

LETTERS

to the EDITOR

Biophysics, Teleology, and Mechanism

Sir:

Professor Hoffman's considerations (in his stimulating article in *Physics Today*, July 1949) that "biophysics" is a *contradictio in adjecto* reveal unmistakably the zeal of the converted. The attitude he describes is that of the physicist who has been conditioned, during his training, to believe that no positive standpoint can be found outside the physical sciences, and then, coming in contact with the life sciences, feels particularly frustrated when attempting to participate in cancer research where he can see "the cells of the body grow wrong." Habitually living like Pangloss in "the best of all possible worlds," the physicist, on his way to becoming a biophysicist, discovers—like *Candide*—disteleologies in the world, thereby developing into a teleologist. This is like the atheist who first learns to believe in the devil, and from that point asserts the existence of God.

This is not the place to discuss at any length the scope and range of biophysics. This much can be said, however: it is hardly the "experience" in physics and biology which presents a contradiction, but the contradictory statements which are made about these facts.

This is a problem which one cannot hope to resolve by any crucial experiment. Nor will the biophysicist find a way out of his dilemma by a "period of soul-searching and doubt"; his only hope to gain clarity is by a serious study of the problems of epistemology and metaphysics. Acquaintance with the broader implications of the special sciences during the time of their studies, it has been suggested . . . would save physicists and biologists alike a bewildering period of adjustment after they have added the prefix bio- or physico- to their professional designations.

OTTO BLÜH

Vancouver, Canada

Unesco

Sir:

I am writing merely to express appreciation on behalf of the United Nations Educational, Scientific, and Cultural Organization for the very fine article in the July issue of *Physics Today* on Unesco by Bart J. Bok.

I . . . have read the article with a great deal of interest and would like you to know it is being forwarded to our Director-General at Paris headquarters.

Thank you, and Mr. Bok, for presenting such a clear picture of the aims and activities of Unesco.

GEORGE WOODWARD

Lake Success, New York

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