the Galton Laboratory in London. It may be useful for readers interested in the subject to get the references of three communications (Harris, H., and Kalmus, H., *Nature*, 163, 878 [1949]; Harris, H., Kalmus, H., *Ann. Eugenics*, 15, (1), 32 [1949]; Harris, H., Kalmus, H., and Trotter, W. R., *Lancet*, 1038 [Dec. 3, 1949] that apparently have been inaccessible to Dr. Boyd in Cairo, Egypt.

On the whole we find ourselves in agreement with Dr. Boyd's conclusions.

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It is now well known that some persons find phenylthiocarbamide (PTC) extremely bitter, whereas others find it tasteless, the nontasting condition being inherited as a recessive. There is no present evidence to show which was the original and which the derived condition, i.e., whether the mutation involved was dominant or recessive. Boyd has recently found that individuals who can taste PTC can also taste 1-5-vinyl-2-thio-oxazolidone, whereas others are negative to both substances, the latter substance being present in such plants as turnip and cabbage.

Boyd suggests that, as tasters and nontasters of PTC occur also among chimpanzees, "this gene pair has existed in man for a very long time," presumably back to a common ancestor of man and chimpanzees.

It may be pointed out that this conclusion does not necessarily follow. An alternative hypothesis is that the tasting and nontasting genes have arisen independently as parallel mutations somewhere in the lines of descent leading to modern man and the chimpanzee. The conception of parallel mutations dates from 1912 (Gates, R. R. *Nature*, 89, 659), and numerous cases in plants and animals were already known a few years later (Gates, R. R. *Mutations and Evolution*. Cambridge: Cambridge University Press, 1921). Many more are known now. It is reasonable to suppose that, if a particular mutation can occur at a specific locus of a chromosome in one line of descent, the same change can occur at the corresponding locus of a chromosome in a related line of descent. This renders it unsafe to conclude that any two lines of descent having a particular gene in common necessarily derived it from a common ancestor.

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## The Big Lie

That the "big lie" which the Soviet rulers are currently trying to foist on the world is being swallowed not only by the uneducated "toilers," but also by the elite of Soviet science, is shown by the following telegram, published in the Moscow newspaper *Izvestia* of August 23, 1950. It is addressed to the U.N. Security Council by the Presidium of the Academy of Sciences of the USSR.

A feeling of anxiety over the fates of the world and civilization compels us, Soviet science workers, to address the following letter to you.

We, Soviet scientists, who lived through the bloody war with German Fascism, who saw the ruins of Stalingrad, Sevastopol, Odessa, and other cities, and the destruction of great monuments of world culture, cannot remain silent.

The armed forces of the U.S.A., which invaded Korea, rudely violating all the norms of morality and justice, are committing unheard-of crimes—crimes as barbaric as those of the German-Fascist usurpers. Accomplishments and values of a thousand-year-old culture of the Korean people are perishing, the blood of the helpless peaceful population is being shed.

Under the flag of the U.N., the army of the interventionists is pitilessly destroying in Korea homes and clubs, schools and hospitals, universities and libraries, factories and plants, and is breaking up the people's economy and the culture of a peace-loving country. Thousands of persons have already been left without food and shelter. The whole world is gripped by indignation against these terrible misdeeds of the interventionists, which are increasing daily.

We—representatives of Soviet science—declare that the U.N. Security Council must immediately and decisively stop the international crimes that are being committed in Korea by the ruling circles of the U.S.A., one of the member states of the U.N.

Deepest feelings of indignation are aroused in us by representations of the official delegates of the U.S.A. in the Security Council of the U.N., in which they are trying to put the blame on the heroic people of Korea and are introducing proposals directed toward a further spread of the conflagration of war.

The imperialists of the U.S.A. are perverting the great accomplishments of science to their criminal ends and are utilizing them for mass destruction of mankind.

Together with all the peoples of our country, together with scientists, cultural workers, and

other representatives of progressive humanity of the whole world, we unanimously condemn and brand as shameful the scandalous acts of armed aggression of American imperialism, which is covering the earth of Korea with the blood of the aged, of women and children. We are deeply moved by the fact that till now these evil deeds remain unpunished.

Diplomats and politicians of the imperialist camp are trying to justify the barbarous acts of the American soldiery by barefaced falsifications of juridical science and international law. But there is not, and there cannot be, any justification of aggression and aggressors. There is not, and there cannot be, any justification for the beastliness and destruction which the troops of the interventionists are inflicting on the peace-loving people of Korea.

In these tragic days, when the whole world is following, with anxiety and hope, the actions of the U.N. organs that were placed on the watch for peace and international legality, we are directing to you a fervid call to set a limit to the international crimes and immediately curb the aggressors who are covering their acts with the blue flag of the U.N., and thereby restore the prestige of the Security Council and the authority of the United Nations.

In the name of the Academy of Science of the USSR, in the name of all Soviet scientists, we are making known the wrathful protest of the peoples of the entire world who are demanding a decisive cessation of aggression in Korea, unconditional prohibition of bombing of peaceful cities and populations, and an immediate withdrawal of all foreign troops from Korea.

This telegram was signed by: S. Vavilov, I. Bardin, V. Volgin, A. Topchiev, I. Petrovsky, M. Dubinin, D. Beliansky, B. Grekov, B. Wedensky, A. Oparin, I. Meshchanikov, E. Britzke, E. Varga, I. Grebenshchikov, N. Derjaiev, A. Ioffe, I. Kurchatov, T. Lysenko, N. Muskhelishvili, A. Mesmeianov, V. Nikitin, V. Obruchaev, L. Orbeli, A. Paladin, C. Christianovitch, and E. Chudakov. American scientists will recognize the names of their colleagues in the respective branches of science. Although some of the above may have signed the message out of expediency or under pressure, the telegram is reminiscent of the declaration of German scientists early in World War I in support of their side of the battle. The most charitable attitude to take is to ascribe such vituperative language and distorted view of the causes of the Korean calamity to an anticapitalist hysteria that seems to have gripped all classes of people behind the totalitarian curtain.

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## Stress and Meaning

We should like to reply briefly to the comments made by Trager and Calkins (*Science*, 111, 582 [1950] relative to our communication "Oral Stress and Meaning in Printed Material" (*Science*, 110, 404 [1949])).

Trager *agrees* with our suggestion that the enhancement of the stress dimension in print—a dimension comparable to the stress dimension in speech—might very well enable the reader of difficult prose to arrive at a correct understanding of an author's intent with less time delay and with less possibility of error than is at present possible. He, however, incorrectly takes us to task for claiming a priority in the observation that stress factors are related to comprehension. We made no such claim in our communication. What we did report—possibly for the first time—was an experimental *measure* of the high degree of association which exists between the *way* a person stresses material as he reads it aloud and his comprehension of the material that is read.

Trager feels, moreover, that certain linguists—with whose works we have some familiarity—should guide all efforts to incorporate a stress dimension into print. Linguists can unquestionably be of great service in attacking this problem. We feel that it appears now to be undesirable to attempt to represent in print little more than the *essence* of the stresses that occur in speech. It is unlikely that the elegant speech analyses of the linguists can ever find a one-to-one counterpart in print.

Calkins, like Trager and the present writers, also believes that a suitable portrayal of oral stress patterns in print is advantageous to the silent reader. Unlike Trager and ourselves, however, Calkins feels that this objective can be completely attained through the proper use of punctuation and syntax. In particular, Calkins favors a generous use of commas, a recommendation in which the present writers concur. Although Calkins objects to the present trend toward elimination of commas, he apparently considers the use of other stress indicators as "confessions of weakness" on the part of the writer. A reasonable use of bold-face type or italics for the purpose of indicating peak stress in sentences to help in emphasizing meaning is no more a confession of weakness than is the free use of commas. Rather, a careful use of such stress indicators may denote a commendable attempt on the part of the writer to resist what seems little more than a present fashion. We do not feel that our critics have given any basic reasons why, in the writing of scientific reports and similar presentations, all appropriate means of indicating meaning should not be used. Printed words are part of a communication system. Our present experiments are devoted to the sole purpose of improving this system as a mechanism for the transmission of unambiguous meaning.

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