November 7, 1950

Dr. T. M. Sonneborn Department of Zoology University of Indiana Bloomington, Indiana

Dear Dr. Sonneborn:

The enclosed manuscript might perhaps interest you. We are dreaming of using the method developed for maintaining a culture of paramecia growing at different rates which our gadget should permit us to set and to maintain constant. (We would control the growth rate of the paramecia by having the paramecia growing in the "collecting vessel" by providing that "collecting vessel" with a leveling syphon similar to the leveling syphon which is provided for the "growth tube.")

What we would hope to do in our experiment is the following:

We would want to grow in our gadget paramecia which had lost the micronucleii and had undergone macro-nuclear reorganization. The purpose of this is to be certain that the Shimals will not go through autogamy.

We would set up two such experiments, both at the same temperature, with the paramecia growing at <u>different</u> rates in the two experiments. Because autogemy is excluded, both cultures should after a while decline in their fission rate and finally die.

The question to which we would hope to find the answer is whether the lifetime of such a culture is fixed in terms of the <u>number</u> of fissions the animals can undergo in the absence of autogamy or is it fixed in terms of the <u>time</u> which the animals can survive in the growing condition in the absence of autogamy.

We certainly shall not embark on this experiment before we have visited you and have asked many questions, but in the meantime, I thought I would just let you know that we are dreaming about paramecia even though we don't at present work with them.

With best wishes --

Sincerely yours,

Leo Szilard

WV

INDIANA UNIVERSITY
BLOOMINGTON, INDIANA

DEPARTMENT OF ZOOLOGY

November 22, 1950

Dr. Szilard Institute of Radiology and Biophysics University of Chicago Chicago 37, Illinois

Dear Dr. Szilard:

I plan to be in Chicago on December 5 and 6 and hope to have an opportunity to visit your laboratory and talk over the points you raised in your letter. Weiss and Raper have my schedule in their hands. I'd appreciate your arranging with them for some time when you and I could get together. I arrive about 1:00 p.m. on the 5th, give a low-level lecture in the Divisional Sequence course (is that what it is called?) at 4:30, go to the Raper's home for dinner and will be free the following morning. I want to visit your lab, Raper's, and Powers', and hope also to see a few other people, but in any case we must get together long enough to talk over the questions you raised.

Thanks for sending me the manuscript. Muller told me about it earlier and I was as excited about it as he was. I look forward to hearing more about what is in progress in your laboratory.

Cordially,

T. M. Sonneborn

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TMS:gg

The Quadrangle Club
The University of Chicago
Chicago 37, Illinois
September 20, 1956

Professor Tracy Sonneborn Department of Zoology University of Indiana Bloomington, Indiana

Dear Sonneborn:

The other day I came across a passage in a book which you will find attached. I am virtually certain that some time or other you must have interpreted this phenomenon in terms of antigenic type changes observed in paramecia in place of "mutations".

Can you give me a reference to what you have written about it?

With kindest regards,

Sincerely,

Leo Szilard

m Encl.

May 20, 1964 Professor Tracy Sonneborn Department of Zoology University of Indiana Bloomington, Indiana Dear Dr. Sonneborn: I should very much appreciate having your comments on a manuscript, a copy of which you will find enclosed. I was contemplating having it published in "Perspectives of Biology" but first I should like to know what you think about the paper. With kind regards, Yours sincerely, Leo Szilard LS:jm Enclosure