

Standards of Ethical Conduct

Khrushchev does not set off atomic explosions all by himself. They are the work of a team of highly competent, professionally distinguished scientists and technologists. Surprisingly enough, nobody seems to think of these. Apparently, everybody takes it for granted that it is perfectly natural and proper for them to do whatever they are bid to do. Presumably, they are entitled to expect a warm welcome in the "great brotherhood of science," once they again appear at international scientific gatherings, bedecked with the medals they have won by their recent dirty work.

But have not men been judged for crimes against humanity because they did precisely that: share conscientiously and competently in whatever crimes they were ordered to perform? What difference is there between the chemist perfecting poison gas for Auschwitz and the nuclear physicist perfecting a 50-megaton bomb for Novaya Zemlya?

Is it not high time the scientific community, and specifically the great international scientific societies, acknowledge that the age of romantic innocence in science is dead? Is it not high time for them to set up standards of ethical conduct for the members of their professions, so that it may become plain for all the world to see that, whatever their professional skill, the scientific accomplices of test-ban cheating and atmosphere poisoning and nuclear blackmail are *not* honored colleagues among them?

The world has urgent need of whatever moral pressure can be brought to bear in this way on scientists and future scientists. Even more is this true of the scientific world. Nothing less than the claim to respect, and to self-respect, of every scientist is at stake in this issue of drawing a clear line between the scientist who cures cancer and the one who willfully induces it through nuclear fall-out. No longer should the first gladly suffer the insult of being a fellow to the other.

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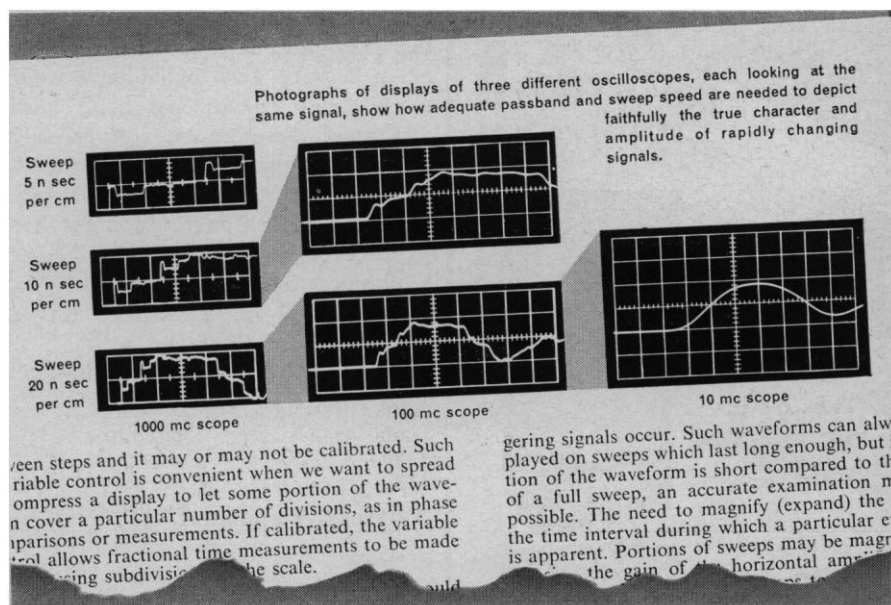
What follows is a quotation from my letter of 1 November 1961 to Professor V. Zhdanov of the Soviet Union, setting forth my reasons for not attending the 8th International Cancer Congress in Moscow next summer. I thought that

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others besides Professor Zhdanov might be interested in these reasons.

"I am honored to have your invitation and would normally have been delighted to attend the Congress, to visit some of the cancer research laboratories in the U.S.S.R., and to participate in your program. However, the resumption of the atmospheric bomb testing by the U.S.S.R. some 2 months ago has caused me deep concern, and this has given way to indignation within the past week, when it was announced that a bomb of about 30-megaton size was first exploded, and then, in direct defiance of an urgent plea signed by 87 members of the United Nations, a second bomb estimated at about 60 megatons was exploded on October 30.

"I am convinced that this series of explosions, culminating in this latest one of frightful magnitude, will cause the premature and unnecessary death of at least a few individuals in the world from leukemia or bone cancer and must therefore be considered an outrage against society. In protest, I must forego attending the VIII International Cancer Congress and am therefore forced regretfully to decline your kind invitation."

HENRY S. KAPLAN

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Auditory-Oculomotor Reflexes at Birth

Wertheimer has made an interesting and significant discovery in finding that the newborn infant will move his (or in this case, her) eyes toward the side on which auditory stimulation is received [*Science* **134**, 1692 (1961)]. But he then goes on to say: "This finding is not compatible with the view that space perception, and particularly cross-modal spatial coordination, is based upon a long and arduous learning process." In saying this he either attacks an enemy who no longer exists or he goes way beyond his data.

If Wertheimer means that not all aspects of perceptual organization involve learning, I can agree without reservation; but this has been shown repeatedly, and no one now holds this view (it has not been defended in the past 30 years). Alternatively, however, showing that there are reflexively coordinated and unlearned components obviously does not show that the full

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