

file 5

Flora Roberts, Inc. • 22 EAST 60TH STREET • NEW YORK 22, N. Y.
ELDORADO 5-4165-6-7

April 17, 1962

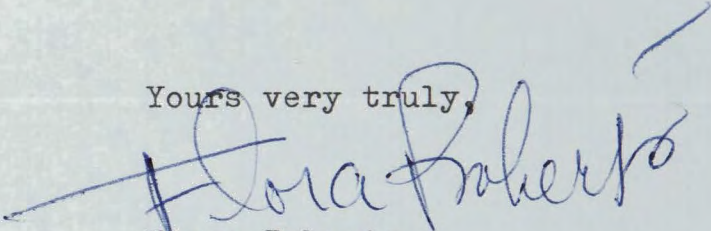
Dr. Leo Szilard.
DuPont Plaza Hotel
Washington, D.C.

Dear Dr. Szilard:

Our friend, Arthur Penn, called me to-day to tell me about your book, and the negotiations you currently are going through pertaining to it.

He tells me he has suggested to you that you use an agent, and thought I would be interested. I am indeed, and if you are willing, I would be glad to discuss the problems involved in completing the proper deal.

Yours very truly,


Flora Roberts

FR:pc

File 5

19 April 1962

Flora Roberts, Inc.
22 East 60th Street
New York 22, New York

Dear Mrs. Roberts:

Having just talked to you over the telephone I am enclosing the manuscript in which Bruce Becker is interested. He can read you the text of the letter he wrote me over the telephone.

Yours sincerely,

Leo Szilard

enclosure (1)

DEFENSE
SUSTAINER
DRIVE

100



list the White Paper

academic freedom committee

P. O. Box 392

San Francisco 1, California

for Fund Raising

HOLLAND ROBERTS
DIRECTOR

April 5, 1962

1-listed

7 April ans'd

Dr. Leo Szilard
Hotel Dupont Plaza
Dupont Circle
Washington 6, D.C.

Dear Dr. Szilard

I am much interested in your proposal "For a Peace Lobby". If it can get off the ground, it could have real possibilities as a political power. The main difficulty is that you have not yet boiled the presentation down so that it can be readily grasped. If you will do this in leaflet form, I would like to send it out as a special mailing with my endorsements to from three hundred to eight hundred people many of whom I think would be interested .

Would you be willing to present your proposal to the Moscow Congress of the World Peace Council which is meeting July 9-14? Plans are for at least two thousand participants from all parts of the world. Whereas our own country holds the key, the proposal would apply with adaptations in other important nations. I am a member of the Bureau of the World Peace Council and would be happy to recommend that you be invited if you are interested.

You may count me as one of those who would make annual contributions to the Movement and work for it in other ways.

Sincerely yours

Holland Roberts

Holland Roberts

Washington, D.C.
7 April 1962

Z Holland Roberts
Academic Freedom Committee
P.O. Box 392
San Francisco 1, California

Dear Mr. Roberts:

Many thanks for your letter of 5 April. The only material that can be mailed out at the moment is the reprint from the Bulletin of the Atomic Scientists. Additional copies can be obtained from the Bulletin. For 100 or more copies they charge 7¢ per copy, including postage.

I do not believe that any useful purpose will be served by presenting my proposal to the World Peace Council in Moscow and in any case I am being kept fully busy trying to put together an organization. It is my hope that it will be possible for me to communicate with you rather soon about the next step that we may be taking.

Sincerely yours,

Leo Szilard
Hotel Dupont Plaza
Washington 6, D.C.

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

1201

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=Int'l Letter Telegram

VLT=Int'l Victory Ltr.

W. P. MARSHALL, PRESIDENT

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CAF025 PD=GROTON CONN 9 849A=

DR L SZILARD=

UNIVERSITY OF CHICAGO=

THE ELECTRIC BOAT DIVISION OF GENERAL DYNAMICS CORPORATION
CORDIALLY INVITES YOU TO BE PRESENT AT THE KEEL PLATE
LAYING OF THE FIRST NUCLEAR POWERED SUBMARINE, BY THE
PRESIDENT OF THE UNITED STATES, AT GROTON, CONNECTICUT,
ELEVEN THIRTY AM DAYLIGHT SAVING TIME ON FOURTEEN JUNE 1952.
PLEASE LET US KNOW BY RETURN WIRE, COLLECT, IF IT WILL BE
POSSIBLE FOR YOU TO ATTEND=

O P ROBINSON SENIOR VICE PRESIDENT=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

DOMESTIC SERVICE

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DAY
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LETTER

WESTERN UNION

1206

INTERNATIONAL SERVICE

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RADIOGRAM

W. P. MARSHALL, PRESIDENT

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	Collect			

Send the following message, subject to the terms on back hereof, which are hereby agreed to

COLLECT TELEGRAM

Mr. O. P. Robinson, Senior Vice President
The Electric Boat Division
General Dynamics Corporation
Groton, Connecticut

Re telegram regret unable to attend keel plate laying.

Leo Szilard

Institute of Radiobiology and Biophysics
The University of Chicago
5650 Ellis Avenue
June 9 1952

COPIED FROM ORIGINAL
IN THIS COLLECTION

The University of Chicago

CHICAGO 37, ILLINOIS

Institute of Radiobiology and Biophysics

5650 Ellis Avenue

January 15, 1952

Mr. Morris Robkin
2936 Vaquero Avenue
Los Angeles 32, California

Dear Mr. Robkin:

I am writing you in reply to your letter of December 26th. We don't have a Department of Biophysics, but there is a Committee on Biophysics and I understand that it is possible to get a doctors degree in Biophysics which is awarded by the University on the recommendation of the Committee. I am not a member of that Committee and know very little about its operation. I am, therefore, passing on your letter to Dr. John Simpson who is Chairman of the Committee and you should hear from him shortly.

Sincerely yours,

Leo Szilard

LS/sds
cc: Dr. Simpson

January 17, 1952

John Simpson

Leo Szilard

Nuclear Studies & Comm. on
Biophysics
Radiobiology and Biophysics

The enclosed letter which I have written and which is
self explanatory is sent to you for action. Mr. Robkin will
expect to hear from you.

LS/sds

STANFORD UNIVERSITY

STANFORD, CALIFORNIA

DEPARTMENT OF BIOLOGICAL SCIENCES

June 26, 1951.

Dr. Leo Szilard,
Professor of Biophysics,
University of Chicago,
Chicago,
Ill.

Dear Professor Szilard:-

I am writing this letter to inquire if it would be possible for me to obtain a research position in your Department.

For your information, I should like to mention that I was born in Hungary, I came to the United States in 1940 and became an American citizen in 1945. I have degrees in organic chemistry and plant biochemistry from the Universities of Vienna and Budapest. I am enclosing a detailed curriculum vitae. As you will see from this, my earlier work was in agricultural and sugar chemistry but since 1942 my interest has been concentrated more on basic research in the field of chemistry of natural products. I worked with Professor A. J. Haagen Smit in the Bio-organic Department of the California Institute of Technology for three years. I also did research on carbohydrate enzymes at the New York State Experimental Station of Cornell University. I am quite familiar with the modern technique of chromatography, ion exchange and radioactive tracers.

At present I am research associate in the Department of Biological Sciences, working with Professor Tatum in the field of biochemical genetics on carbohydrate enzymes and isolation and identification of radioactive sugars from the mycelia of Neurospora Crassa.

I should like to mention the following names as references:

Dr. E. Tatum, Biology Department, Stanford University, Stanford, California.

Dr. M. Wolfson, Chemistry Department, the Ohio State University, Columbus, Ohio.

Dr. R. C. Hockett, Sugar Research Foundation, 52 Wall Street, New York 5, N. Y.

I look forward to hearing from you,

Sincerely yours,

Elizabeth Roboz

September 29, 1951

Miss Elizabeth Roboz
Department of Biological Sciences
Stanford University
Stanford, California

Dear Miss Roboz:

Your letter of June 26th remained unanswered through an oversight for which I wish to apologize. There is no opening suitable for you of which I know, but I am keeping your documents and your photograph in case something should turn up in the future.

With best wishes,

Sincerely yours,

Leo Szilard

physiogenetics

May 11, 1959

Professor John Rock
Harvard Medical School
Boston, Massachusetts

Dear Dr. Rock:

In the January issue of the Proceedings of the National Academy, I have published a theory of the process of aging and I am now trying to compare some of the conclusions to which this theory leads with established facts. The theory permits to predict how the chances that an ovum may give rise to a viable embryo depend on the age of the mother. In order to check my conclusions against established fact, I am eager to find out how long it takes a woman who is trying to get pregnant to achieve this, depending on her age. If you were able to let me know where I could find the answers to this question, I should be very grateful.

My present address is care of Robert B. Livingston, The National Institutes of Health, Bethesda 14, Maryland.

With best wishes,

Sincerely yours,

Leo Szilard

P. S. Attached is a list of questions. Should you be able to give me any hints of where I might find the answer to any of them, I shall greatly appreciate this also.

LIST OF QUESTIONS

1. How does the litter size depend on the age of the female in animals like mice, rats, hamsters, etc.? I shall be satisfied with good data on mice. I should be particularly interested in finding data where the litter size has been compared with the number of corpus lutea so that one would know what fraction of the ova have given rise to offspring and how this fraction depends on the age of the female.
2. In the human population, assuming that a real effort is made by a woman to become pregnant, how long does it take to achieve pregnancy? What I would like to know is how this "waiting period" depends on the age of the woman.
3. How does the chance of a successful insemination fall off with the dilution of the sperm, in the case of bulls?
4. Is it known how the "permissible" dilution depends on the age of the bull?
5. How does the probability that a child is a mongoloid idiot depend on the age of the mother? *See Penrose 1933 J. Gen. 27: 219 on relation to paternal age.*
6. Who, at the School of Agriculture at the University of California, at Davis, California, is an expert on artificial insemination in cattle? With whom elsewhere could I discuss experiments that need to be done to obtain the answer to (3) and (4)?

Write to
Geoffrey Beale
Inst. Animal Genetics,
Edinburgh.
One of his associates
may have data
on this.

Herman Slatis
at Argonne Nat. Lab.
may have data
on this.

Curt Stern
at Berkeley
is your man
on this one.

Rockefeller Institute
in Chicago.
Remember him?

He is Pres. or Director of a "Genetic" outfit that sells bull sperm for art. fert.

On mongolism and parental ages, see also:

Jenkins, 1933 Am. J. Dis. Children 45: 506

Kemp, T. 1944 Acta path. microbiol. scand., suppl 54, p195

Osler, J. 1953. Mongolism. (book, publ. in Copenhagen)

In general, on parental age & mutation, see Penrose 1955 Lancet, Aug 13, pp 312-313

(over)

Sonneborn, 1956, Genetics ~~41~~: 661
1957. " 42: 397

LIST OF QUESTIONS

Jerushalmy 1938. Am. J. Hyg.

1939. Human Biology

1940. U.S. Pub. Health Rep. 55(23) June 7, Report # 2478
pp 1010-1027 Pub. Health Rep.

1941. " " 56(29) 1463-1481

I. Sutherland 1949. Stillbirths. Oxford Univ. Press

Bibliography of Recent Official Demographic Statistics.
Statistical Papers, Series M, #18. Statistical Office of the United Nations
Department of Economic Affairs, N. Y. 1954 (March)

"waiting period" depends on the age of the woman.
achieve pregnancy? What I would like to know is how this
by a woman to become pregnant, how long does it take to
In the human population, assuming that a test is made
and how the fraction of the population that is made
know what fraction of the population that is made
comparing with the number of corpus lutea so that one would
interested in finding out whether the latter size has been

How does the probability that a child is a mongoloid idiot
depend on the age of the mother? relation to paternal age?
Who, at the School of Agriculture at the University of
California, at Davis, California, is an expert on artificial
insemination in cattle? With whom elsewhere could I discuss
experiments that need to be done to obtain the answer to

It is the number of a "carrier" only that will appear for out. fert.
(3) and (4)?
Dr. Mendelsohn and parental age, see also:
Lehman 1933 Am. J. Dis. Children 47: 206
Kemp, T. 1941 Acta Paediatr. Scand. suppl 27, p 192
Latter, J. 1953. Mongolism. (Book, publ. in Copenhagen)
In general, on parentage & mutation, see Lehman 1952 Lancet, Aug 13, pp 315-317

to think
Jeffrey Beale
Book. Human
Childbirth
of his associates
have been data
on this

Human birth
at 40 weeks
that last part
on this

Just 2 years
at birth
a year
on this one

Artificially fertilized
in Chicago.
Mendelsohn's
He is the number of a "carrier" only that will appear for out. fert.

(1957)

October 17, 1960

To: Governor Nelson Rockefeller

Dear Governor Rockefeller,

On October 5th I had an extended, and rather satisfactory, private conversation with N.S. Khrushchev. Because I believe that the first approach to him after the elections might well set the tone for all subsequent conversations throughout the next four years, I am anxious to give you orally a report on both the mood and substance of my conversation. Thus I would hope to convey to you a type of approach that might evoke a constructive response.

I should be very grateful for your setting aside a few hours for an interview after the elections, and letting me know the date as soon as you are able to do so.

Should the elections be won by Senator Kennedy, I should still want to have this interview with you - believing, as I do, that the role played by the leaders of the Opposition party might be almost as important in this matter as the role played by the Secretary of State.

I am asking Miss Nancy Hanks to transmit this letter to you, with such comments as she might care to make.

Over the telephone, I can be reached at the Memorial Hospital in New York at Extension 133 - TRafalgar 9-3000. If my extension does not answer, a message may be taken by the hospital but such messages are not always delivered.

Very truly yours,

LEO SZILARD

Memorial Hospital, Room 812
444 East 68th Street,
New York 21, NY.

THE ROCKEFELLER INSTITUTE

A Graduate University and Research Center

NEW YORK 21, NEW YORK

OFFICE OF THE PRESIDENT

Dear Dr. Szilard,

I had a message from Mr. Walkowicz this morning saying that you urgently needed a secretary. I send you herewith the best secretary I know: a dictaphone. You can keep it for as long as you need it, and talk to it at any time of the day or night -- it is tireless and accurate, and does not watch the clock!

We will, of course, transcribe the tapes for you if you will get a message to me when you want them picked up. Also, if anything goes wrong with the machine, our service contract will bring you a repairman on the double.

With best regards, I am

Yours sincerely,



Mabel H. Bright

Dr. Leo Szilard
Room 804
Memorial Hospital

4 February 1960

THE ROCKEFELLER INSTITUTE

A Graduate University and Research Center

NEW YORK 21, NEW YORK

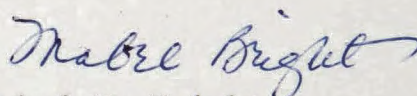
OFFICE OF THE PRESIDENT

Dear Dr. Szilard,

What a nice person you are. And what a short end of the stick you got! Perhaps you like dictaphones. Personally, I prefer candies, all beautifully and separately wrapped in glittering paper and delivered as a Valentine. I am deeply touched, for I thought the visit from your lovely wife to tell me of your appreciation was, in itself, more than adequate compensation. Thank you for this added bit of thoughtfulness.

With best regards, I am

Yours sincerely,

A handwritten signature in blue ink that reads "Mabel Bright". The signature is written in a cursive, flowing style.

Mabel H. Bright

Dr. Leo Szilard
Room 804
Memorial Hospital
444 East 68th Street
New York 21, New York

17 February 1960

315 Hicks Street
Brooklyn Heights, N. Y.

February 19, 1962

Dr. Leo Szilard
University of Chicago
Chicago, Illinois

Dear Dr. Szilard:

I heard your very thought-provoking talk "Are We on the Road to War?" on station WBAI this morning and would like a copy of your speech, as soon as possible. I am also interested in knowing if you have reached any conclusions yet as to the possibility of getting the movement you described "off the ground."

My husband and I have already discussed your idea together and have come to the conclusion that we would ~~be~~ willing active supporters. Also, there is a very large, vocal group of women in our community who have been very active, since this past summer, in participating in demonstrations here in New York and Washington and in letting our various congressmen know our point of view. However, we are really searching for a more effective method of influencing opinions and policy decisions. I am very anxious to introduce your ideas to them.

I hope that you will be able to send me the requested transcript soon. I enclose a self-addressed envelope to help facilitate this request. Thank you.

Sincerely yours,

Mrs. Thornton Rockwell

1180 Sherman Street, Apt.307
Denver 3, Colorado

December 7, 1959

Dear Dr. Weiss:

It makes me very unhappy that I can't come and let Dr. Szilard serve humanity through my typewriter. Not that I care about humanity, I care only about its individual members, some of them. Maybe it's better anyway if Dr. Szilard finds somebody else - somebody who is gentle but unconcerned, as I am neither.

I accused Dr. Szilard of instigating my return to university, but it actually was an oldfashioned typewriter which made my hands ache last July. I decided that my head is tougher than my hands and I should work with it. I am majoring in Spanish, minoring in German, but have to take all kinds of ephemeral subjects also "for my general education". That is, the subjects are not ephemeral but my knowledge of them will be. For the basic science requirement I'm taking mathematics, since it's clean and reliable. Right now we have Christmas holidays but I'm studying more than ever, since the Irregularities Committee(what a name!) has allowed me to take 45 hours worth of exams next quarter. - I'm enjoying it all, and I'm not doing too badly, but, of course, I fight with the professors.

Dr. Szilard says he will not let me know how he is, nor where he is, which shows that he cares only about humanity, and nothing about its individual members. The whole thing makes me very worried and depressed. Do you have any plans of coming to Denver?

I hope you are well and that you have nice people around you. I don't think it helps very much but Helle and I send you our best thoughts and wishes and hopes.

Sincerely yours,

Earl Roger

P.S. And please tell Dr. Szilard not to be stubborn.

answered 7/12
file M



W.P. Rogers
Zoology Dept.

The University of Adelaide
ADELAIDE. SOUTH AUSTRALIA.

The University of Adelaide

Adelaide

Department of Zoology

WPR/mnj

18th June, 1962

Dr. L. Szilard,
Dupont Plaza Hotel,
WASHINGTON 6, D.C.,
U. S. A.

Dear Dr. Szilard,

I read with considerable interest your proposal in the Bulletin of the Atomic Scientists, 18, 23. Although it is now after the date you gave in suggesting that people should write to you I wish to tell you that though I differ in some minor points I am most strongly in favour of your proposal. I am sure that many of my colleagues in this University would also take this view if your article was brought to their notice. My purpose in writing to you now is to enquire how your proposal is progressing and if it would be worth while to try and get some support for you within this University.

Yours sincerely,

W.P. Rogers

W.P. Rogers

July 12, 1962

Dr. W. P. Rogers
Zoology Department
The University of Adelaide
Adelaide, South Australia

Dear Dr. Rogers:

Many thanks for your very kind letter of June 18. The Council For Abolishing War has, in the meantime, been established as a political committee in Washington. It is a strictly American organization, which does not solicit and cannot accept any support from abroad. I am grateful to you, however, for your interest. By reading the Bulletin of the Atomic Scientists you will be able to follow the movement, since reports about it will appear from time to time in that magazine.

Sincerely yours,

Leo Szilard

LS:jl

December 9, 1963

Sir Eric Roll
Sheraton Park Hotel
Washington, D.C.

Dear Sir Eric:

Enclosed is a manuscript of a paper which I have prepared for publication in England. Any comment which you might care to make would be appreciated and would be held in confidence.

With best wishes,

Yours Sincerely,

Leo Szilard

*one copy
sent
will*

JO ROMAN • 35 EAST 67th STREET • NEW YORK 21, N. Y.

file 11

Dr. Leo Szilard
Hotel Dupont Plaza
Washington 6, D.C.

*19 March to
Brewer*

March 14, 1962

Dear Dr. Szilard,

I am writing this note specifically to encourage you in your efforts to form an effective peace lobby. If you could draw any useful time or energy from me, I would be glad to assist.

I am already making the fullest effort toward peace of which I can think. Mainly, I have worked out the enclosed plan, upon which there is still enormous work to be done. One aspect of the plan not noted on the enclosed draft is provision of travel grants to persons who will go abroad to work on the plan. Whether I can get all of this off the ground remains to be seen; not the least depending upon the success of fund-raising to be started soon.

I also do some work with the Women Strike for Peace movement. In between I'm an artist and a psychiatric social worker.

Considering all this, I'm not optimistic that I could be of direct help in your program. However, I would at least like to be kept informed of your progress and, above all, I wish you and your thoughtful program well!

Sincerely,

(Mrs.) Jo Roman

Roosevelt College

OF CHICAGO

430 SOUTH MICHIGAN AVENUE

CHICAGO 5, ILLINOIS

TELEPHONE
WABASH 2-3580

Feb. 28, 1951

Dr. Leo Szilard,
University of Chicago,
Chicago 37, Ill.

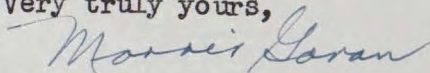
Dear Dr. Szilard:

We are planning, for the Spring of 1951, an important Conference in which your cooperation will be most welcome. We are scheduling a meeting to discuss topics which some of your writings in the Bulletin of Atomic Scientists have analyzed.

The theme of our program is science and national security. Throughout one afternoon and evening, we hope to search out some meanings of science for national welfare, aspects of freedom, whether the scientist owes his allegiance to science or to the state, and how security regulations affect scientific research.

Would you be interested in delivering an address?
We have in mind Friday, May 18, but this is not yet a set date.

Very truly yours,



Morris Goran

1155 East 57th Street
March 2, 1951

Mr. Morris Goran
Roosevelt College of Chicago
430 South Michigan Avenue
Chicago 5, Illinois

Dear Mr. Goran:

Many thanks for your very kind letter of February 28th. I regret that it will not be possible for me to give an address at your forthcoming meeting. I have accepted a visiting Professorship at the University of Colorado and I expect to be shuttling back and forth this spring which makes it impossible for me to accept invitations of this sort. I wish the best of success for your proposed meeting.

Very truly yours,

Leo Szilard

LS/sds

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unless its deferred char-
acter is indicated by the
proper symbol.

WESTERN UNION

TELEGRAM

W. P. MARSHALL, PRESIDENT

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=International
Letter Telegram

SF-1201 (4-60)

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

LLV004 CTA070

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WASHINGTON DC 30

DR LEO SZILARD

SHORELAND HOTEL CHGO

URINALYSIS TWO WHITE FOUR RED CELLS NO ALBUMIN CULTURE PSEUDOMONAS
SENSATIVE TO MANDELAMINE AND POLYMXIN RESISTANT ALL OTHER
DRUGS I AM SKEPTICAL BUT SUGGEST ADDING MANDELAMINE THIS CONTINUING
SULFA UNTIL CULTURE REPEATED

ARTHUR ROSENBAUM.

1961 DEC 1 AM 12 06

Culture III 11-28-61

March 27, 1958

Honorable Adlai E. Stevenson
135 South LaSalle Street
Chicago 3, Illinois

Dear Governor Stevenson:

Since you indicated your interest to John Nuveen when he forwarded my memo on the "Political Impact of Little Rock," I have attempted a second round, this time in a field closer to my own activity and political interest.

I discussed most of what follows with Tom Finletter and also with Paul Butler. Some of the analysis does, in fact, come from the talk with Mr. Finletter.

In any event, here it is, and I do hope I may see you shortly should Mr. Nuveen try to arrange an appointment in the near future.

Washington is troubled with many complexes. The lack of leadership at the top is both a cause and a result -- of national mood and citizens' bewilderment. It is a cumulative condition.

In foreign policy it goes back to the post-war days when, of necessity, our purpose was a negative one of containment of the U.S.S.R. We did not exploit the momentum of battle victory as did Russia to venture forth in the name of our own way-of-life. There was no capitalist manifesto, and more important, no American elan. We succeeded in maintaining the status quo in limited areas -- we contained ourselves as much as the Russians. Domestically, our post-war history was much darker and today we would like to forget or suppress the fact that the country has just emerged from a cold civil war. Although the side of democracy finally did prevail over McCarthyism, the fact is that America will suffer partial intellectual sterility and lingering traumatic shock for years to come.

It took a Russian invention to stir us. In Sputnik, we had a stimulus which, fortunately, was not physically destructive. Unfortunately, it is something Russian which again excites us; casting us in our familiar role as Communist respondent. Long before Sputniks I and II, the first satellite was the United States itself, reacting to the U.S.S.R., taking its cue and its policy from the Kremlin in reverse, revolving at their instance and following at their initiative.

Be that as it may, the thing we need most today to dis-enthrall Americans is a knowledgeable, hard-hitting opposition. The logical voice is the Democratic Party. During the Eisenhower term the Democratic Party has failed to contribute to foreign policy in any important, identifiable way. It has offered no new concepts or accepted any challenge; even the scuttling of the Grand Alliance by Dulles prior to and during the Suez crisis went virtually unnoticed on the part of Congress.

In the name of "responsibility" Lyndon Johnson led the Senate into compliance with the Eisenhower Doctrine and other absurdities. The majority leader can now point with pride, and congratulate all concerned that the Democrats weren't caught with blame for America's deteriorated Middle East position. The fact that America has been jeopardized and that the Communists' strategic position strengthened is ignored. Smart politics put the monkey on the GOP's back! It is comforting to know that after the plane in which you are flying crashes you will be absolved of any blame because you had the foresight to put someone else -- perhaps the cabin boy -- at the controls.

Congressional Democrats have indulged in pinpricks, but they have not been searching deeply nor have they applied their consummate political know-how to foreign relations. Perhaps this is partly explained by the fact that, as the Congressional majority, they feel they too are an "administration." Also, they hesitate to fall into the kind of State Department baiting associated with Jenner, McCarthy, Hickenlooper, Dirksen, Bridges and other Republicans which paralyzed the Department under Acheson. But must opposition be of the Jenner variety? There is also the Churchillian stance, where the opponent is affirmative and sets criteria by which an Administration can be measured.

Today there is talk of increasing bi-partisanship in foreign policy, as if to insure that the Democrats will exert no independent judgment. This would increase the restraint on Senators like Fulbright, Sparkman, Humphrey and Mansfield and eliminate all critical comment. Formal bi-partisanship, now, would represent a pooling of the vacuums of the Administration Republicans and the Congressional Democrats, and an agreement to do nothing, think nothing, ask no questions and merely acquiesce to Dulles.

Paucity of ideas, timidity, "smart" politics, whatever the reason, the country is left without the benefits of a critical Congressional opposition in the most important area facing America at a time when the Executive is unprecedentedly weak and floundering.

The failure of House and Senate Democrats to deal with the Administration's defaults and blunders places a double responsibility on citizens who hold no official office. One can no longer raise the

question of propriety. When the government fails the people the people must save the government. There exists the imminent danger that America will default because its men of conscience felt they didn't have credentials to speak out. At a time when Western civilization is in mortal peril, ideas and convictions must be expressed by men with a sense of moral obligation, regardless of whether they sit in chancelleries and Departments of State, or in private offices and political clubs.

Many of us feel that under these circumstances the Democratic Party's Advisory Council is the logical spokesman for a new initiative. Your Advisory Council has demonstrated its ability to survive a difficult birth. It has been obviously feeling its way, representing, as it does, divergent opinions. The time has come for your Advisory Council to assert itself. By acting to its fullest capacity, both critically and creatively, the Democratic Advisory Council would soon emerge as the American advisory council -- in fact if not in name -- fulfilling the function of a shadow cabinet in foreign relations. One must cite the example of the Churchill group preparing itself and the country by relentless but constructive political opposition during the period of Chamberlain disintegration.

Since the State Department presents no program, merely day to day improvisations out of Dulles's head in response to Soviet initiative, it is important that the Democratic policy voice not be just another echo. As the Democratic program based on our national aims and principles is unfolded it would be the only one available for public debate. Once the public takes up the discussion, the issue will be drawn in Congress soon enough. (Look at the job the Democrats have done in Agriculture! Every farm Republican must disassociate himself from Benson. The foreign policy issue can be drawn so that Dulles is equally anathema.)

In view of the fact that there is no foreign policy lobby which talks and acts politically (with the exception of the old isolationists who have repositioned themselves) we urge that you consider a series of speeches delivered in various cities by Advisory Council spokesmen, such as yourself, Tom Finletter, Chester Bowles and others. This might be similar to the Burton-Ball-Hill-Hatch effort when these Senators tramped the country preparing the ground for a United Nations organization. It must be emphasized, they spoke to a specific point. Today one would have to advocate a program -- this time containing specifics for America's economic and political offensive. Gloom and disaster predictions, however accurate, must be followed by positive alternatives. Above all, a theme or line is required.

A group of prominent citizens taking to the road and speaking their mind for no ulterior purpose, no election prize, but

to warn, elucidate and exhort, would be a moving sight. The freshness of such evangelism would stir people beyond the content and words of the speakers.

In this connection, probably the most fertile audiences are in the business and financial community. Rarely do they hear foreign relations discussed by men with your point of view. They are now being pulled together by Eric Johnston as if foreign policy were some sort of eleemosynary cause -- like the Red Cross. Never are they approached from the premise that the foreign policies of the United States have a more direct bearing on their economic future than the latest rulings of the Internal Revenue Bureau.

Like the general public, the businessman has been given an over-simplified picture. Once again the issues and choices are drawn by the extremists. Inside the Republican party the battle rages between Wall Streeters and Main Streeters. While the international oil and money interests speak through the Luce publications for an American Empire in the American Century, the industrialists and protectionists speak through the Chicago Tribune for the Fortress America concept. The argument, not only for the Republican businessman but for the whole country, is polarized in this extremist manner.

The possibility that there might exist a foreign policy which expresses national desires and attitudes other than those which coincide with certain specific oil and banking stakes, has not been ventured. A policy of broadest national interest has not tried to win sponsorship in the economic and political community, and therefore remains on the drawing-boards of a few hopeful policy planners. The presumption is that if you're not directly in the textile business, or you're not extracting minerals abroad, or financing some overseas venture, then foreign policy is small concern of yours.

We are convinced that we are on the right track in suggesting that the Democratic Advisory Council and you personally move into this area. Several months ago, prior to the NATO meeting last December, when you were called to consult with Secretary Dulles, there was a tangible sense of public relief. Washington morale had never been lower since Pearl Harbor, and there was less than no confidence in the Administration. Whatever Republican designs might have been to misconstrue and exploit your presence, the public felt reassured that a specialist, highly regarded for his honesty and skill, was at last called to the consultation room where the patient had failed to respond to old quack remedies.

The leaders in the National Democratic Party, as contrasted with the leaders of the Congressional Democratic party, are uniquely situated to give shape and hope to American foreign policy. If the concept and the vision are broad enough, the means, manpower and the expert help will rally to your assistance, for such a constructive opposition would remove the pervading sense of frustration and irrelevance from men of purpose everywhere.

Sincerely yours,

Maurice Rosenblatt

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Room 20B-221
RESEARCH LABORATORY OF ELECTRONICS
CAMBRIDGE 39, MASS.

CENTER FOR
COMMUNICATION SCIENCES

May 12, 1961

Dr. Leo Szilard
University of Chicago
Chicago, Illinois

Dear Leo:

In my own name and in the name of my friends who have read THE VOICE OF THE DOLPHINE, cordial thanks for your being so thoughtful as to have a copy of the book sent to me. As one of my friends remarked, "it provides a partial antidote to the general depression that is commonly felt."

With best wishes and warm regards.

Sincerely,

Walter

Walter A. Rosenblith

WAR:aa

Congratulations to the NAS and you!

Washington, D. C.
March 3, 1962

Professor Arthur Rosenfeld
Department of Physics
University of California
Berkeley, California

Dear Arth:

The attached letter is meant for you and those others whose names are listed in the memo "The Next Step". I should be very grateful to you for reading the attached letter and the enclosures, and for advising me as soon as possible whether you are willing to serve as an Associate.

I hope that you are not going to disqualify yourself from serving on the Board of Directors of the Council.

Sincerely,

Leo Szilard

Hotel Dupont Plaza
Washington, 6, D. C.
Telephone: HUDson 3-6000

Enclosures

P.S. I am enclosing the revised and final version of my speech, which will be printed in the April issue of the Bulletin of the Atomic Scientists.

LS

Mrs. A. H. Rosenfeld
160 Southampton Avenue
Berkeley 7, California

Dear Leo,

Arthur and I would like
you to have the enclosed
check for your program. Hope
you receive lots of others. He
will be quite interested in hearing
about how far off the ground
it's flying.

Sincerely,
Avelyn Rosenfeld

TELEPHONE MESSAGE

DURING YOUR ABSENCE

M _____ TEL. ✓DATE APR 28 1950 194 TIME 12 A M.OPERATOR H

Call Col. Will I Levy -
 at Scheuley's Monday
 Ch. 4-2200- or at his
 home Sunday Pl. 3-4500.
 This is in response to your
 telegram to L.S.
 Roenstleil.

WHEN IT IS NECESSARY TO MAKE LONG DISTANCE CALLS, PLEASE
 ENDEAVOR TO MAKE THEM BEFORE 10 A.M., FROM NOON TO
 2 P.M., FROM 5 TO 7 P.M. OR AFTER 9 P.M.

M Mr. P. Gillard

ROOM _____

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CENTER FOR INTERNATIONAL STUDIES
80 MEMORIAL DRIVE
CAMBRIDGE 39, MASSACHUSETTS

4 copies

November 8, 1957

Professor Morton Grodzins
University of Chicago
1126 East 59th Street
Chicago 37, Illinois

Dear Professor Grodzins:

I apologise not to have answered Professor Sallard's previous letter because of travelling and the normal summer confusion. As you know, I am not a physicist but an economist very much interested in international affairs and economic development. I had no doubt in the summer—and expressed it in many talks with my friend and colleague, V. Weiskopf—nor have I any doubt now that an international meeting of scientists, economists, political scientists, including high-range journalists, would be of great merit. I have no doubt personally that the University of Chicago would be a good sponsor. You may of course consider whether it would be appropriate to have one American, one English, French, Dutch, and so on, University to organise such a meeting collectively. There would also be a problem of whether the most appropriate place to hold the meeting would be in the Western Hemisphere or in Europe, for instance Geneva. I think, however, that these problems are secondary and if organisation were to take much time, one should not delay on this account. A meeting place in Canada or Jamaica would also be eminently suitable.

Sincerely yours,

Paul M. Rosenstein-Rodan

PMRR:ms

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IN THIS COLLECTION

for file

HEADQUARTERS
SIGNAL CORPS ENGINEERING LABORATORIES
FORT MONMOUTH, NEW JERSEY

REFER TO:

ADDRESS REPLY TO:

SIGEL-RTB-3
Project 112A

Director
Evans Signal Laboratory
Belmar, New Jersey

MAR 3 1952

University of Chicago
Institute of Biophysics
Chicago, Illinois

Attention: Professor L. Szilard

Gentlemen:

Inclosed herewith is a copy of a talk intended for presentation at the forthcoming American Physical Society meeting in Columbus, Ohio in March. The basic idea is a kind of converse to Maxwell's demon, namely to see how much information can be bought for some fixed expenditure of entropy. It leads to a thermodynamic limit to the precision of any measurement, "A Phenomenological Uncertainty Principle".

I hope you find it of interest and would appreciate your comments.

Very truly yours,

Jerome Rothstein

1 Incl.
"A Phenomenological
Uncertainty Principle"

JEROME ROTHSTEIN
Solid State Devices Section
Thermionics Branch

RECEIVED
MAR 3 1952

MAR 3 1952

A Phenomenological Uncertainty Principle

By Jerome Rothstein
Signal Corps Engineering Laboratories
Fort Monmouth, New Jersey

Information is conveyed by making choices from an ensemble of alternatives, be they letters of the alphabet as in a written text, or the dots and dashes of Morse code. The amount of information conveyed by a message is conveniently measured by the logarithm of the total number of equivalent messages that might have been sent. The greater the uncertainty at the destination as to what the message would be, the greater is the amount of information conveyed when a definite message is selected. This logarithmic measure of a prior uncertainty or later information, or its generalizations, has been called entropy in communication theory by analogy with statistical mechanics.

In physics, admissible information is provided by measurement, with information defined as above. For any measuring apparatus presents the observer with a set of alternatives, namely the ensemble of possible indications of the measuring apparatus. Measurement chooses from this ensemble. As we have shown elsewhere, this leads to an identity in logical structure of the problems of measurement and of communication, and exhibits the entropy of information theory as a legitimate generalization of the entropy of physics. Physical information turns out to be essentially negative entropy.

It is thus not in the least surprising that making a measurement, i.e., acquiring information, involves increase in entropy for system of interest plus means of observation. The irreversibility of measurement is thus basically phenomenological, rather than quantal. The existence of a thermodynamical entropy equivalent for an item of physical information was also derived by Szilard more than twenty years ago. In a classical paper he showed that a Maxwell demon could violate the second law of thermodynamics unless he paid for

the information on which he acted with entropy increase elsewhere. If the demon gets his information from measurement, the price is paid in full.

von Neumann, in an elegant and general discussion, considered quantum mechanical measurement and came to the same conclusion.

Let us consider now, not how to be demons and use information to decrease entropy, but the converse problem of how much information we can get in return for some definite expenditure of entropy. A thermodynamic limit to the precision of a measurement will result. For clarity consider the following simple case; a similar argument obtains in general. Suppose the only knowledge we have about some quantity initially is that it falls in the range between o and u , say, all values equally probable. A measurement is made, as a result of which it is known to fall within the range Δu . How much information has been obtained? Consider the initial interval u as divided into sub-intervals, each of length Δu . There are $u/\Delta u$ such sub-intervals. The measurement has chosen one of these, hence a choice has been made from $u/\Delta u$ alternatives.

The logarithm of $u/\Delta u$ therefore represents the information yield of the measurement. When it is multiplied by Boltzmann's constant it yields the thermodynamical equivalent of the information. By the results of Szilard and von Neumann, an amount of entropy ΔS had to be generated in making the measurement of at least this amount. If this entropy were not generated, the information could be used to lower the entropy of the system by $k \log (u/\Delta u)$ and the second law would be violated. We thus conclude that

$$\Delta S \geq k \log (u/\Delta u)$$

We can rewrite this inequality in the form

$$\Delta u \geq u \exp (-\Delta S/k)$$

It now says that the accuracy of any measurement is limited by how much entropy can be usefully expended in order to perform the measurement. The larger the ΔS available, the higher the accuracy which can be obtained. Now the

maximum ΔS is fixed by the conditions of the experiment, for it can not exceed the quantity of entropy which would be generated if the entire experimental set-up were to be brought to thermal equilibrium from the state it was in before the measurement.

The practical limitation placed on the accuracy of a measurement by this relationship can be entirely neglected for macroscopic measurement. It is hundreds of orders of magnitude smaller than errors from other sources. We believe, however, that it is of significance for theory. It is clear from the last equation that perfect accuracy in measurement is to be achieved at the cost of infinite entropy increase, and hence is unphysical. Now the uncertainty principle has made it clear that contradiction with experiment arises if one combines sharp values of complementary variables. The mutually exclusive ways in which we are forced to obtain information about complementary variables has led quantum theorists to renounce belief in the reality of simultaneously sharp values, and to the doctrine that an essential part of any physical reality is the means used to observe it. We believe the foregoing discussion shows that individual p's or q's, if more sharply specified than thermodynamically allowed by the means of observation, are as illegitimate as simultaneous p and q values violating the uncertainty principle. We believe that thermodynamics implies a phenomenological uncertainty principle for measurement of a single quantity no less binding on physics than the famous quantal one.

It would be rash to predict where this principle might lead. We venture to suggest, however, that it may help in dealing with some of the divergencies plaguing physics which can't simply be renormalized away. For example, the divergent classical self-energy calculation for the point electron (which carries over to quantum mechanics), rests on the integration of a point function in the neighborhood of a singularity, divergence arising from contributions infinitely close to the singularity. But what justification is there

to add separate contributions from points operationally indistinguishable? Is it not analogous to Gibbs' paradox, which leads to non-additivity of entropy only when one considers complexions as distinct when they are in fact operationally indistinguishable? We therefore advance the speculative hypothesis that divergencies may have their origin in ascribing theoretically sharp values to operationally uncertain parameters.

August 20, 1957

Dr. Paul Rosenstein-Rodan
c/o Center for International Studies
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Dr. Rosenstein-Rodan:

At the Pugwash meeting, V. Weisskopf told me that you might be interested in the kind of problems with which I am concerned. Therefore, I am sending you some material which is self-explanatory.

I should much appreciate your letting me know what you think of the proposal in general and also what you think of the possibility of trying to interest the Center in this, if the University of Chicago does not choose to assume responsibility for meetings of this sort.

Very sincerely yours,

Leo Szilard

m
Encl.

716 De l'Epee Ave.,
Apt. 10,
Montreal, P.Q.,
Canada.

May 29, 1951.

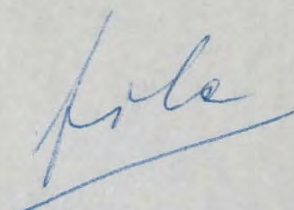
Prof. Szillard,
U. of Colorado.

Dear Sir, I have spoken to Prof.
Puck in Boston after he
delivered at the Massachusetts Gen.
Hospital seminar. Apparently
there was some curiosity as to my
"feeling" and "interest" in biophysics.
This I believe I answered to Prof.
Puck's satisfaction as he asked me
to write to you, and Dr. Cann, in-
quiring as to the types of problems
on which I can work for my Ph.D.
thesis and under your advisement.

I would be grateful, therefore, if you would kindly send me some information as to the nature of the problems available which might interest me.

I am led to understand that some financial aid in the form of an assistantship would be made to me should I pursue my graduate studies at the U. of Colorado.

Yours sincerely,
Leonard Rosenthal


March 19, 1953

Dr. Carl G. Rossby
c/o Department of Meteorology
University of Chicago
Chicago 37, Ill.

Dear Dr. Rossby,

Dr. Maurice S. Fox tells me that you would welcome my writing to you about him.

I have a very high regard for Dr. Fox, both as a scientist and as a person. His scientific interests are broad. His background has been in physical chemistry, and he is able to integrate and apply the knowledge and techniques he has acquired in other areas in a very capable fashion. He has both imagination and critical ability, characteristics which help make him a first class scientist. He feels happy in a laboratory and is a well-balanced, stable person who is very pleasant to work with. I say this from the experience I have had working very closely with him for the past two years. He is a man of integrity and I have a high regard for his character as a whole.

I understand that his first training was in meteorology. He came to work with me immediately after he had obtained his Ph.D. in physical chemistry at this University in the spring of 1951, and he very quickly became a capable microbiologist. I believe that he felt that pure physical chemistry is a rather narrow field and that biology concerns itself with deeper mysteries and offers a greater challenge. He first worked

with me on a grant from the Rockefeller Foundation, and presently holds a U.S.P.H. fellowship.

If you wish me to be more specific in any respect please do not hesitate to let me know.

With best wishes,

Leo Szilard

LS/llt

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
LABORATORY FOR NUCLEAR SCIENCE
CAMBRIDGE 39, MASSACHUSETTS

May 23, 1962

Rm. 26-567

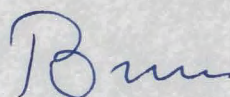
Dr. Leo Szilard
Hotel DuPont Plaza
1500 New Hampshire Ave., N. W.
Washington 6, D. C.

Dear Leo:

This is just a note to thank you and Mrs. Szilard
for sending me the "Voice of the Dolphin". I shall
enjoy reading it during my trip to Italy.

With best wishes,

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'Bruno'.

Bruno Rossi

BR/mtc

July 29, 1955

Mr. Leo Rosten
McArty Hotel
148 South McArty Drive
Beverly Hills, California

Dear Mr. Rosten:

Enclosed you will find three documents marked 1, 2 and 3, which speak for themselves. If you find time to read them, I would appreciate your comments.

I wonder whether you think that the manuscript might be suitable for Look Magazine, and also whether you might think that Mr. Cowles should be approached concerning accepting membership on the Panel described in document 2?

I am not submitting the manuscript officially to Look at this time.

With kind personal regards.

Sincerely,

LS:srr

Leo Szilard

Enclosures

(Translation)

Rotary Club of Ramos Mejía
Founded March 19, 1957 - District 489
Casilla de Correo 38, Ramos Mejía, Argentina

Ramos Mejía, April 12, 1960

Doctor
LEO SZILARD

Distinguished Doctor:

A newspaper item published in the daily "Clarín" of Buenos Aires, has acquainted us with some aspects as given in an article by Margaret Higgins, of the "New York Herald Tribune" and of the ailment from which you suffer.

This report expresses your feelings toward humanity, and informs us of your anguished question: "Have I contributed toward maintaining peace, or, on the contrary, have I worked toward the destruction of humanity?"

Permit us, Dr. Leo Szilard, to make known to you our feeling as Argentines, and also our feeling as Rotarians:

We Argentines are supporters of the doctrine:

"America for the World"

and we Rotarians throughout the world, in our objectives,
search for:

"intelligence, good will and peace among nations, through the companionship engendered by business men and professional men, united under the ideal of service".

Therefore, holding close to us as the worthiest of our human sentiments, and which the history of our nation permits us to put on display before the whole world, for the Argentines have always founded their activities in favor of liberty, and on peace for all in the hope of securing the completest possible harmony of feeling and respect for the rights of all nations, we must write this message to you, trying to convey to you one more expression of spiritual tranquillity.

Dr. Leo Szilard, our Rotarian slogan concisely states:

"Give of yourself, without thinking of yourself"

and "He benefits best, who serves best".

These Rotarian axioms should mean a great deal to you!

You, Dr. Leo Szilard, gave, without thinking of yourself, of your intelligence as a scientist, offering to the world the fruits of your knowledge.

You will not bear the future responsibility for the real profit that the world can give to the elements that can assure welfare for humanity and preserve world peace, if those who control the destiny of the world do not succeed in solving the principles (or problems) of living together, and making use of whatever means they have for coming to an agreement on their differences of opinion.

Your function as a human being in this present community required you to offer your knowledge to the person who could best make use of your wisdom for the good of all humanity. The few years that have passed since Nagasaki and Hiroshima, speak well and with certainty, attesting to the fact that your wise experience was offered in the best human sentiment, which at that historical moment, required the united efforts of all of us.

Dr. Leo Szilard, you have the obligation to receive the medical attention which your condition requires, especially since yours is a life which all of humanity needs, in the assurance that your human presence represents the best use of your experience.

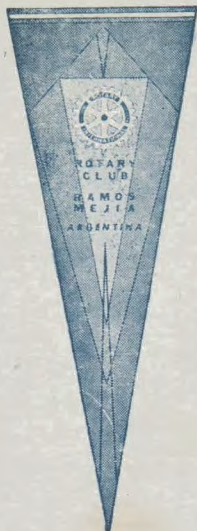
You, yourself, cannot renounce a right which we all have, in asking that you rise above your thoughts, allowing your science to continue serving for the good of all humanity.

Dr. Leo Szilard, we beseech you with our feeling as Argentines, lovers of all that is good will and peace among all nations.

Dr. Leo Szilard, the Rotary Club of Ramos Mejía, Buenos Aires, Republic of Argentina, looks forward to your reply to this sincere expression of feelings which unite us and characterize us, but the good news of your complete return to health will be reply enough for us.

JUAN J. PUJOL
Secretary

ESTEBAN TRIAS
President



Rotary Club de Ramos Mejía

FUNDADO EL 19 DE MARZO DE 1957 · DISTRITO 489

Dirección Postal: CASILLA DE CORREO 38 - Ramos Mejía (Pvcia. Buenos Aires Rep. Argentina)

Ramos Mejía, abril 12 de 1960.-

Doctor
LEO SZILARD

Distinguido doctor:

Una noticia periodística publicada por el diario Clarín, de Buenos Aires, nos ha permitido conocer aspectos que hacen a un reportaje que le efectuará la periodista Margaret Higgins, del "New York Herald Tribune", y de la dolencia que le aqueja.

La noticia traduce su sentimiento hacia la humanidad, y nos dice de su angustioso interrogante: "He contribuido a mantener la paz, o por el contrario he trabajado para la destrucción de la humanidad ?".

Permitanos Dr. Leo Szilard, manifestarle nuestro pensamiento de argentinos, y para más, nuestro sentimiento rotario:

Nosotros, los argentinos, propugnamos la doctrina: "América, para todo el mundo".

y nosotros, los rotarios, de ~~todo~~ el mundo, en nuestros objetivos, perseguimos:

"la inteligencia, la buena voluntad y la paz entre las naciones, por el compañerismo de sus hombres de negocios y profesionales, unidos en el ideal de servicio".

Por lo tanto, abrigando en lo más caro de nuestro sentir humano, y que la historia de nuestro pueblo nos permite exhibir al mundo entero, puesto que los argentinos siempre fundaron sus acciones en pro de ~~la~~ libertad, y la paz de todos sus semejantes en procura de la más completa armonía de sentimientos y respeto por los derechos de todas las naciones,

// -



Rotary Club de Ramos Mejía

FUNDADO EL 19 DE MARZO DE 1957 - DISTRITO 489

Dirección Postal: CASILLA DE CORREO 38 - Ramos Mejía (Pvcia. Buenos Aires Rep. Argentina)

al Dr. Leo Szilard.-

no podemos menos que dirigirle la presente, procurando llevar una expresión más de tranquilidad a su espíritu.

Dr. Leo Szilard, nuestro lema rotario, expresa concisamente:

"Dar de sí, sin pensar en sí".

y "Se beneficia más, quién mejor sirve".

Estos axiomas rotarios debieran a Ud. decirle, mucho !

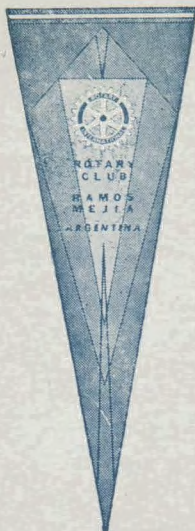
Ud. Dr. Leo Szilard, dió sin pensar en sí, la inteligencia de su ciencia, brindando al mundo el fruto de sus conocimientos.

No cabe a Ud. la responsabilidad futura del real aprovechamiento que el mundo preste a los elementos que pueden asegurar un mejor bienestar de la humanidad y perseverar la paz mundial, si quienes son depositarios de los destinos del mundo, no logran solucionar sus principios de convivencia humana, y para arbitrar sus diferencias extremen los medios a su alcance.

Su función como ser humano en esta comunidad actual exigía de Ud., brindar su saber a quien mejor podría utilizar sus conocimientos en pro de la humanidad toda.- Los pocos años vividos desde Nagasaki y Hiroshima, dicen bien a las ciertas que su sabia experiencia fué ofrendada al mejor sentimiento humano que en el mundo, en ese momento de la historia, requería de los esfuerzos mancomunados de todos.

Dr. Leo Szilard, Ud. tiene la obligación de recibir la atención médica que su estado requiere, cuanto más que es una vida a la que la humanidad entera necesita, en la seguridad de que su presencia humana, es un respeto para el mejor uso de sus experiencias.

/// -



Rotary Club de Ramos Mejia

FUNDADO EL 19 DE MARZO DE 1957 - DISTRITO 489

Dirección Postal: CASILLA DE CORREO 38 - Ramos Mejia (Pvcia. Buenos Aires Rep. Argentina)

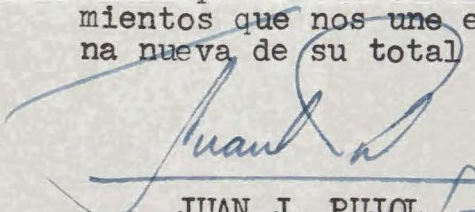
al Dr. Leo Szilard.-

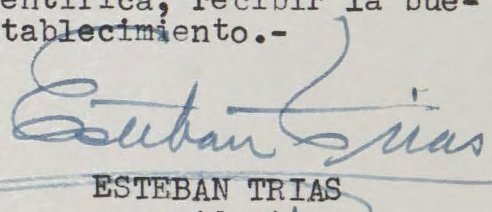
No puede Ud. renunciar por Ud. mismo a un derecho que tenemos todos, en pedirle que supere sus pensamientos y que su ciencia siga sirviendo para beneficio de toda la humanidad.

Dr. Leo Szilard, se lo pedimos con sentimiento de argentinos, amantes de todo lo que sea libertad, paz y confraternidad.

Dr. Leo Szilard, se lo pedimos con sentimiento de rotarios, amantes de todo lo que sea la buena voluntad y la paz entre todas las naciones.

Dr. Leo Szilard, el Rotary Club de Ramos Mejia, Buenos Aires, República Argentina, espera por toda respuesta a esta sincera expresión de sentimientos que nos une e identifica, recibir la buena nueva de su total restablecimiento.-


JUAN J. PUJOL
secretario


ESTEBAN TRIAS
presidente.

THE UNIVERSITY OF CHICAGO
THE ENRICO FERMI INSTITUTE
FOR NUCLEAR STUDIES

6/16/61

Dear Dr. Szilard,

Professor J. Rotblat, West Hampstead,
London, has sent you a tome of 800 pages
(weight 4 lbs.), "Proceedings of Sixth Pugwash
Conference, Moscow, U.S.S.R." Do you want
me to send it on?

Kind regards.

Sincerely,

Harold Marm

20423 Lander Drive
Woodland Hills, California
June 9, 1962

Leo Szilard, Ph.D.
Department of Biophysics
Enrico Fermi Institute for Nuclear Studies
University of Chicago
Chicago, Illinois

Dear Dr. Szilard:

Upon the recommendation of Dr. Alexander Kolin, who was a biophysicist at the University of Chicago before coming to the University of California in Los Angeles, I am writing you in hopes of gaining information regarding the cancer therapy you received which led to your remarkable improvement. I apparently have a condition which is very similar to the diagnosis of your case, according to the opinion of Dr. Kolin.

I would be deeply indebted to you if you could find the time to tell me who your attending physician was and how it was arranged to go to the Sloan-Kettering Institute for the type of treatment which gave you relief without the intervention of surgery. I realize that you are extremely busy, but I hope you appreciate the anxiety and urgency of the situation facing me.

Very sincerely yours,

Laurence W. Roth

Laurence W. Roth, Ph.D.

file

Leo Szilard, Ph.D.
Hotel Dupont Plaza
Washington, D. C.

Dr. Laurence W. Roth
20423 Lander Drive
Woodland Hills, California

Dear Dr. Roth:

I assume on the basis of your letter of June 9th that you have a carcinoma of the bladder. If this is the case and the examination shows that the tumor could be fully removed by an excision of the bladder without having to remove the bladder as a whole then surgery is the first, and in my opinion, the only choice. If the examination shows that the tumor could not be fully removed except by removing the whole bladder, and if the biopsy shows that the tumor is highly malignant then my first choice would be X-rays. In such a case the tumor should not be first surgically removed and the bladder should not be opened. If the tumor responds to radiation, they may want to give the bladder 7,000 r units in the hope of curing the cancer. If the tumor does not respond to radiation they may want to stop at 4500 r and remove the bladder by surgery.

My recommendation is that you consult my Urologist, W. F. Whitmore, Jr. at Memorial Hospital in New York, as a private patient. If the examination shows the surgery may cure you without removal of the bladder, he is the best Urology surgeon I know of. If the bladder is not opened and the decision is radiation therapy, then I would go to the Royal Marsden Hospital, Fulham Road, London S.W. 3 and consult Mr. Wallace, a surgeon, who frequently recommends radiation therapy in which the Royal Marsden Hospital has more experience than any other place, or else I would go to Dr. Kaplan in charge of Radio Therapy at the Medical Center, Stanford University, who is now interested in curing bladder cancer by radiation and who has very excellent equipment. Incidentally, my own internist took care of me at Memorial Hospital is now on an extended visit at Royal Marsden in London. His name is Dr. Arvin Glicksman, and I am certain he would help you to make the right contact in London.

Sincerely,

Leo Szilard

Jim Fort

Biology Dept.

M.I.T.

Cambridge 39, Mass

August 21, 1957

Prof. Leo Szilard
Quadrangle Club
57th St. & University Avenue
Chicago 37, Illinois

Dear Prof. Szilard:

I have joined Leviathal's group for the coming two or three years. The situation here looks very promising for doing research and learning biology (Hotchkiss and Luria will ~~be~~ be here as visiting professors) I hope ~~we~~ I shall have the opportunity of seeing you from time to time.

Sincerely,
Frank Rothman

Dear Prof. Szilard,

Raymond Byrne in Levinthal's laboratory has measured the maximum time of synthesis of an alkaline phosphatase molecule and found it to be 4 seconds at 37° when the cells are growing exponentially in a synthetic medium with a doubling time of 90 minutes. Short pulses (2, 4, 6, 9 ...sec) of tritium labeled leucine were given to a culture of a constitutive phosphatase strain. The enzyme was purified in each case and counted. Byrne derived the expected relationship for counts/enzyme activity ^{vs. time} to ~~be exponential~~ increase exponentially ~~with time~~ until all molecules are uniformly labeled and to then become linear. In the experimental plot (counts/enzyme activity vs. time) he could not get good points in the exponential portion but after 5 sec. the plot is linear and extrapolates back to 2 sec. This time according to his equation is half the time of synthesis.

Obviously there are many factors such as pool equilibration, folding of the protein, etc. which make this a value for the process of making a finished enzyme from extracellular leucine, not the time to make a polypeptide chain.

With best regards,

Frank Rothman

file

THE UNIVERSITY OF ROCHESTER
SCHOOL OF MEDICINE AND DENTISTRY

POST OFFICE BOX 287, STATION 3
ROCHESTER 20, NEW YORK

10 January 1952

ATOMIC ENERGY PROJECT
(ADMINISTERED BY THE DEPARTMENT OF
RADIATION BIOLOGY UNDER CONTRACT WITH
THE U. S. ATOMIC ENERGY COMMISSION)

Dr. L. Szilard
Inst. Radiobiology and Biophysics
University of Chicago
Chicago, Illinois

Dear Dr. Szilard:

I want to thank you for your hospitality both at your laboratory and at the luncheon table, for the pleasure of your company, and for your interest in the work we are doing at Rochester. I managed to bring the Chemostats back to Rochester without breakage and we are now setting them up. I am convinced that they will prove to be very useful tools in our work. Should we get any interesting information with them, I will communicate with you.

I am enclosing the most recent of my papers. I don't have any more reprints of the earlier papers, but I believe that Maurice has copies. I would be happy to receive reprints of any of your future publications.

If you can manage to pass through Rochester at any time, please let me know and I will be happy to return your hospitality.

Sincerely,

Aser Rothstein

Aser Rothstein

AR/mam

United Press International

GENERAL OFFICES
NEWS BUILDING, 220 EAST 42ND STREET
NEW YORK 17, N. Y.

Written From

WASHINGTON BUREAU
714 NATIONAL PRESS BUILDING
WASHINGTON 4, D. C.

March 1, 1962

Dear Dr. Szilard,

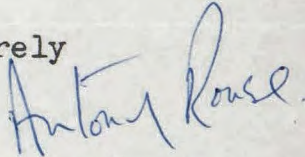
This to say that both Nadia and I enjoyed dining with you both very much on Tuesday and that I was most flattered to be asked to join you and that I thank you for a most pleasant dinner.

I hope my dispatch did justice to you. In any case meeting you both gave me great pleasure and my editor says this was quite clear in my supposedly objective copy.

I enclose the material you lent me and the copy of your book -- which I am starting in the proof edition your wife gave me.

Please give her my regards and accept my best wishes for the success of your peace lobby.

Yours sincerely


Antony Rouse

October 4, 1961

Harry Rowen
c/o Paul Nitze
U.S. Department of Defense
Washington 25, D. C.

Dear Rowen:

Attached are the lists which I have used. If you have any newer lists which are in the public domain, I would greatly appreciate your mailing them to me.

Also I would greatly appreciate your having somebody look at all of the cities of over 100,000 listed, both American and Russian and letting me know which cities are clustered (cities within a distance of less than forty miles from other cities within the group).

Finally, I should greatly appreciate your sending me two lists of American cities: one list containing those cities which have a strategic bomber or rocket base located within thirty miles of the city and another list containing those cities which have a strategic bomber or rocket base within sixty miles of the city.

Needless to say, I would not want any information that is not publicly available.

Enclosed is a manuscript, "The Mined Cities" (sent to Look Magazine with the attached covering letter), which you might find amusing. Enclosed also is a copy of a recent issue of The New Republic containing my article on the Berlin issue. The premise upon which it is based is explicitly stated in the second paragraph of the article; I know, of course, that many people, including Paul Nitze, would not accept it as valid.

Yours very sincerely,

Leo Szilard
Hotel Dupont Plaza
Washington 6, D. C.

P.S. Please have the attached list of cities returned to me at your convenience.

LS



THE CHESAPEAKE AND OHIO RAILWAY COMPANY

TERMINAL TOWER • CLEVELAND 1, OHIO

BETTY ROYON

STAFF ASSISTANT TO THE CHAIRMAN

April 11, 1961

Dear Professor Szilard:

"The Voice of the Dolphins" will occupy the place of foremost honor in my library. I am thrilled to be the possessor of an advance copy, and proud to claim personal acquaintance with the distinguished author.

With all good wishes,

Sincerely yours,

Betty

Professor Leo Szilard
Memorial Hospital, Room 804
444 East 68th Street
New York 21, New York

BR: jmp



ASSISTANT SECRETARY OF DEFENSE
WASHINGTON 25, D. C.

File 4 3/55

DEC 15 1961

DEPUTY DIRECTOR OF
DEFENSE RESEARCH AND ENGINEERING

Dear Leo:

Thank you for sending me your proposal of September 21st concerning a National Society of Fellows. I see that Adam Yarmolinsky has undertaken to sound out Clark Clifford whose name we discussed when we talked to you about this. I also discussed this with L. A. Hyland and will try him again for suggesting a possible organizational head. I think the success of the venture will depend on numerous factors including the following:

1. The reputations of the Fellows and correspondingly their access to the appropriate communities, particularly the scholarly and scientific communities.
2. Their ability, as individuals, to define problems and to work on them.
3. Their interrelationship and the sympathetic, symbiotic, catalytic effects they may have on each other. This could be very great, but on the other hand it could fail altogether. It would probably be desirable to look for at least one thoughtful leader whose presence would tend to have the desired catalytic effect on the total group, although I suspect you cannot predict such effects ahead of time.
4. Their coupling to the Administration. Not only are many people too busy to think effectively about the long term implications of current actions and issues--they are often not even able to spend time talking thoughtfully or listening receptively. It will be important, therefore, to examine this coupling all the time and, if it is not satisfactory, to figure out ways of making it so. The sympathy and desire of a few key officials would be enormously important in this connection.

So far as names are concerned, I have thought of a few without, in some cases, being able to visualize clearly just how they would be "plugged" in. They include the following:

1. H. J. Mueller - his interest in biological matters relating to population control should be considerable, but, in addition, he has the

almost unique distinction of both being a professional historian and a Nobel Laureate in a scientific field. He is accustomed to thinking in long range terms. It is a little hard to see just where his great talents could best be utilized. There are, of course, all kinds of demographic problems both here and abroad which will alter greatly our economic and political and military posture in another generation to which he might address himself.

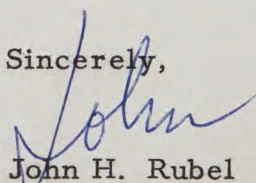
2. Harrison Brown - has already addressed himself to a number of problems relevant to public policy present and future. There are all kinds of problems he might work on but possibly conservation is one of the most important. I suspect that what is economical by current yardsticks or what is considered uneconomical would look quite different if evaluated on the basis of more long range criteria. Maybe, for example, we should be developing nuclear power plants so that we can save coal so that after a thermonuclear war in the year 2000, we would have a better chance starting up again. Harrison Brown has also addressed himself to the "power elite" theme which was struck by President Eisenhower in his farewell address. Some of the problems in this regard are closely related, it seems to me, to the economics of disarmament on which considerable additional work might perhaps be profitably done.

3. Peter Drucker - might find it very stimulating and mutually beneficial, to look hard to the Government's management problems close up in a concentrated way. Senator Jackson's sub-committee and study on government policy machinery represents a prodigious effort and although it has been completed, follow-up by a noted scholar might enhance the gains and capitalize on the prior effort.

4. It seems to me that this country really lacks thoughtful and experienced military scholars. There are a few instances in which these men have been used in a consulting capacity, but even these, like General Taylor, are assignments with heavy administrative burdens. Of course, most military people are not very scholarly. I wonder, however, if a man like General White, who has accumulated a lifetime of diplomatic, political and military experience, who is a really outstanding leader of men and, I think, intelligent and sensitive, would be able and willing to join a group of scholars. He might have a lot to contribute.

This draft was so old I had planned to discard it until you told me to send it in our talk last week.

Sincerely,



John H. Rubel

Dr. Leo Szilard
Dupont Plaza
Dupont Circle and New Hampshire Ave., N. W.
Washington 6, D. C.

1155 East 57th Street
Chicago 37, Illinois
December 14, 1950

Mr. B. A. Rubin
Brookhaven National Laboratory
Upton, Long Island
New York

Dear Rubin:

The enclosed paper might interest you. It will appear
in the December issue of the Proceedings of the National
Academy of Science.

Sincerely,

Leo Szilard

WV

LAWRENCE RUBIN

70 SANDRA DRIVE
TOTOWA BORO, N. J.

CLlifford 6-6021

December 3, 1961

Dr. Leo Szilard
University of Chicago
Chicago, Illinois

Dear Dr. Szilard,

I had hoped for months to see just such an organization as your "Council for Abolishing War". There is a desperate need for such a lobby. The enclosed check is very small indeed, but I hope it can help. Good luck.

Sincerely,
Larry Rubin

MRS. DAVID L. RUBINFINE
35-12 165TH STREET
FLUSHING 58, N. Y.

Dear Dr. Szilard:

My husband and I feel fortunate indeed, that his old friend and colleague Margaret Brenman Gibson, thought to send us a copy of your speech "Are We On The Road to War?" As Margaret has said, "for the first time we felt hopeful that with such a plan, led by a man like you, we might yet avert a nuclear catastrophe."

My husband is a psychoanalyst connected with the New York Psychoanalytic Institute. We have three children and as we've become increasingly disturbed about fall-out shelters, contamination of our food etc - we have become involved in various peace movements. And Up Until Now, it has been with a feeling of futility - so we wish to not only thank you but to pledge

ourselves to those tasks and objectives that you suggest in your speech.

Most of our friends are as excited as we are by the possibility of such a movement and have ordered copies of the speech for their friends.

I, myself, have just received 50 copies which I am in the process of distributing and I'm sure you will hear from a great many of these people.

These are the names of a few of our friends who agree with us - and you!

- 1.) Dr. + Mrs. Irving Sternschein
135 Central Pk. West, N.Y.C., N.Y.
- 2.) Dr. + Mrs. Ernest Marcus
5 Peter Cooper Rd., N.Y.C., N.Y.
- 3.) Dr. + Mrs. George Wiedeman
4 E. 95th St, N.Y.C., N.Y.
4. Dr. + Mrs. Maury Golob
182-61 Avon Rd., Jamaica Estates, L.I.
5. Dr. + Mrs. Irwin Solomon
1148 Fifth Ave, N.Y.C., N.Y.
6. Mr. + Mrs. Robert Rosenwald
135 Central Pk West, N.Y.C.

More will be forthcoming, I'm sure!

Sincerely,

Mrs. David L. Rubinfine

LEO SZILARD

The University of Chicago
Chicago, Ill
April 17, 1955

Confidential

Mr. Raymond Rubinow
Room 510
55 Fifth Avenue
New York, N. Y.

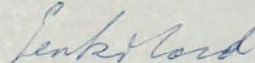
Dear Mr. Rubinow:

In connection with the project which I discussed with you, our main concern at present is to make sure that we can obtain the cooperation of certain members of the Russian Government. One approach to this problem is to ask the Russian Government, at the outset, to contribute half of the expenses of the work of the Commission. (The Board is purely an American body and no contribution to its expenses will be accepted from any sources other than American.)

Marshall MacDuffie has undertaken to explore this in a preliminary way by discussing the issue with members of the Russian Embassy. Subsequently, he ought to pursue this matter through his personal contacts in Moscow. As of right now he would be free to make such a trip. On this occasion he would have to act as our counsel and could not be free to exploit his experiences journalistically as he did on the occasion of his two previous trips. For this reason I believe that we ought to offer him a fee of \$3000. in addition to his expenses which would not exceed another \$3,000., if his stay in Moscow is limited to one month.

Through the discussions that I have with those who offer their help and advice, my thinking is gradually evolving and the attached Addendum to the Memorandum which was sent you earlier will bring you up to date.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Leo Szilard", written in a cursive style.

Leo Szilard

LS/nr
encl

April 16, 1955

ADDENDUM TO MEMO OF FEBRUARY 28.

Please note that the function of the Board is to judge the recommendations of the Commission from the point of view of enlightened self interest and that it must, therefore, be composed of American citizens only. The function of the Commission is to conduct an enquiry into what appears to be both desirable and likely to be acceptable to the various governments. The Members of the Commission must not regard themselves as representing America's interest and they may be foreigners, as well as Americans.

I have asked a few men whose names are given in the Memorandum whether they would make themselves available on a full time basis for the work of the Commission and I shall ask some others the same question. All these are tentative enquiries for the purpose of finding out whether qualified men of standing would make themselves available. The final composition of the Commission will not be determined until the point is reached where we are ready actually to set up an operation.

The response of those so far asked is helpful from the point of view of guiding our further thoughts and it appears that about half of those approached say that they will make themselves available. It is my impression that it will be possible to obtain the services of the right kind of people for the work of the Commission.

To my mind it is not desirable to have the Commission composed of experts. The Members of the Commission should be laymen who have faith in the possibility of working out an arrangement. In addition they must have imagination and critical ability. They can greatly profit by discussing their problems for days and, perhaps, weeks with

experts, including those who have past experience in International negotiations. To learn from the experts is important but the experts must not run the show.

Since an important function of the Commission is to explore the thinking of Members of the Russian, Chinese, British and American governments, it would be well to obtain half of the financial support needed for the work of the Commission from the Russian government. Attempts in this direction will be made. The other half ought to come from American sources, from private individuals, Foundations or, conceivably, from the Government.

Since the work of the Commission consists in an enquiry, the fund needed for its work could be administered by a University or some other tax exempt educational or research institution. Donations to this fund would, therefore, be tax exempt.

The work of the Board is more political and funds for its operation would have to be administered in a different manner. The financing of the Board must come from purely American sources.

Leo Szilard

Rudich & Fulton, Insurance

1090 SOUTH LA BREA AVENUE
LOS ANGELES 19, CALIFORNIA
WEBSTER 3-8408

February 7, 1962

Dr. Leo Szillard
Hotel DuPont Plaza
Washington, 6, D. C.

Dear Dr. Szillard:

I had the good fortune to hear you talk when you were recently in Los Angeles. It was at the Santa Monica Civic Auditorium under the auspices of the Los Angeles Committee for Sane Nuclear Policy.

I have been awaiting a copy of your address, which I had requested, but I have not as yet received same. In the interim, I have given a great deal of thought to your ideas, particularly with reference to the need for creating a lobby in Washington to work for peace. I was very much impressed with your plan, as I share your opinion that it is necessary to be represented in Washington by competent people who will call upon the various public officials to urge such a program that will maintain peace.

In the short time that has transpired since you were here, I have taken every occasion to discuss your ideas with various friends and acquaintances, and without being able to present the picture very adequately because of my lack of data, I nevertheless succeeded in getting a number of favorable responses. I believe that in addition to my own pledge of 2% of my annual income, I can pledge to obtain at least ten other people to do likewise. Furthermore, with a full understanding of the necessity of proceeding upon the basis you have outlined, I feel that these people will also undertake a similar pledge to obtain many of their friends to do likewise. A chain reaction of this type can easily take place provided the problem and need for action are brought before the people.

I am enclosing my check for an additional ten copies of your address, which I hope will be forthcoming very soon.

I think it would be helpful if you can take the time to send me any further information which you may have on hand with respect to the Council for Abolishing War; namely, who will comprise its membership and how it will function, etc.

Looking forward to an early reply, I remain

Respectfully yours,

Morris M. Rudich

Morris M. Rudich

MMR:eb

Enc.

P.S. Please note - check in the amount of \$25.00 to Trustees for Council for Abolishing War also enclosed.

*File
request for speech
filled but not answered*

*10 up
no change
9 Feb.*

Cable Address

VASCOBINI, NEW YORK

EXECUTIVE OFFICES OF

R. H. Macy & Co.
Inc.

PLEASE ADDRESS REPLY TO EXECUTIVE OFFICES



New York 1, New York
September 27, 1945

Hon. William Benton
Department of State
Washington, D.C.

Dear Bill:

Thanks a lot for sending me the minutes of the press conference which were extremely interesting. I think the newspaper accounts fell way short of doing you justice.

I was in Chicago last week for the bomb conference which, in my opinion, was a huge success. As far as I am concerned from now on the bomb comes first. When can I see you about it? When are you coming to New York?

Very sincerely yours,

M
Beardsley Rum1

*The Atom &
World
Politics*

C O P Y

(Letter to Senator Ralph E. Flanders from Beardsley Rum1)

February 19, 1947

Dear Ralph:

I am writing you this letter long hand in order to emphasize my deep personal concern in the Lilienthal controversy. If by any chance the Lilienthal appointment is not confirmed, I feel that not only will an act of conspicuous injustice have been done, but the national interest itself will have been damaged as a result of malice, pettiness and indifference.

I feel that the long term importance of the event arises from the character of the reply which Lilienthal made to Senator McKellar, a copy of which I enclose. I believe that this statement because of its literary quality and the circumstances under which it was uttered will last as a permanent document in the literature and philosophy of personal freedom.

Not only is the text deeply moving, revealing fundamental spiritual insight and humane sympathies, but in terms of psychological analysis it bears witness to the profound sincerity of the speaker.

The statement was an "explosion", and in making it Lilienthal drew on his subconscious intellectual and moral reserves, reserves which could have been built up only after a long period,--years and years of analysis and meditation. The length of the statement, its form and content, show that the problem had been the subject matter of earnest study, of discussion with others and of previous attempts to write or to speak formally concerning these issues.

Rarely have we had such overwhelming evidence of fundamental character and authentic liberal commitment as we have in this statement.

In addition we know that Lilienthal has a conspicuous record as an administrator, and in the successful production of the Acheson-Lilienthal report he has shown remarkable ability to negotiate unanimous decisions in most difficult areas.

Further, his so-called "new-dealism" was of a rare type since he was always opposed to Big Government and took vigorous and effective measures to see that local government was preserved in the organization and operation of TVA. This was clearly demonstrated in his bitter controversy with Harold Ickes, new-dealer who wanted to see TVA brought into the federal government.

Finally, Lilienthal has the complete confidence of the nuclear scientists, and without such confidence American research on atomic energy will be irreparably damaged. We know that we made our advances because scientists from other lands came to our liberal shores, Einstein, Fermi, Szilard, and there is no way to force a scientific product from a disaffected scientific mind, or to limit the movement of science from one country to another over a period of time.

Under all these circumstances it is my belief that we have in the making a "cause celebre". I hope that you will take these matters into account in coming to your decision and that you will bring these points to the attention of others whose vote may be decisive on this critical issue.

With kind personal regards,

Very sincerely yours,
Beardsley Ruml

Roscoe B. Jackson Memorial Laboratory

BAR HARBOR, MAINE

Cable Address
"JAXLAB"

May 18, 1959

Dr. Leo Szilard
c/o Dr. Robert B. Livingston
National Institutes of Health
Bethesda, Md, Maryland

Dear Dr. Szilard:

Pertaining to your recent phone call I am enclosing some data on the correlation between parental age and litter size. This information can be obtained from punch cards for a number of strains of mice. The table I send you is for one strain which happens to have been sorted from the cards. I regret very much that we do not have data on corpora lutea in relation to age. We have often thought of the need for this very important information, but to date have devised no easy method for accumulating the data. I hope this will be of help to you, and if I can be of further service please let me know.

Sincerely yours,

AT 83373

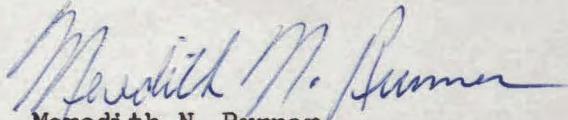

Meredith N. Runner
Staff Scientist

Table 1.

Correlation between parental age (litter seriation) and number of young born. Mouse strain 129.

<u>Serial order of Litters</u>	<u>No. Litters</u>	<u>No. Young</u>	<u>Mean Young</u>
1	748	4,167	5.6
2	705	3,776	5.4
3	672	3,534	5.3
4	645	3,369	5.2
5	581	2,806	4.8
6	507	2,433	4.8
7	412	1,783	4.3
8	290	1,179	4.1
9	174	692	4.0
10	71	257	3.6

4,805 litters from life histories of 866 females. Strain 129

Note that these data do not show increasing litter size prior to the fifth litter. This is unlike most published observations.

28

1 year

1.5 years

Table 2.

Correlation between parental age (litter seriation) and
number of young born. Mouse strain 129.

<u>Serial order of litters</u>	<u>Mean Young born</u>
1	5.8
2	5.6
3	5.7
4	5.6
5	5.0
6	5.6
7	4.9
8	4.4
9	3.9
10	3.6

Data from 187 paired matings (extracted from Table 1) that produced
9 or more litters.

Note that the selected sample of animals started with larger litters
than the population as a whole (Table 1.)

August 16, 1957

Mr. Dean Rusk
President, The Rockefeller Foundation
49 West 49th Street
New York 20, New York

Dear Mr. Rusk:

I should greatly appreciate your reading the attached note when your time permits and giving me your general reaction at your convenience.

With best wishes,

Sincerely yours,

Leo Szilard

m
Encl.

file 5
January 11, 1961

3 April
ans'd.

Dale Russell
417 Fernald
Columbia University
New York 27, New York

Prof. Leo Szilard
Enrico Fermi Institute of Nuclear Studies
University of Chicago
Chicago, Illinois

Dear Dr. Szilard

I am a graduate student at Columbia majoring in vertebrate paleontology and am currently studying for my PhD qualifying exams, one of my minor subjects being genetics, under Prof. Dobzhansky. While reviewing recent literature on genetics I read two interesting articles in Advances in Genetics vol. 9, 1958. One was by G. L. Stebbins in which he discusses the phenomenon of hybrid breakdown and suggests it is due to the disruption of co-adapted genic blocks by crossing over with foreign chromosomes, and the similar disruption of heterotic combinations of alleles.

A second article by Pontecorvo and Kafer describes the mapping of the somatic chromosomes of a fungus by mitotic recombination. They intimate (p. 103) that it is possible that mitotic recombination may be widespread in higher organisms. I was struck by the parallel between hybrid breakdown and the gradual breakdown of somatic organization through aging. Could the process be ultimately due to somatic crossing-over?

Could it reasonably be postulated that the gradual exposure of deleterious recessives in somatic cells by mitotic crossing-over and the resultant homozygosis causes the slow loss of fitness and integrity of the body (senescence)? If so senescence would occur without exposure to radiation, but radiation of gametes or of differentiated somatic cells would increase the genetic load that could be exposed by somatic crossing-over.

I discussed the idea briefly with Dr. Dobzhansky who told me you were working on the problem of senescence and showed me a paper you published in the Proceedings of the NAS in 1959. I do not know if you have considered the above idea, or if it is of any value. If not please file this letter in the nearest trash repository.

Thank you for reading this letter, I remain interested in your work.

With best wishes

Dale Russell

3 April

Dale Russell
417 Fernald
Columbia University
New York 27, New York

Dear Mr. Russell:

Many thanks for your letter of 11 January. I have not considered the postulates which you mention in your letter and in my paper I have assumed that aging process is centered on the non-dividing tissues rather than the dividing tissues such as bone marrow, skin, etc. Why don't you pursue your thought to its logical consequences and see where you come out?

Sincerely,

Leo Szilard

Washington 6, D. C.
October 5, 1962

Dr. I. Ruzsnyak, President
Hungarian Academy of Sciences
Budapest 5
Roosevelt Ter 9

Dear Dr. Ruzsnyak:

Your letter of August 27 was forwarded to me to Washington. Both my wife and I are grateful for your very kind invitation and we regret that at the present time it is not possible for us to schedule a visit to Budapest.

Your letter did not reach me until we returned from the Pugwash Conference in Cambridge. We did not stay on in England for the London meeting.

You refer in your letter to an invitation which you sent me on July 19 through your Washington Embassy. That invitation did not reach me; if it had, I would have written you earlier.

With best wishes,

Yours sincerely,

Leo Szilard
Hotel DuPont Plaza
Washington 6, D. C.

Szilárd Leó professzor urnak

The University of Chicago,
Chicago 37, Illinois,
Enrico Fermi Institute for Nuclear Studies
U.S.A.

Igen tisztelt Professzor Ur,

Ez év július 19-én washingtoni követségünk útján meghívást küldtem Önnek. Most jutott sajnálatomra tudomásunkra, hogy ez a meghívás már nem találta Önt Amerikában.

Engedje meg, hogy a Magyar Tudományos Akadémia Elnöksége nevében ezért ezuton tisztelettel meghívjam Önt 10 napos magyarországi tartózkodásra Akadémiánk vendégeként. Igen nagy örömünkre szolgálna, ha feleségével együtt eleget tenne meghívásunknak és megismertethetnénk Önnel hazai tudományos eredményeinket. A magyar tudósok nagy várakozással néznek az Önnel való találkozás elé.

A Magyar Tudományos Akadémia természetesen fedezi itteni tartózkodásának minden költségét. Ami a látogatás időpontját illeti, ez természetesen Öntől függ, úgy gondoljuk azonban, hogy esetleg - amennyiben ez Önnek is megfelel - a londoni Pugwash konferencia után jöhetne Magyarországra.

Mellékelem Jánossy Lajos akadémikus, alelnök levelét, amelynek eredeti példányát szintén amerikai címére küldte meg.

Öszintén remélve, hogy meghívásunkat módjában lesz elfogadni, várom mielőbbi szíves válaszát.

Öszinte üdvözlettel



Rusznay István
/ Rusznayák István /
elnök

Melléklet

RUTGERS UNIVERSITY
The State University of New Jersey
NEW JERSEY AGRICULTURAL EXPERIMENT STATION

DEPARTMENT OF MICROBIOLOGY

May 25, 1953

NICHOL AVENUE
NEW BRUNSWICK NEW JERSEY

Dr. Leo Szilard
University of Chicago
Institute of Radiobiology
Chicago 37, Illinois

Dear Dr. Szilard:

I am in receipt of your letter of May 21 and would like to suggest Friday, June 5, as the date for the visit of Dr. Novick to our laboratory. Please come along with him if you can spare the time.

Looking forward to seeing both of you on that date, I am

Sincerely yours,

Selman A. Waksman

Chairman, Microbiology Dept.

SAW:VAC



The Trustees and Faculties
of
Rutgers University
The State University of New Jersey
request the honor of your presence
at the dedication of
The Institute of Microbiology
at two o'clock
Monday, the seventh of June
nineteen hundred and fifty-four
New Brunswick, New Jersey

RUTH HAGY'S

COLLEGE NEWS CONFERENCE

"WHERE THE LEADERS OF TOMORROW MEET THE LEADERS OF TODAY"

Washington Office
4609 Norwood Drive
Chevy Chase 15, Md.
OLiver 6-4244

15 Park Avenue
New York 16, N. Y.
MUrray Hill 3-5758

September 9, 1961

Dr. Leo Szilard,
The Lodge,
Stowe, Vermont

Dear Dr. Szilard:

Earlier this week we discussed by telephone the possibility of your participation as a guest on College News Conference sometime in October.

College News Conference is a half-hour television program currently sponsored by National Educational Television. A panel of four college students question guests on major national or international issues. Students selected for the panel must demonstrate knowledge of the background, work and opinion of the guest or guests to be questioned by them. The program is taped but it is NEVER EDITED. Ruth Hagy is moderator and introduces the guest or guests and panel.

In the event of your participation, you had suggested the subject for the program might be the question of whether the Russians are sincerely interested in disarmament. And, if I understood you correctly, you would not object to appearing with another guest, such as Ambassador Arthur Dean or Admiral Strauss, provided the program time could be extended to an hour. If the time could not be extended, the panel would query you alone. The dates of October 24, 25, 26 or 27 are those we hope you may consider.

I shall look forward to hearing from you at your earliest convenience. I trust this finds you and Mrs. Szilard in good health.

Cordially yours,



Lillian Levy, Washington Correspondent,
Ruth Hagy's College News Conference
4609 Norwood Dr., Chevy Chase 15, Md.

P.S.

The statement issued from the White House on the resumption of nuclear testing by the Soviet Union, which you requested, is attached.

1155 East 57th Street
Chicago 37, Illinois
December 14, 1950

Mr. F. J. Ryan
Institute Pasteur
28 Rue du Doctor Roux
Paris 15, France

Dear Ryan:

I owe you an answer to your letter about Peggy Lieb. When I got your letter, we had no funds available and later upon inquiry I found that she went to work with Delbruck.

The enclosed manuscript will show you what we are doing with the Chemostat. It appears in print in the December issue of the National Academy of Science. Hope you have a pleasant time in Paris!

Perhaps you could pass on the manuscript to Monod since according to your address you seem to be in the same laboratory.

Sincerely,

Leo Szilard

WV

Institut Pasteur

28, RUE DU DR ROUX, PARIS XVI

TEL. SÉCUR 01-10

PARIS, le 27 June 1951

Dr. Leo Szilard
Institute of Radiobiology and Biophysics
1155 East 57th Street
Chicago 37, Illinois

Dear Szilard,

On the basis of letters from home I infer that during my absence from Columbia the relations between our group and the Institute of Radiobiology and Biophysics have deteriorated. It makes me quite unhappy to suspect that this might be true, for I feel indebted to you for favors done in the past, and would not want you to believe that they have gone unappreciated.

As you know, my interest in the work of your group continues. Here at the Institute I have been spending part of my time with continuous cultures (more about that later) and am more than sorry that I did not put in use the apparatus you so kindly sent me while I was still at Columbia. The reasons for this negligence are purely personal, involving a mass of responsibilities which prevented me from undertaking the use of a new method which at the time I did not clearly understand.

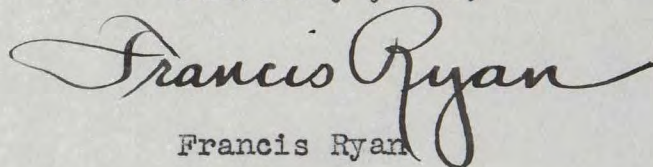
Perhaps, however, the source of the difficulty lies in our work on periodic selection. If so, I am at a loss to understand it and would like to describe the situation as it appears to me. Our knowledge of fitter types is quite old. In fact I had discussed them with you before my departure. During the summer of 1950 Mrs. Schneider gave a talk at Woods Hole on this subject which was abstracted in the October Biol. Bull. Your paper with Novick appeared in December and reference to it is made in the paper published by Atwood, Schneider and myself in the P.N.A.S. Our work was (perhaps unfortunately) completely independent of yours and was specifically concerned with the attainment of equilibrium through periodic selection, a possibility that was not mentioned by either Stocker or Novick and you. Is there anything in this situation with which I am not acquainted? It has been very difficult, as you might imagine, to keep in close contact with things back home.

To turn to pleasanter things: I have progressed to some extent with continuous cultures, but am still hampered by a number of technical problems, like the eventual contamination of feeder tubes with culture contents. In those experiments with both h^+ and lac^+ that approached being satisfactory I have always found stable proportions of mutants which are reached immediately and maintained for as long as 70 generations. This occurs despite five-fold differences in growth rate. I do not feel sure that this means mutation~~s~~ is linked to bacterial division in these cases because I have independent evidence that more than two equilibria may exist between mutant and parent. Whatever factors bring this about may stabilize the numbers of mutants at a level independent of growth rate even if mutation were a function of time. If things go well I hope to clear this up before long.

Most of my work here has concerned attempts to change the rate of mutation from lac^- to lac^+ with substances related to lactose. All results thus far have been negative. Further, although most distributions of mutants in the literature do not fit that developed by Lea and Coulson for random mutation and no selection, that for the lac^+ mutant is completely in accord. Thus I am left with a demonstration of what everyone already believes: the mutation $lac^- \rightarrow lac^+$ is not only adaptively, but also statistically, random.

We are leaving Paris, with many regrets, on Sept. 29th, and I hope that on one of your frequent tours East you will pay us a visit.

Sincerely yours,

A handwritten signature in cursive script that reads "Francis Ryan". The signature is fluid and elegant, with a large, sweeping "F" and a long, trailing "y".

Francis Ryan

5650 Ellis Avenue

July 3, 1951

Dr. Francis Ryan
Institut Pasteur
28 Rue du Dr. Roux
Paris XV, France

Dear Ryan:

A couple of days ago I received your letter of June 28th, which puzzled me a great deal. Just a few weeks ago, at the Cold Spring Harbor Symposium, I had numerous animated conversations with Atwood and I didn't notice any change in our cordial relations.

Judging from your letter, it would seem that a note which I sent to Atwood in returning the manuscript (which he sent me prior to its publication) might have been misunderstood. I shall come back to this presently. Let me say first of all that it never entered my mind that the paper which you, Atwood, and Schneider published in the PNAS encroached in any way on our work with the chemostat. I note from your letter that you quote our work in your paper. I think that there was no reason for you to do so, since your manuscript was ready for print prior to publication of our paper and since, in the circumstances which you have outlined in your letter, our results have not influenced your thinking concerning the periodic disappearance of the mutant strain from the population. No question of "priority" is involved in any case since the phenomenon had been similarly interpreted prior to us by Stocker.

My note to Atwood was induced by the following circumstance: In the late spring of 1950 we had a small gathering at Madison, Wisconsin, in which

July 3, 1951

Atwood participated. On that occasion Novick and I discussed our results, but Atwood was not present at every bull session and may not have taken cognizance of it. Had he heard about it at that time and had this influenced his thinking, he probably would have wanted to quote our paper. I believe in my note to Atwood I suggested that for the sake of his own peace of mind he check his memory on this point and stressed that if our results did not influence his thinking then there was no reason why our paper should be quoted. In this note I meant just what I said and no more, but this might just be the reason why the note was misleading; people nowadays are given to expressing their thoughts by indirection.

Having suggested to Atwood that he check his memory I assumed that he had done so, dismissed the matter from my mind, and I haven't ever thought of it since until just now when I received your letter.

Sorry to have caused such a turmoil quite unnecessarily.

I hope you and your wife will continue to have a pleasant time in Paris, and I am looking forward to seeing you some time in the fall. With kind regards,

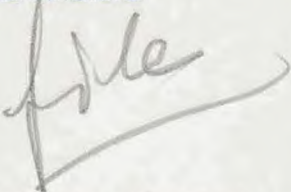
Sincerely yours,

Leo Szilard

LS/sds

WILLIAM FITTS RYAN
20TH DISTRICT, NEW YORK

COMMITTEE:
SCIENCE AND ASTRONAUTICS



Congress of the United States
House of Representatives
Washington, D. C.

1517 NEW HOUSE OFFICE BUILDING
WASHINGTON 25, D.C.
CAPITOL 4-3121, EXT. 6616

DISTRICT OFFICE:
ROOM 308
100 WEST 72ND STREET
NEW YORK 23, N.Y.
TRAFALGAR 7-4192

December 18, 1961

Mr. Leo Szilard
Hotel DuPont Plaza
Washington 23, D.C.

Dear Mr. Szilard:

As part of our continuing program to bring substantive issues to the community for discussion, the reform Democratic clubs on Manhattan's West Side and I, as the Congressman from the area, are sponsoring a Foreign Policy Conference. We would very much like to enlist your participation.

The Conference is scheduled for Saturday, February 3, at the Men's Faculty Club of Columbia University.

Our agenda calls for six panel sessions, three in the morning and three in the afternoon, and also a full plenary meeting to be held in the afternoon. Disarmament, foreign economic policy, Africa, Asia, Latin America and U.S./Soviet relations in Europe will be the particular subjects to come before the individual panels.

We would like you to serve on a morning panel dealing with disarmament. You would speak for approximately ten minutes on some facet of the topic, and would then take part in a general discussion with your co-panelists and answer questions from the floor.

The combined membership of our clubs totals over 5,000. This, together with the interest generated by the undertaking even at this early stage of planning, encourages us to anticipate an important and exciting forum. We are confident that the program will attract a large and responsive audience.

Stanley Newman, my legislative assistant, is coordinating the panel on disarmament. He will contact you very soon to talk with you further about our plans.

I hope that you will join us in this venture and look forward to hearing from you.

Sincerely,



William Fitts Ryan
Member of Congress

WFR:sh