

From the present attitude, coupled with the damage that was done in the last war, we can be reasonably certain that they would not hesitate to put us on the road to scientific suicide.

RESERVIST

(Name withheld by request)

Microfilm Publication

I AM very much concerned about the petition submitted by the two committees on zoological nomenclature to the International Commission on Zoological Nomenclature reported in *SCIENCE* (113, 466 [1951]).

I think these committees have taken an extremely narrow point of view on a subject of great importance to both zoological and botanical nomenclature. The acknowledged shortage of publication space and cost of letterpress, lithoprint, etc., types of publication alone make it imperative that every type of publication that is readily available to the public be considered as a legitimate place of "publication" for taxonomic entities.

The paper cited cannot be used as an argument for their petition, for it is only an argument against the waste of money on republishing a paper already effectively published and available to anyone desiring it.

LEROY H. HARVEY

Department of Botany, Montana State University

Nondiffusibility of Alkaline Phosphatase in Fixed Tissue

DR. NOVIKOFF's intensive examination of the histochemical tests for alkaline phosphatase (*Science*, 113, 320 [1951]) still leaves unanswered the question of whether the enzyme itself diffuses. That the enzyme does not diffuse during incubation of sections in aqueous medium at pH 9.4 can be shown by a simple test that, to my knowledge, has not appeared in the literature. In this laboratory we have made the test on sets of five slides of mouse duodenum, which are treated as follows:

1) A slide is incubated in standard Gomori medium at 38° for 5 sec. Appropriate further treatment then reveals a dense black precipitate in the striated border, but no sign of activity anywhere else.

2) Another slide is incubated in the medium for 30 min. After conversion of the precipitated calcium phosphate to cobalt sulfide, the entire section appears blackened, with a gradient of darkness extending away from the striated border through the epithelial cells, the intravilline stroma, and the mucosa and musculature. The Golgi bodies are darker than the rest of the cytoplasm. The picture certainly suggests diffusion from the border into inactive material.

3) Three other slides are incubated in barbital buffer (pH 9.4) at 38° for 30 min, and are then placed in buffer-substrate medium for 5, 15, and 30 sec. The pictures obtained after this treatment are the same as in case 1, with the precipitate being strictly limited to the striated border. There was no evidence of diffusion beyond the border, nor was there any apparent loss of enzymatic activity such as Yokoyama, Stowell, and Mathews (*Anat.*

Record, 109, 139 [1951]) observed under somewhat similar conditions.

Of course these results do not bear on the possibility that alkaline phosphatase diffuses during fixation. They do, however, show that highly concentrated phosphatase does not alter its position in fixed and mounted sections kept in fluid medium at incubating temperature for as long as ½ hr. This finding is in agreement with Dr. Novikoff's demonstrations that it is possible for calcium phosphate to diffuse and be absorbed at false localizations in mounted sections.

FLORENCE MOOG

Department of Zoology, Washington University

Sui Generis

I READ with interest J. R. Pierce's article on "Science and Literature" in your issue of April 20, but I would like to point out one omission in it. He spoke of a book by Heinlein, tracing the imaginary future of man through many periods but omitted to mention what, in my opinion, is by far the best book on this subject, namely, Olaf Stapledon's *Last and First Men*. This pursued the subject in a most illuminating way, on the assumption that with the vast amount of time still ahead of the human species, it might well produce a succession of totally different types. Stapledon's picture of the society in which all the thinking was done by specialized individuals whose brains were cultured out to a gigantic size on some sort of trellis, is unforgettable!

JULIAN S. HUXLEY

London, England

A Note to the Department of Internal Revenue

THE appearance of the comments on "Scholars and the Root of All Evil" in *SCIENCE* (113, 330 [1951]) on March 23, at a time when scholars along with the rest of the tax-paying public were emerging from the annual struggle with income tax returns, started a trail of thought that poses another point for public attention. In reading the comments in *SCIENCE* we were confronted with Bauer's formula for deriving an approximately just and fair income for the scientist or scholar who has invested many years of his youth, many dollars of a then nonexistent income, many IQ points of mental capacity, and unbounded personal energy and zeal in preparing his mental equipment for lifetime service.

In making out the federal income tax return we noted the possible channels open to the businessman who also has invested money in ideas but who, on the other hand, has transmitted his investment into material things: buildings, equipment, inventories, etc., against which, in time, the government will allow a proportionate mark-off under a heading on page 2 called "depreciation." By putting the two investments in juxtaposition, the reader discovers that for the learned man, the one who has salted away his money and time and effort and ability in his "brains"—in