

233

CORRESPONDENCE Sept, 1957

N. WIENER · MC 22

[ca Sept, 1957]

Send
Refusal

*On behalf of the President,
the Board of Trustees,
and the Senate of New York University,
the Director of The Hall of Fame
for Great Americans
invites you to be present at the ceremony for the
unveiling of the Busts and Tablets
for*

JOSIAH WILLARD GIBBS

and

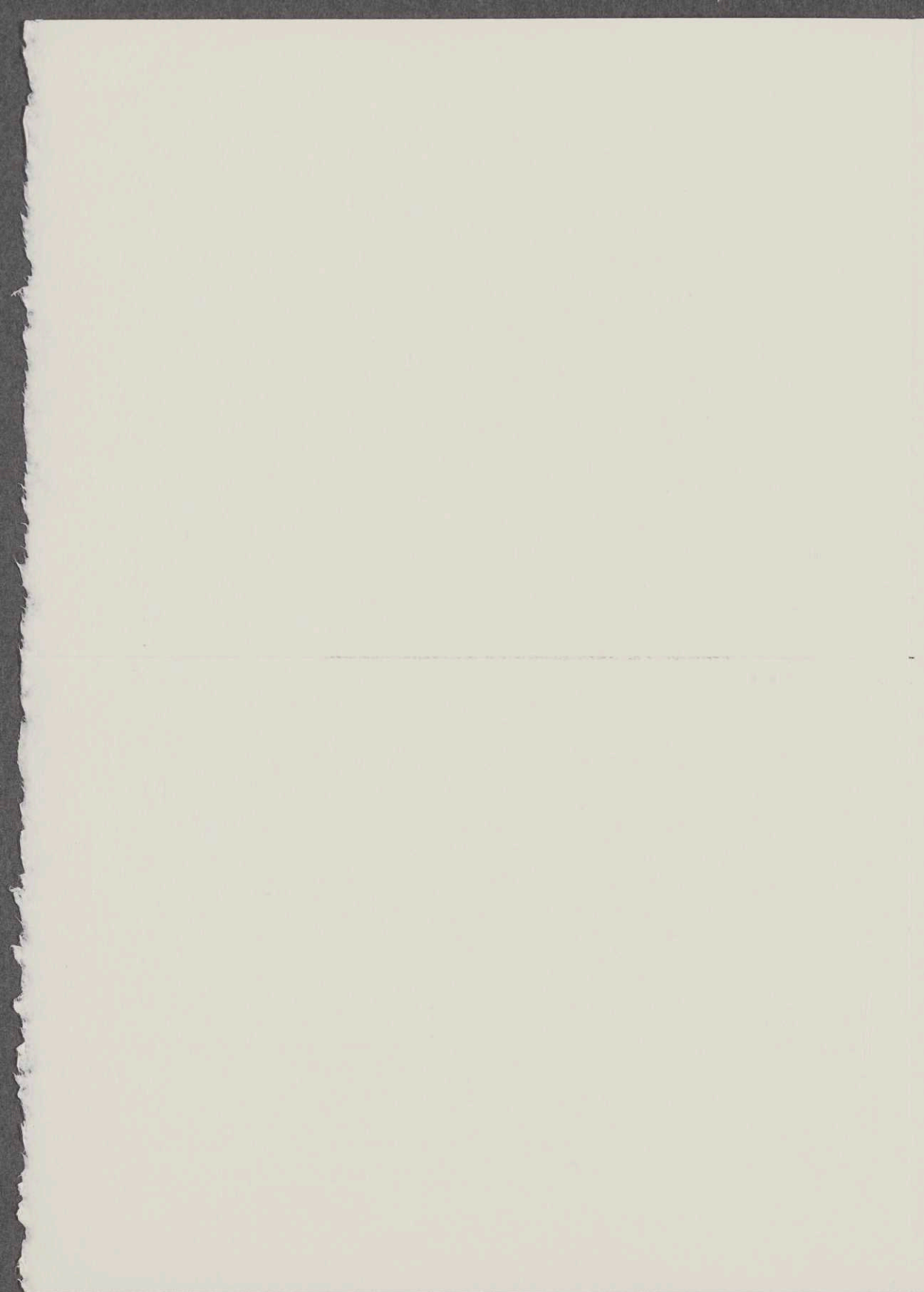
GEORGE WESTINGHOUSE

*1 December, 1957, at 3:00 o'clock
in the auditorium of the Library of the University
at University Heights, 181st Street
New York City*

*Please reply
before November 15th*

*Please consider
this invitation as a card of admission*

Participants on inner page



PARTICIPANTS

THE HONORABLE HERBERT HOOVER

DR. DETLEV W. BRONK

President, The Rockefeller Institute

DR. JOHN G. KIRKWOOD

Sterling Professor of Chemistry, Director of Sciences, Yale University

DR. RALPH G. VAN NAME

*Research Associate Emeritus in Chemistry, Yale University
(Nephew of Josiah Willard Gibbs)*

DR. WILLIAM F. RYAN

President, The American Society of Mechanical Engineers

MR. WALTER J. BARRETT

President-Elect, The American Institute of Electrical Engineers

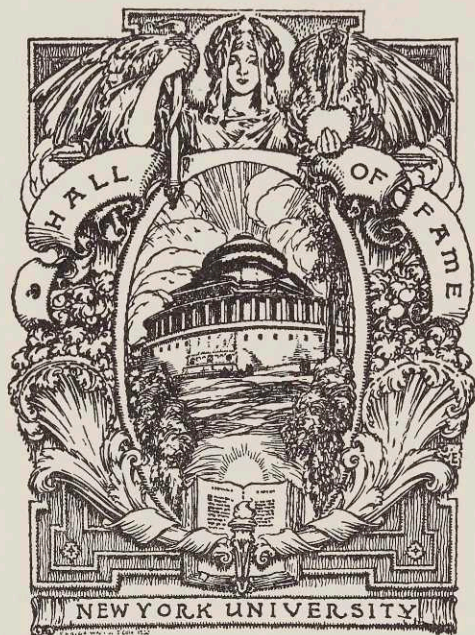
MUSIC

MEMBERS OF THE YALE GLEE CLUB

Fenno Heath, *Director*

Bust of Gibbs by Stanley Martineau, Sculptor

Bust of Westinghouse by Edmondo Quattrocchi, Sculptor



PURDUE UNIVERSITY
LAFAYETTE, INDIANA

DEPARTMENT OF BIOCHEMISTRY

September 2nd, 1957.

Professor Norbert Wiener,
Department of Mathematics,
Massachusetts Institute of Technology,
Cambridge 39,
Massachusetts.

Dear Professor Wiener,

Please accept my apologies for not replying earlier to your letter of August 20, but the delay was on account of illness.

I now await news from Dr. Rosenblith. However, regardless of the outcome in that direction, I wish to express my sincere gratitude to you for your interest and help.

Yours sincerely,

Arthur Dalby

Arthur Dalby.

JOHN WILEY & SONS, INC.

ESTABLISHED 1807

PUBLISHERS OF BOOKS

440 FOURTH AVENUE
NEW YORK 16, N. Y.

W. O. WILEY,
CHAIRMAN OF THE BOARD
E. P. HAMILTON,
PRESIDENT
W. B. WILEY,
VICE-PRESIDENT & TREASURER
MARTIN MATHESON,
VICE-PRESIDENT

J. S. SNYDER,
VICE-PRESIDENT
J. S. BARNES,
VICE-PRESIDENT
FRANCIS LOBDELL,
SECRETARY

TELEPHONE
MURRAY HILL 9-7630

September 3, 1957

Mr. D. R. Lueder, Chief
Engineering Division
Mining Technical and Exploration Services Limited
1150 O'Connor Drive
Toronto 16, Canada

Dear Mr. Lueder,

We are quite willing to grant you permission to reprint the material listed below, provided:

1. The illustrations or quotations to be used have appeared in our books without credit or acknowledgment to another source.
2. Suitable acknowledgment to the source be given, preferably in the following form:
"Reprinted with permission from (author) (title) (copyright date), John Wiley & Sons, Inc."

In respect to this method of giving credit, however, we are willing to accept the standard editorial practices of other publishers as long as the essential items above are included.

This borrowed material will be used in

a textbook.

Sincerely yours,

J. S. Barnes

J. S. Barnes
Vice President

JSS/jb

* The copyright on Cotton, CLIMATIC ACCIDENTS, is owned by Whitcombe & Tombs, Christchurch, Australia. It will be necessary for you to obtain permission from them in this instance.

Mr. D. R. Lueder, Chief
Engineering Division

Page 2

9-3-57

Terzaghi & Peck, SOIL MECHANICS IN ENGINEERING PRACTICE
page 122, paragraphs 1,2 plus adaptation of figure 51.

Baver, SOIL PHYSICS paragraph 1, lines 1-5;
page 273, lines 3-7;
page 272, last paragraph, lines 2-7

Nevin, PRINCIPLES OF STRUCTURAL GEOLOGY, certain definitions on
pages 9, 83, 146, 161.

Flint, GLACIAL GEOLOGY AND THE PLEISTOCENE EPOCH
Page 102, paragraph 1, lines 9-13;
page 103, paragraph 2, last 4 lines;
page 105, paragraph 3;
page 111, paragraph 3,4;
page 113, paragraphs 1,2;
page 132, paragraphs 1,2;
page 134, paragraphs 1,2;
page 138, paragraphs 2, lines 3-6;
page 144, paragraph 1.

Weiner, Norbert CYBERNETICS
eight lines location unknown.

DEPARTMENT OF MATHEMATICS
WHITE HALL
CORNELL UNIVERSITY
ITHACA, NEW YORK

September 3, 1957

Professor Norbert Wiener
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

Dear Professor Wiener:

The Wm. H. Wise Publishing Company has asked me to revise the sections on Calculus (including the chapter bearing your name) in their book "Popular Mathematics". I am aware that it may appear highly impertinent on my part to revise your material, but what I primarily plan to do is add illustrative examples and exercises, make minor clarifications in the exposition and rewrite altogether the introductory chapter (which in the old edition was written by Herbert Harvey). The payment I shall receive for this will be of considerable help to me financially. I am concerned with the question of authorship. Of course, I would be honored to have my name appear jointly with yours, but perhaps you prefer to have your name removed altogether from the article. I would appreciate ~~learning~~ *learning your views* ~~from you~~ on this.

Sincerely yours,

H. D. Block

H. D. Block

ss

[and 9/9/57]

THE ERICSSON CORPORATION

100 PARK AVENUE
NEW YORK 17, N. Y., U. S. A.CABLE ADDRESS
"ERICTEL"TELEPHONE
MURRAY HILL 5-4030*Ericsson*

September 4, 1957

Ref: T-17,933/1580

Massachusetts Institute of Technology
Cambridge, Massachusetts

Re: Photograph, Mr. Norbert Wiener

Gentlemen:

We have had a request from our head office for a photograph of Mr. Norbert Wiener. This is to be used in a book on information theory. Therefore, the photograph must be suitable for making printing blocks.

Please let us know whether or not you could furnish such a picture of Mr. Wiener. Address your reply to the attention of the writer as soon as possible.

Thank you for your assistance in this matter.

Very truly yours,

THE ERICSSON CORPORATION

C. Bernstein
(Mrs.) C. Bernstein*ibid +
see 44-5127**[and 10/23/57]*

M. M. DeWOLF
40 Rue Jasmin
Paris 16eme, France

Sept 4, 1957

Dr. Norbert Wiener
Dept Mathematics
MIT
Cambridge, Mass

Dear Sir,

I am very much interested in the subject of mathematical analysis of objects of artistic beauty. I am writing to ask the name and address of the publishers of your works on this subject and the names of the works.

most sincerely
Maurice M. De Wolf

[ans 11/9/57]

DOUBLEDAY & COMPANY, INC., 575 MADISON AVENUE, NEW YORK 22



MURRAY HILL 8-5300

September 4, 1957

Mr. Norbert Wiener
South Tamworth
New Hampshire

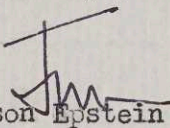
Dear Professor Wiener:

As usual my optimistic view of the time at my disposal has proved false and I have not yet finished the novel; but I shall soon - I hope within a day or two, and I shall spend another few days working up my notes.

I should not like to say more at this point than that the material is promising and that I continue to marvel at your boundless energy.

Best to you and Mrs. Wiener.

Sincerely yours,



Jason Epstein

JE jdm

American Forum - for Socialist Education
Room 221
1133 Broadway, New York 10, N.Y.

September 4, 1957

Dr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

My dear Dr. Wiener,

I am enclosing herewith a copy of a memo relating to a conference to be held here in New York on Saturday, November 9th, dealing with the problems of automation, atomic energy, etc.

It is necessary that I explain to you the auspices under which the conference will be held, since this constitutes an additional reason why some of us think you may want to give especially serious consideration to participation in it. On the other hand, we want you to be clear from the beginning about the questions that might be raised in this connection. The purposes of American Forum are stated in the enclosed brochure. The aim of promoting discussion among all elements, including communists, who have some interest in the problems of socialism and consider themselves to have some relation to the labor and socialist traditions of the past, has met with very general welcome. However, there is one aspect of the set-up of our National Committee which has led to questioning and opposition on the part of some people who are extremely critical of communism, as I am myself and a good many of the members of our National Council. The factor that is the subject of criticism is that we have deliberately taken two known leaders of the Communist Party in the United States onto the National Council. Our argument is that communists who are willing to participate in discussion when no issues are barred should not automatically be excluded from such participation in advance of the experiment in communication. We argue furthermore that if they are to participate in the discussion they should also have an opportunity to participate in arrangements for the same, and that there is no difference in principle between participating in such arrangements for a single meeting and doing it for a series of meetings in a continuous process.

There will therefore be some communists who will participate in the discussion on November 9th, and it is likely that Elizabeth Gurley Flynn will be one of the speakers at a dinner on the preceding evening, which however will not be a direct part of the conference itself.

2.

We want the meeting on November 9th to be a demonstration of serious and untrammled discussion. The fact that we are eager to have you as an opening speaker is itself a testimony to that. We want you of course both because of your scientific activity in this field and because of your known concern about the human factors and particularly the importance of human freedom and the right to dissent. I have delayed in sending this letter because I thought that some of my friends at the American Friends Service Committee office in Cambridge might be able to take this matter up with you personally, but they have been delayed in getting back from their vacations. As it is, I am eager to have some response from you in time for a meeting of our working committee in the early afternoon of Monday, September 9th. I shall appreciate it, therefore, if, in case you cannot send an immediate reply by mail, you will wire or telephone me at my expense to my apartment, 310 University Drive, UNiversity 4-1700.

Earnestly hoping for a favorable reply to this communication, I am,

Sincerely yours,

A. J. Muste
A. J. Muste *1 cm*

mca

[ans 9/9/57]

Plans for Conference to be held Saturday, November 9th

Theme: America's Road to Socialism In the Age of Automation and Atomic Energy.

Morning Session: Opening presentation of problem from several angles -
capitalist, socialist, etc.

Followed by Three Panels: Youth Problems, Trade Union Problems,
Cultural Problems.

The objective of these panels is the widest participation of those in attendance and presentation of all points of view whether or not represented on the American Forum National Committee. Resource persons or consultants will therefore be held to brief presentations.

Afternoon Session: Same general theme.

Two Panels

Socialism and Democracy: in which all the questions of the type of government in a socialist society, civil liberties etc. in Communist countries etc. are in order.

Political Action: what types may be desirable and necessary at the present time, as well as the broader questions of means to achieve a democratic socialist movement in the U.S.

Closing Statement by A. J. Muste. This is not thought of, however, in terms of a summary or statement of consensus. The Conference, in line with the basic purpose of American Forum, is not meant to work out a program, adopt resolutions etc. but is a project in discussion and thinking together, the results of which each participant is free to use in his own way.

Publication: It is thought the Conference addresses and discussions may provide exceptionally useful material for a first A.F.S.E. publication and this will be kept in mind in selecting speakers, making some sort of record of the discussions, etc.

6 Waterden Road,
Guildford,
Surrey
Tel.: 4289

Ref. N. W. J. C.

Sep. 4. 57

Dear Professor Wiener,

Thank you very much for your
kind letter of August 13th and for the
address of Messrs. Houghton & Mifflin to whom
I shall now write. I am grateful to you
for allowing me to quote what Mr. Abraham
Kaplan wrote in 'The World of Mathematics'
drawing on your two books 'Cybernetics' &
'The Human Use of Human Beings'.

It is very kind of you to offer your help.
I am now revising my typescript & wonder if
I ought to send you the pages in which your
work is referred to, to avoid any misrepresenta-
tion - that is if it would not be a trouble

to go to check it. My son was well
ahead of others over here in his belief in
the range of universal computers.
I am taking for granted your permission
to say that you thought highly of his work.

Sincerely yours

Elmer Turing



WAYNE STATE UNIVERSITY

OFFICE OF THE VICE PRESIDENT

DETROIT 2, MICHIGAN

ACADEMIC ADMINISTRATION

September 5, 1957

Professor Norbert Wiener
South Tamworth
New Hampshire

My dear Professor Wiener:

I am delighted that you can participate in the symposium on The College Professor next spring. I look forward with keen relish to what you will contribute.

The date of the symposium has not yet been settled, so I am glad to have your suggestion. We shall certainly do our best to keep away from May 3. You will have the details from me shortly.

Sincerely,

James P. McCormick
Assistant to the Vice President
Academic Administration

JPM:jg

[Ca. Sept 5, 1957]

American Forum - for Socialist Education
Room 221
1133 Broadway
New York 10, N.Y.

Dr. Norbert Wiener,
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Dr. Wiener,

In the letter which Mr. Muste wrote you
yesterday, I mistakenly gave you his home address as
310 University Drive. It should have been 310 Riverside Drive.
His home phone is University 4-1700.

I hope my mistake did not inconvenience you.

Sincerely,

Maude M. Ay
secretary to Mr. Muste

Mathematical Institute
Nagoya University,
Chigusaku, Nagoya

September 5, 1957.

Professor Norbert Wiener,
Department of Mathematics,
Massachusetts Institute of Technology,
Cambridge 39, Mass.

Dear Dr. N. Wiener:

I am much pleased to be informed that I shall spend two semesters at the Research Laboratory of Electronics in MIT as a Fulbright Research Scholar. I have learned from Professor Ahlfors that you gave me a support for my application. Thank you very much of your kindness.

I shall be in Cambridge in the beginning of October. I am now interested in the theory of relations.

With best regards, I am

Sincerely yours,

Katuzi Ono

Katuzi Ono
Mathematical Institute,
Nagoya University

Prof. Dr. med. BERNHARDT

Berlin-Charlottenburg 9
Heerstraße 74
Telefon 94 44 59

Sept. 6, 1957

Prof. Dr. Norbert Wiener
Dept. of Mathematics
Mass. Institut of Technology
Cambridge 39
Massach.
U. S. A.

Dear Professor Wiener :

The reprint I send you is devoted to the problems of energy of living tissues and of the human organism.

Since 1922 I am doing research work and clinical work on obesity. Obesity proves to be a very interesting and complex field. I came to results similar to those that M.A. Goldzieher published in " The Amer. J. of Digest. Diseases vol. 19 , pg. 69 , 1952. "

This author refers to ideas that you mentioned .

So I believe this reprint might interest you. If so, I should like to get in contact with you. For my findings are only a beginning and no definite prove. I should like to hear your opinion on these questions . Certainly you will know the book E.W.Sinnott : The Biology of the Spirit (Viking Press , New York 17 , 1955).

I have the feeling that we are about to get a new aspect of the problems of energy involved in living tissues.

Please be so kind to drop me some lines and to send me reprints of that field .

All the branches of human research must be united to solve these really difficult questions.

Your work " Cybernetics " seems to me a wonderful beginning in this direction.

Very sincerely yours



Hermann Bernhardt

September 6 , 1957.
Berlin-Charlottenburg
Berlin-West.

I wrote a book on obesity.

[Jan 10-16-57]

With best compliments !!

Sonderdruck

MEDIZINISCHE KLINIK

DIE WOCHENSCHRIFT FÜR KLINIK UND PRAXIS

Schriftleitung: Dr. K. H. Stauder · Verlag Urban & Schwarzenberg
München · Berlin

51. Jahrgang, Nr. 14 — 6. April 1956 — S. 568—570

Alle Rechte, auch die des Nachdrucks,
der photomechanischen Wiedergabe und der Übersetzung, vorbehalten.

Zur Frage der Energetik des menschlichen Organismus

Von Hermann Bernhardt

Aus der I. Inneren Abteilung

des Städtischen Krankenhauses Berlin-Spandau,

Aerztlicher Direktor: Prof. Dr. med. Hermann Bernhardt

In meinem Buch über die Fettleibigkeit habe ich den Bilanzproblemen besondere Beachtung geschenkt. Ich halte die Klärung dieses Gebietes, das gern von den Autoren gemieden wird, für wichtig und fruchtbar in bezug auf viele grundsätzliche Fragen der Medizin.

Es gibt Gewichtsabweichungen, die uns zunächst unerklärlich erscheinen. Ich denke da an die mageren Mädchen der Spätpubertät, die trotz reichlicher Nahrungszufuhr nicht zunehmen, ohne daß Resorptionsstörungen oder Hyperthyreose bestehen. *C. J. Barborka*, Mayo-clinic, hat auf dieses interessante Gebiet hingewiesen. *H. W. Bansi* hat die große Schwierigkeit der bilanzmäßigen Erklärung der lipophilen Dystrophie (paradoxe F.) in seinem Buche über „Das Hungerödem“ eingehend erörtert. Diesen Beobachtungen und Befunden kann man aus dem Schrifttum noch weitere sichere Unterlagen beifügen, aus denen sich ergibt, daß manche Fett-

leibige auch unter sehr niedriger Kost kaum eine Gewichtsabnahme zeigen, ja, daß in seltenen Fällen sogar Gewichtszunahmen unter einem solchen Regime beobachtet werden können.

Seit über 30 Jahren achte ich auf diese interessanten Vorkommnisse. Als Unterlagen dienten mir dabei Kontrollen des Gewichtes bei langer Durchführung der sog. Standardkost. Unter Standardkost verstehe ich eine Diät, die kalorisch dem eigenen Ruhe-Nüchtern-Umsatz (RNU) der Person entspricht und in ihrer Zusammensetzung sich der bis dahin gewohnten Kostform anschließt. Man kann in praxi, da ja der RNU bei der F. ganz überwiegend normal liegt, die bekannten Benedict-Tafeln heranziehen, wobei ich empfehle, bei starker F. für das Gewicht das Mittel zwischen Ist- und Sollgewicht zu wählen.

Es zeigte sich nun, daß viele Fettleibige unter solchem Regime keineswegs abnehmen, sondern deutlich an Gewicht gewinnen. Dabei wurde die allgemeine Lebensführung der Personen möglichst nicht geändert.

Die weitere Klärung führte dann zur Entdeckung der sog. negativen Stoffwechselphasen. Der Gasstoffwechsel sinkt bei diesen Fettleibigen während des Tages öfter unter das Niveau des RNU ab, und zwar besonders im tiefen Schlaf, in der Nachphase nach körperlicher Anstrengung und im Anschluß an die Nahrungszufuhr (als sog. negative spezifisch-dynamische Wirkung). Ich verweise in bezug auf die negativen Stoffwechselphasen auf meine Arbeit zusammen mit *W. M. Boothby* aus dem Jahre 1931 und die zusammenfassende Darstellung in der *Dtsch. med Wschr.* 1932, S. 1471.

Es geht nicht an, diese negativen Phasen zu bagatellisieren, da eine einfache planimetrische Berechnung zeigt, daß sie in der Lage sind, die positiven Stoffwechselphasen weitgehend zu kompensieren. Es gibt Fälle, wo dann der tatsächliche Gesamttagessauerstoffverbrauch niedriger liegt als der auf 24 Stunden berechnete RNU-Wert.

Es ist sicher, daß der menschliche Organismus in der Lage ist, weitgehende Sparmechanismen in Gang zu setzen. Man kann daher gewisse Formen der F. dadurch

erklären, daß solche Sparmechanismen zu falscher Zeit und in falschem Ausmaße eintreten. Es ist allgemein bekannt, daß eine F. sich gern an Phasen der Unternahrung und Not anschließt. Die einmal eingeschalteten Sparmechanismen bleiben bei der nun wieder erhöhten Nahrungszufuhr bestehen und führen somit zu einer positiven Bilanz auch bei relativ geringer Zufuhr.

Was für erhebliche Einsparungen der tierische Organismus durchsetzen kann, erhellt an: eindrucksvollsten aus den Beobachtungen bei den Winterschläfern. Uebrigens kann man auch beim Menschen, z. B. im hohen Norden und in Sibirien, winterschlafähnliche Zustände feststellen.

Meine langjährige Beschäftigung mit diesem Gebiete hat mir die Ueberzeugung gebracht, daß unsere bisherige Methodik der kalorischen Erfassung der Einnahmen und Ausgaben des menschlichen Organismus nicht in der Lage ist, alle Gewicht:abweichungen zu klären. Auch die genaue Beachtung des Wasser-Salz-Haushaltes kann nicht als die generelle Lösung des Rätsels gelten. So ist es z. B. falsch, wenn von gewisser Seite behauptet wird, daß es sich bei der paradoxen F. um Wasseransammlungen und nicht um Fettgewebe gehandelt habe. Im Gegenteil, jeder wirkliche Kenner der Materie wird mir bestätigen, daß das Fettgewebe bei der lipophilen Dystrophie besonders wasserarm ist.

Unser Organismus ist dauernd in Fluß. Das haben besonders die neuen Ergebnisse der Isotopenforschung mit Sicherheit feststellen können. Das Ausmaß der Umstellungen, der Aufbau- und Abbauprozesse hat alle Forscher auf tiefste beeindruckt. In diesen Abläufen liegt ein erheblicher Energiebetrag verankert. *L. v. Bertalanffy* hat mit Recht darauf hingewiesen, daß wir es beim lebenden Organismus immer mit einem sog. „offenen System“ zu tun haben und daß es sich bei den Bilanzierungen immer um Fließgleichgewichte handelt. Ich selbst möchte darüber hinaus den Begriff der potentiellen Energie unseres Organismus in den Mittelpunkt stellen. Ich bin der Meinung, daß die potentielle Energie der lebenden Gewebe größer ist, als dem einfachen Verbrennungswert der toten Materien (Eiweiß, Fett, Kohlen-

hydrate) entspricht. Diese potentielle Energie ist in den Zellen verankert. Es ist schon lange bekannt, daß beim Wachstum mehr Energie benötigt wird, als dem Verbrennungswert der angesetzten Stoffe entspricht. Ich verweise hier auf die bekannten Arbeiten von *M. Rubner*, *O. Heubner*, *F. B. Talbot*, *A. E. Hansen* und *W. Künzer*. Verschiedentlich hat man geglaubt, bei der Deponierung stofflicher Energie in der belebten Welt mit einem konstanten Wirkungsgrad rechnen zu können, der auf etwa 60–80% geschätzt wurde; d. h. es müßte für den Ansatz von 100 Cal. ein Betrag von ca. 150 Cal. zugeführt werden. Dieser Durchschnitt ist aber sicher nicht berechtigt. Ueberblickt man nämlich die vorliegenden Unterlagen, so erkennt man, daß die Verhältnisse sehr verschieden sind. Es gibt zweifellos Situationen, in denen der Organismus ausgesprochene Neigung zum Wachstum zeigt und der Wirkungsgrad recht günstig liegt. Auf der anderen Seite gibt es aber Zustände, da sich das Verhältnis so verschlechtert, daß selbst bei hoher Zufuhr ein Wachstum nicht erzwungen werden kann. Ich möchte glauben, daß gewisse Fälle der hartnäckigen Magersucht hier ihre energetische Erklärung finden, indem der Wirkungsgrad bei der Massenbildung sich äußerst verschlechtert. Sicher ändert sich dieses wichtige Verhältnis im Laufe des Lebens auch normalerweise erheblich. *A. E. Hansen* hat dies klar herausgestellt. Wir kennen wohl einen Teil der hier eingreifenden Faktoren, doch ist das ganze Gebiet noch weitgehend unerforscht.

Ueberblickt man diese Gegebenheiten, so wird klar, daß ein Unterschied besteht, ob ich einem Menschen 200 g toten Fleisches zu essen gebe, oder ob er selbst in seinem Organismus 200 g seiner Muskulatur abbaut. Im zweiten Falle müssen wir mit dem Freiwerden der in diesen Geweben vorhandenen potentiellen Energien rechnen, wodurch – wie leicht ersichtlich – das gesamte Bilanzgeschehen ein ganz anderes Bild bekommt. Hier werden im Organismus selbst Energien frei, die er nun durchaus dazu verwenden kann, Fettgewebe aufzubauen. Der Einwand, daß das nötige Material an Substanz fehlen könne, ist heute auch nicht mehr stichhaltig, seit wir wissen, daß unser Organismus in der

Lage ist, selbst die kleinsten Bausteine, wie die Kohlen-
säure, wieder zum Aufbau zu verwenden. Für die Klinik
gewinnt hiermit der Antagonismus zwischen Musku-
latur und Fettgewebe eine besondere Beleuchtung. Es
gibt eine ganze Reihe von Zuständen, bei denen man
schon lange erkannt hat, daß neben einer deutlich
negativen Stickstoffbilanz eine erhebliche Tendenz zur
Vermehrung der Fettgewebe besteht. Ich erinnere an
die lipophile Dystrophie, an das Cushing-Syndrom und
an die nicht sehr seltenen Fälle, in denen man bei einem
vorschreitenden Carcinom bei starker Rückbildung der
Muskulatur eigenartige Fettlager sich entwickeln sieht.
Die Beobachtungen und Untersuchungsergebnisse bei
einem ganz akuten Cushing-Syndrom sind für mich der
Anlaß gewesen, diese Probleme immer wieder auf-
zugreifen.

Der Vergleich unseres menschlichen Organismus mit
einer Maschine ist daher nur sehr bedingt richtig. Gehen
wir den Dingen auf den Grund, so treffen wir auf
große Unterschiede; eine Maschine bleibt trotz aller
Leistungen selbst unverändert, während unser Organismus
sich dauernd umstellt. Es gibt ja in Wirklichkeit
überhaupt keinen stationären Zustand bei der lebenden
Materie. Bei einer ausgeglichenen Stoffwechsellage kön-
nen wir wohl in praxi aus den kalorischen Gegeben-
heiten manches Wertvolle erkennen. Dort aber, wo
grobe innere Umstellungen vorhanden sind, wird man
sich immer an die Relativität solcher Messungen er-
innern müssen. Daß sie bei den schweren Zusammen-
brüchen des Organismus, z. B. bei der lipophilen Dystro-
phie, klinisch faßbar wurden, ist auf das große Maß
der Veränderungen zurückzuführen.

Bei der Suche nach weiteren Unterlagen bin ich auf
verschiedene Arbeiten und Ansichten gestoßen, die die
Relativität unserer bisherigen Betrachtungsweise er-
hellen.

Ich möchte in erster Linie eine Arbeit von M. A. und
J. W. Goldzieher (New York) nennen. Diese Autoren
üben in ihrem 1952 erschienenen Aufsatz scharfe Kritik
an der klinischen Stoffwechsellehre. Sie betonen, daß
die Verhältnisse im lebenden Organismus sehr viel

komplizierter liegen, als daß man sie einfach mit den bekannten Verbrennungsvorgängen in vitro gleichsetzen könne. Sie stellen fest, daß die bekannten thermodynamischen Regeln der Physik wohl für ein geschlossenes System gelten, nicht aber ohne weiteres auf ein offenes System angewendet werden dürfen, bei dem die Reaktionen in vielen Einzelprozessen mit sehr verschiedener Wärmetönung ablaufen. Sie nehmen dabei Bezug auf Ausführungen des bekannten Physikers *Norbert Wiener*. Sie sind der Meinung, daß eine eingreifende Neuordnung auf diesem ganzen Gebiet bevorsteht.

Eine besondere Erwähnung verdient das sog. zweite thermodynamische Gesetz der Physik. Es besagt, daß alle chemisch-physikalischen Systeme dauernd zum Ausgleich sich fortentwickeln, d. h. allmählich absteigen. Dieser Tendenz steht nun aber bei kritischer Betrachtung das organische Leben diametral gegenüber, da hier in weitem Umfang eine aufsteigende, spannungsschaffende und -erhaltende Richtung gegeben ist.

In seinem kürzlich erschienenen Buche „*The Biology of the Spirit*“ hat *Edmund W. Sinnott*, der Dekan der Naturwissenschaftlichen Fakultät der Yale-Universität, dieses ganze Problem klar beleuchtet. Er kommt zu der Ansicht, daß die mechanische Wärmetheorie dem organischen Leben nicht gerecht wird. Das Hauptmerkmal der lebendigen Substanz ist seine „Zielsicherheit“. Diese kann nicht geleugnet werden. Eine kritische Neubearbeitung der Grundfragen erscheint ihm unabdingbar.

An viele führende Autoren habe ich in diesen Jahren geschrieben und ihnen die hier dargelegten Probleme geschildert. Dabei habe ich auch auf entsprechende Beobachtungen im Tierreich hingewiesen. Bisher habe ich nur wenige Antworten erhalten. Ich lege daher in diesem Aufsatz den ganzen Fragenkomplex nochmals vor in der Hoffnung, daß hie und da eine Anregung aufgenommen wird.

Auf Grund meiner über dreißigjährigen Beschäftigung mit diesem Gebiet halte ich mich für berechtigt zu behaupten, daß unsere bisherige Betrachtungsweise der Energetik des menschlichen Organismus und der leben-

den Substanz unzureichend ist und einer Neuorientierung bedarf. Große Gebiete der Klinik, nicht nur Fettleibigkeit und Magerkeit, werden meiner Ansicht nach auf diese Weise befruchtet werden.

Zusammenfassung

1. Bei kritischer Betrachtung zeigt sich, daß die bisherige Stoffwechsellehre in vieler Hinsicht unzureichend ist. Vor allem wird sie dem Energiegeschehen im lebenden Organismus nicht gerecht.
2. Die energetischen Abläufe und Möglichkeiten in der lebenden Materie sind sehr kompliziert. Die bekannten thermodynamischen Regeln der Physik können hier nicht ohne weiteres übernommen werden. Besonders das sog. 2. thermodynamische Gesetz kann im lebenden Organismus keine Geltung haben, da die hier ablaufenden Prozesse keineswegs sämtlich zum Ausgleich neigen. Im Gegenteil, das Schaffen und Erhalten von „Spannungen“ ist dem „Leben“ eigen und von ihm nicht zu trennen. Auch der immer wieder gebrauchte Vergleich unseres Organismus mit einer Maschine kann nicht aufrechterhalten werden.
3. In den Mittelpunkt aller Betrachtungen über die Energetik des lebenden Organismus muß meiner Ansicht nach die potentielle Energie gestellt werden. Tut man dies, so ergibt sich eine ganz neue Sachlage. Es wird klar, warum die kalorienmäßige Erfassung der Einnahmen und Ausgaben unzulänglich ist und dort, wo stärkere endogene Umstellungen vorhanden sind, weitgehend versagen muß.
4. Eine neue Belebung der Grundlagenforschung erscheint unabdingbar. Als ein Programm in dieser Richtung sei der vorliegende Aufsatz aufgefaßt.

Schrifttum

- Bansi, H. W.: Das Hungerödem. Ferd.-Enke Verlag, Stuttgart 1949. — Barborka, C. J.: Proc. Interstate Postgrad. M. A. North America 240, 1945. — Bernhardt, Hermann: Die Fettleibigkeit. Ferd.-Enke Verlag, Stuttgart 1955; Erg. inn. Med. u. Kdhkd. 36, 1, 1929; Dtsch. med. Wschr. 1932, S. 1471; Dtsch. med. Journ. 6, 40, 1955; Konstitutionelle Medizin, III. Bd., S. 365, 1955; Endocrinology, 14, 209, 1930. — v. Bertalanffy, L.: Naturwissensch. 28, 521, 1940; 32, 26, 1944; Science 2871, 23, 1950. — Boothby, W. M. u. Bernhardt, Hermann: Z. Klin. Med. 116, 219, 1931. — Goldzieher, M. A. u. Goldzieher, J. W.: The Amer. J. of Digest. Diseases 19, 69, 1952. — Hansen, A. E. in Mitchell-Nelson, Textbook of

Pediatric, 5. Aufl. Philadelphia u. London. W. B. Saunders Company 1950. — *Künzer, W.*: in Biologische Daten für den Kinderarzt, II. Aufl. Herausgegeben von Prof. Dr. J. Brock. 2. Bd., S. 379, 1954 (Kraftwechsel). Springer-Verlag (Berlin-Göttingen-Heidelberg). — *Rubner, M.*: Kraft und Stoff im Haushalt der Natur. Akademische Verlagsgesellschaft, Leipzig 1909; Handbuch der normalen und pathologischen Physiologie, Bd. 5, Berlin 1928. — *Rubner, M.* und *Heubner, O.*: Z. Biol. 36, 1, 1898 u. 38, 305, 1899. — *Schäfer, E. L.*: Medizinische 1953, S. 941. — *Sinnott, E. W.*: The Biology of the Spirit, Viking Press, Publ. East 48 Street, New York 17, 1955. — *Talbot, F. B.*: Mschr. f. Kinderheilkunde 27, 465, 1924.

Anschr. d. Verf.: *Berlin-Spandau, Neuendorfer Str. 30*

Prof. Dr. med. H. Bernhardt
Professor für Innere Medizin
Berlin-Charlottenburg 9
Heerstr. 74, Tel.: 94 44 59

JOHN WILEY & SONS, INC.

ESTABLISHED 1807

PUBLISHERS OF BOOKS

440 FOURTH AVENUE
NEW YORK 16, N.Y.

MURRAY HILL 9-7630

W. O. WILEY,
HONORARY CHAIRMAN OF THE BOARD
E. P. HAMILTON,
CHAIRMAN OF THE BOARD
W. B. WILEY,
PRESIDENT
MARTIN MATHESON,
SENIOR VICE-PRESIDENT & SECRETARY
J. S. SNYDER,
VICE-PRESIDENT
J. S. BARNES,
VICE-PRESIDENT

FRANCIS LOBDELL,
VICE-PRESIDENT & TREASURER
WARREN SULLIVAN,
VICE-PRESIDENT
W. G. STONE,
ASST. VICE-PRESIDENT
G. S. IERARDI,
ASST. VICE-PRESIDENT
W. H. GRIMSHAW,
ASST. VICE-PRESIDENT
A. H. NEILLY, JR.,
ASST. VICE-PRESIDENT

September 6, 1957

Professor Norbert Wiener
Department of Mathematics
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

Dear Professor Wiener:

ANALYTICAL DESIGN OF LINEAR FEEDBACK CONTROLS, by George C. Newton, Jr., Leonard A. Gould and James F. Kaiser has just been published and we are pleased to inform you that a copy is on its way to you with the author's compliments and our own.

Your contribution and assistance in the preparation of this book are mentioned in the preface and I am sure you will look forward to seeing the finished product.

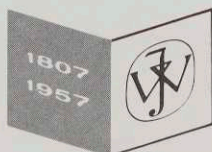
Should you have any additional comments they will be most welcome.

Sincerely yours,

Andrew H. Neilly, Jr.
Andrew H. Neilly, Jr.
Assistant Vice President

AHN:BB

150 YEARS



OF PUBLISHING

September 7, 1957

Dear Professor Wiener:
as Vice-Leader of the party of about 40 Japanese conferees,

This will serve to inform you that I am going to attend the 2nd World Metallurgical Congress to be held in Chicago, Illinois, from November 2 through 8, 1957, and to join the two weeks' Pre-Conference Study Tour beginning from October 20, starting from New York City.

As I intend to visit Canada before the Congress and Europe after it for the purpose of seeing the recent development of nickel metallurgy, I will make my trip according to the following tentative itinerary:

Leave	Arrive	Days of Stay	From-To
Tokyo		Oct. 1	
	Honolulu	Oct. 1 (Oct. 2) Tokyo	1 Oct. 2
Honolulu	San Francisco	Oct. 2	2(1-Fresno) Oct. 4-5
San Francisco	Vancouver	Oct. 6	3 Oct. 7-9
Vancouver	Edmonton	Oct. 10	2 Oct. 11-12
Edmonton	Sudbury	Oct. 13	1 Oct. 14
Sudbury	Boston	Oct. 15	1 Oct. 16
Boston	New York	Oct. 17	Study Tr. 15 Oct. 18-20-27-31
(Tour)	Chicago	Nov. 1	Congress 7 Nov. 2-3-8
Chicago	New York	Nov. 9	3 Nov. 10-12
New York		Nov. 12	
	London	Nov. 13	3 Nov. 14-16
London	Oslo	Nov. 17	1 Nov. 18
Oslo	Kristiansand	Nov. 19	1 Nov. 20
Kristiansand	Stockholm	Nov. 21	2 Nov. 22-23
Stockholm	Berlin	Nov. 24	4 Nov. 25-28
Berlin	Dresden	Nov. 29	1 Nov. 30
Dresden	Dusseldorf	Dec. 1	2 Dec. 2-3
Dusseldorf	Antwarp	Dec. 4	1 Dec. 5
Antwarp	Paris	Dec. 6	4 Dec. 7-8-10
Paris	Le Havre	Dec. 11	2 Dec. 12-13
Le Havre	Geneve	Dec. 14	2 Dec. 15-16
Geneve	Zurich	Dec. 17	2 Dec. 18-19
Zurich	Milan	Dec. 20	2 Dec. 21-22
Milan	Rome	Dec. 23	4 Dec. 24-25-27
Rome		Dec. 28	

Remarks: Sunday, X-mas Eve and Day

I shall be very much obliged if you will kindly let me know your whereabouts when I will be passing through the place closest to you, for I am just anxious to make a reunion with you; my addresses in the States are as follows:

Mr. Kiichi Murakami
c/o Mrs. G. Sato
5279 E. Tulare
Fresno, Calif.

Mr. Kiichi Murakami
c/o Sumitomo Shoji New York Inc.
149 Broadway
New York, N. Y.

Looking forward to seeing you again,

Sincerely yours,

Kiichi Murakami

DR. ERNST VON SCHENCK

REINACH (BASEL)

XXXXXXXXXXXX
TEL. 0 25 80
XXXXXX

Basel, Sevogelstr. 40

Tel. 23 52 94

Schweiz

7. September 1957

Herrn Prof. Dr. Norbert Wiener
Massachusetts Institute of Technology
Dpt. of Mathematics
Cambridge 39

Massachusetts USA

Sehr geehrter Herr Professor,

das Studio Basel des Schweiz. Landessenders Beromünster führt seit neuester Zeit Sendungen unter dem Titel "weltweite Gespräche" durch. Damit sollen die Uebertragungsmöglichkeiten des Radio dazu benutzt werden, Persönlichkeiten aus verschiedenen Ländern über gewichtige Themen unserer Gegenwart miteinander ins Gespräch zu bringen. Sie werden unmittelbar verstehen, warum ich vor allen andern an Sie gedacht habe, als man mich bat, "Kandidaten" für derartige Sendungen zu nennen. Aber natürlich ist das sehr viel mehr als nur eine spielerische Assoziation. Vielmehr glaube ich - nach der Lektüre von "Mensch und Menschmaschine", dass Sie einem breiteren Publikum Entscheidendes zu sagen haben, und dass wir, ohne über einige Ihrer Grundthesen gründlich nachgedacht zu haben, mit ganz fundamentalen Aspekten der gegenwärtigen und zukünftigen Entwicklung - und wie schnell ist das Zukünftige schon Gegenwart, ja Vergangenheit! - ganz einfach nicht fertigwerden, so dass die Gefahr immer grösser wird, dass diese uns "fertig macht".

Als Basis eines solchen Gesprächs dünkte ich mir einige Grundgedanken aus Ihren Kapiteln über die "industrielle Revolution" und "Recht und Kommunikation".

Als Gesprächspartner in der Schweiz habe ich an Fr. Pollock, Professor am Frankfurter Institut für Sozialforschung gedacht, den und dessen in Europa viel Aufsehen erregendes Buch über Automation Sie gewiss kennen. Er wohnt seit einiger Zeit wenigstens teilweise im Tessin. Er scheut alles Oeffentliche für sich selbst, wäre aber aus Freundschaft zu mir und wegen der Idee dieses Gespräches gerade mit Ihnen wohl bereit, eine Ausnahme zu machen.

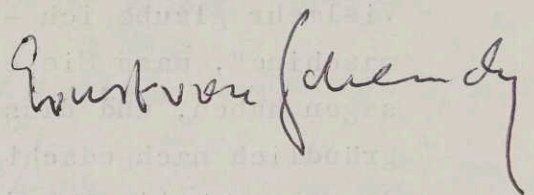
.1. [Ernst-10-58]

Hier in Basel würde ich als "Vermittler" zum Publikum fungieren, während in den USA unser dortiger Korrespondent H. Gautschy, Sie bei unseren Hörern einführen würde. Wir hoffen sehr, dass Sie, sehr verehrter Herr Professor, sich unserer Bitte, an diesem so wichtigen "weltweiten Gespräch" teilzunehmen, nicht versagen werden.

Wir wären Ihnen für Anregungen und eventuelle Uebersendung weiterer Publikationen zu dem zu behandelnden Problemkreis aus Ihrer Feder sehr dankbar.

In vorzüglicher Hochachtung

Dr. Ernst von Schenck



BRITISH COLUMBIA ACADEMY OF SCIENCES
VANCOUVER, B. C.

9th September, 1957.

Dr. Robert Wiener,
Department of Mathematics,
Massachusetts Institute of Technology,
Cambridge, Mass.,
U. S. A.

Dear Dr. Wiener,

Thank you very much for your letter of August 9th. We are extremely sorry to note that you are unable at the present time to make a trip to Vancouver. I can fully appreciate that it is a long way to ask you to come for a one night stand and also that it would be very strenuous if you were to stop off at several other places en route.

If when you retire you feel like an excuse for visiting Vancouver during the academic session, I should appreciate it very much if you would write to me when it might be possible to arrange for you to talk to the Academy.

With kind regards,

Yours sincerely,

Guy G. S. Dutton

G.G.S. Dutton,
Program Chairman,
Chemistry Department,
University of British Columbia.

South Tamworth
New Hampshire
September 9, 1957

Mr. H. D. Block
Department of Mathematics
White Hall
Cornell University
Ithaca, New York

My dear Mr. Block:

My chapter of the book on Calculus is so far back that I had almost forgotten it. It is certainly not a job of which I am particularly proud, and so long as what is done to it does not directly affect my name in an adverse manner, I frankly don't care about it. You thus have full authorization to go ahead with the revision in your own manner, provided that it is made clear in the preface that I have no share in the revision, and provided you use ordinary care and judgment in refraining from committing me to anything to which I do not wish to be committed.

Sincerely yours,

Norbert Wiener

NW:jc

South Tamworth
New Hampshire
September 9, 1957

Mr. Thomas E. Brewster
1786 East 89th Street
Cleveland 5, Ohio

My dear Mr. Brewster:

After the many years which have passed since Einstein's first work on generalized relativity, two things have become clear. One is that any theory of physics in the future will have to accept the identification of gravitation with acceleration forces. The other is, that the precise frame over which this identification is to be made remains highly uncertain. It is a fact that only tremendously large gravitational fields are big enough to show the need for any substantial modification of special relativity theory, and that we have the knowledge of too few of these and of too small a variety of these to come to any thoroughly final conclusion.

Very truly yours,

Norbert Wiener

NW:jc

South Temworth
New Hampshire
September 9, 1957

Mr. Ralph Freedman, Secretary
Humanities Society
Assistant Professor of English
State University of Iowa
Iowa City, Iowa

Dear Mr. Freedman:

Pardon my delay in answering your letter. I have been on vacation in the White Mountains and part of my very considerable correspondence has been mislaid. It appears to me that my lecture schedule is full up for the year. Certainly I am full up until mid-year's, and I am a little hesitant to take on much for the second term as I have a good deal of work to do in writing and research. May I therefore bog off?

With apologies,

Norbert Wiener

NW:jc

South Temworth
New Hampshire
September 9, 1957

Mr. Carl Heyel
39 Papermill Road
Manhasset, New York

Dear Mr. Heyel:

I have not read Dr. Modigliani's book as yet, but may be able to look it over at my leisure. I must confess that I am not attracted by the word "scientician." It is either a pompous synonym for scientist, or it expresses a group with which I am quite out of sympathy, the group that combines the topics of work of the scientist with the point of view and the moral attitude of the technician. Unquestionably this group has a function in our modern world, but in my opinion, this function has been greatly inflated at the expense of the proper function of the scientist.

Sincerely yours,

Norbert Wiener

NW:jc

South Tamworth
New Hampshire
September 9, 1957

Mr. A. M. Musto
American Forum - for Socialist Education
Room 221
1155 Broadway
New York 10, New York

My dear Mr. Musto:

I am already tied up for the period around the ninth of November at which your Conference is to be held. I therefore must regret that I am unable to participate. Moreover, I am not perfectly clear as to the sponsorship of your forum. As it is called the American Forum for Socialist Education, I presume it is sponsored by the Socialist Party. While I have a certain sympathy with Socialist ideals, I must say that the official publications of the Socialist Party have handled the matter of my relation to automatization in what is either an incompetent or disingenuous manner. I therefore do not wish to put myself in a position in which it may appear that I have been summoned to your meeting in order to make a case for myself. I do not recognize any authority on your part, and I do not wish to appear to defend myself before a group that has already established its hostility.

Sincerely yours,

Norbert Wiener

NW:jc

P. S. This letter does not authorize you to quote it in whole or in part or to make any literary use of it.

N. W.

[sent 9/10/57]

South Tamworth
New Hampshire
September 9, 1957

Mr. Bengt Ulin
Matematiska Institutionen
Uppsala Universitet
Uppsala, Sweden

My dear Mr. Ulin:

I am holding your letter for action until
Mr. Masani arrives, which should happen within
ten days. Then we shall answer you together.

Sincerely yours,

Norbert Wiener

NW:jc

Enc. 11/11/57

September 10, 1957

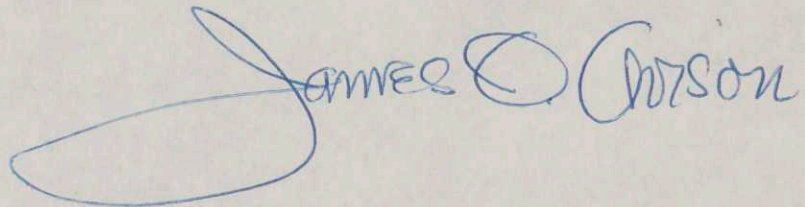
MEMORANDUM

TO: Dr. Weiner
FROM: James O. Avison, Convocation Director
SUBJECT: Length of Address at Grinnell Convocation

Since there will be so many events going on at Grinnell's fall convocation, we think it best to give each guest speaker a stated number of minutes for the length of his address.

Your address, Friday morning, October 25, is scheduled for 30 minutes. I hope this meets with your approval.

joa/pd

A handwritten signature in blue ink that reads "JAMES O. AVISON". The signature is written in a cursive style with a large, sweeping initial "J".

THE UNIVERSITY OF CHICAGO

CHICAGO 37 • ILLINOIS

COMMITTEE ON HUMAN DEVELOPMENT

September 10, 1957

Professor Norbert Wiener
Department of Applied Mathematics
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

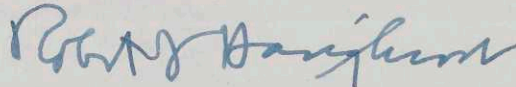
Dear Professor Wiener:

I am asking the University of Chicago Press to send you a copy of the book by DeHaan and Havighurst entitled, Educating Gifted Children.

As you will see, we have made considerable use of your autobiography in the chapter on "The Extremely Gifted Child." I am greatly indebted to you for permission to use this material, and also for your letter of April 12 written from Tokyo.

I wrote the chapter on "The Extremely Gifted Child" in the book. I do not believe that I did as good a job as I might have done if I had had more time to take advantage of your suggestions and those of others. However, I hope I have made a useful contribution which will help others in thinking about the problems.

Sincerely yours,



Robert J. Havighurst
Professor of Education

RJH/f

American Forum - for Socialist Education
Room 221
1133 Broadway, New York 10, N.Y.

September 10, 1957

Dr. Norbert Wiener
South Tamworth
New Hampshire

Dear Norbert Wiener,

I greatly appreciated your taking the trouble to telephone me the other evening about the conference on November 9th about which I had written you.

I agreed to write you a further comment on the point you had raised about the relationship of American Forum to the Socialist Party. I do not know about the comments on your position relating to automation which may have been made in the socialist press. However, as I noted previously over the telephone, there is no connection between the Socialist Party and American Forum. As a matter of fact the Socialist Party has, through its national executive committee, been severely critical of American Forum and is threatening with expulsion those members of the Socialist Party, who are on the national committee of the American Forum.

In any event, membership on the national committee of American Forum is on an individual basis, as the enclosed brochure indicates. No one serves as a delegated representative of his organization or group. There are individual members of the Socialist Party, such as Professor Mulford Sibley of the University of Minnesota, who are on our national committee and who naturally are in disagreement with the hostile attitude of the Socialist Party, mainly on the ground that we believe that communists should not be automatically excluded from political discussion at the present stage and that on a national committee of over forty members, we have deliberately asked two members of the Communist Party of the United States to serve. This is interpreted by some of our critics as entering into a political relationship and also as a united front with communists.

We point out that American Forum does not have any platform except that of untrammelled political discussion on a basis of non-exclusion and therefore we are not entering into a political agreement on program. Quite the contrary. The American Forum exists on the mutually

page two

accepted basis that there is very basic disagreement among us.

Nor does the American Forum stand for united action with communists or, for that matter with any political group. Our whole position is discussion precisely on the ground that there are disagreements to be faced and thought through and that there is no adequate basis for united action until this has been done.

Among the members of the national committee of American Forum listed on the enclosed brochure, you will note Professor Kermit Eby of the University of Chicago, Professor Paul Baran of ^{Yale}eland-Stanford University, Dr. Stringfellow Barr, now lecturer at Princeton University, Dorothy Day, well-known leader of the Catholic Worker group, Waldo Frank, novelist and critic, Mr. Russell Johnson of the American Friends Service Committee in Boston, Professor William Neumann of Goucher College, Dr. William Appleman Williams, now at the University of Wisconsin, etc.

To refer to our brochure again, we come together not on the basis of this or that dogmatic socialist formulation, but precisely because we hold that "it is a time when men everywhere need to do fresh and courageous thinking about the problems posed by the vast changes that are on the way." We want the conference on November 9th to give a clear demonstration of this effort at fresh and courageous thinking. It is for this reason that we are so very eager that you should give the opening address on the significance of automation to human beings and to society in our day.

This would certainly give you an opportunity to comment upon the misrepresentation of your position at certain points which you feel has occurred in the socialist press. Your presence would also be a strong endorsement of the need for inclusion of all elements willing to submit themselves to challenge and discussion in untrammelled exchange of ideas.

In view of the above, I hope very much that in spite of your already heavy commitments that you will feel that you can come to New York on November 9th. If this should nevertheless be absolutely impossible, I am raising the question whether you might possibly make it on Saturday, December 7th if we were to postpone the conference to that date.

page three

Once again, I shall appreciate it if you can let me have your answer promptly and, though I shall be away part of the weekend, if you will leave a call at my apartment (UNiversity 4-1700) we shall undoubtedly be able to connect again. A letter which will be certain to reach me here in New York on Monday morning next would also meet the situation.

Thank you very much for your serious consideration of our request.

Sincerely yours,

A. J. Muste
A. J. Muste (m)

mca

2702 1/2 S. Redondo Blvd.
Los Angeles 16, California
September 11, 1957

Prof. Norbert Wiener
Mathematics Dept.
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Prof. Wiener:

In our discussion of the random factor and its place in electronic computers, you introduced me to a manuscript by Robert J. Lee called "A Generalized Learning-Machine", which he copyrighted in December of 1954.

After a study of his paper I feel that it would be profitable for me to meet Mr. Lee for an exchange of ideas on the subject.

I would be very grateful if you could put me in touch with Mr. Lee either directly or indirectly in whichever manner you find most convenient.

Hoping that this letter finds you and your family enjoying the best of health, I remain

Respectfully yours,

Walter Appleman, M.D.

Walter Appleman, M.D.

WA:ag

Columbia University
in the City of New York

NEW YORK 27, N. Y.

SCHOOL OF ENGINEERING

OFFICE OF THE DEAN

September 11, 1957

Dr. Norbert Wiener
Massachusetts Institute of
Technology
Cambridge, Mass.

Dear Dr. Wiener:

In making our final arrangements for the Combined Plan Conference from October 6th through 9th, it would be most helpful if you would let me know your mode of traveling to New York. If you intend to travel by rail, it is requested that you yourself make the round-trip reservation. We suggest first-class accommodations, using roomettes if available, for overnight travel.

Expense travel vouchers will be provided at Arden House, and you will be reimbursed as soon as you mail us the signed vouchers after your return home.

If you wish to fly, your flight will be arranged through Columbia Travel Service and you will receive your round-trip ticket.

Transportation from New York City to Arden House will be by chartered bus. I shall advise you in the near future at what time the buses will leave.

Your prompt reply will be greatly appreciated.

Sincerely yours,

Gudrun Dalchow
Gudrun Dalchow
Secretary
Combined Plan Program

Philadelphia College of Osteopathy

SPRUCE STREET AT 48TH

PHILADELPHIA 39, PA.

Office of the Dean

SHERWOOD 8-1000

September 11, 1957

Dr. Norbert Wiener
South Tamworth
New Hampshire

Dear Dr. Wiener:

I have just talked with Mrs. Wiener and told her a little bit about our Arden House conference. As I explained to her, the details of travel for you will be made by Professor Lee at Columbia.

The program for the conference is shaping up nicely. It is built around a consideration of the central purpose of a liberal-arts college and how such a college can remain true to its convictions and purpose and at the same time prosper intellectually and otherwise in a society which is increasingly demanding a utilitarian emphasis in education. As you know Columbia School of Engineering takes all of its students from its Three-Two plan. This policy, in effect, says that the best way to make an engineer is to give him first as fine a liberal-arts experience as can be obtained. Columbia naturally is concerned with the kind of experience which its students whom it admits have. Hence we are going to devote hours to a consideration of some of the aspects of those factors with which any good liberal-arts faculty should be concerned.

The conference has been organized with a minimum of rigidity in its structure, on the theory that the best way to have an individual include his own thinking is to stimulate him with ideas which will be the normal media of his thinking, and give him an opportunity to develop his own thoughts in conversation with people whose responsibilities and interests are in his field. Our main purpose is to get our members to think about this and hence about their jobs and their impact on students in a way which they normally don't.

We will open the conference on Sunday evening after dinner with an address by Dean Barzun of the Graduate Faculties of Columbia who will speak to the subject of the misbehavioral sciences. We will hear also from Professor Rickey who is head of the Department of Art at Tulane; and Professor Joseph Sittler who holds a chair of theology in the Federated Theology Faculty at Chicago; Professor A. H. Halsey, a sociologist from Birmingham, England; and possibly President Syms of the Pennsylvania Railroad.

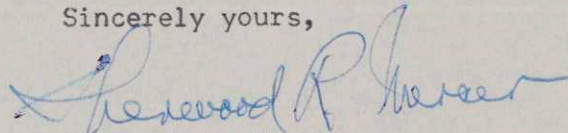
We are asking each speaker to prepare a paper, and if you can let us have your paper a week or ten days before the conference, we will appreciate it. If you cannot do that, will you be kind enough to bring two copies of your address with you. I would also appreciate it if you would wire me collect a title for your paper.

Dr. Norbert Wiener
September 11, 1957
Page 2

The format of the conference is to have an address on Sunday evening, two addresses Monday morning, duscussion groups Monday afternoon, free time Monday evening, two addresses Tuesday morning, discussion Tuesday afternoon, free time Tuesday evening, one address and summing-up on Wednesday morning, and closing the conference with lunch.

I want to express to you our delight that you are going to be with us, and we are all looking forward to having you as a member of our conference. With kind regards,

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Sherwood R. Mercer". The signature is fluid and cursive, with a prominent initial "S" and "M".

Sherwood R. Mercer
Dean

SRM:mm

cc: Dr. Wiener
Massachusetts Institute of Technology
Cambridge, Mass.

September 11, 1957

Dr. Norbert Wiener
South Tamworth
New Hampshire

Dear Dr. Wiener:

I have just talked with Mrs. Wiener and told her a little bit about our Arden House conference. As I explained to her, the details of travel for you will be made by Professor Lee at Columbia.

The program for the conference is shaping up nicely. It is built around a consideration of the central purpose of a liberal-arts college and how such a college can remain true to its convictions and purpose and at the same time prosper intellectually and otherwise in a society which is increasingly demanding a utilitarian emphasis in education. As you know Columbia School of Engineering takes all of its students from its Three-Two plan. This policy, in effect, says that the best way to make an engineer is to give him first as fine a liberal-arts experience as can be obtained. Columbia naturally is concerned with the kind of experience which its students whom it admits have. Hence we are going to devote hours to a consideration of some of the aspects of those factors with which any good liberal-arts faculty should be concerned.

The conference has been organized with a minimum of rigidity in its structure, on the theory that the best way to have an individual include his own thinking is to stimulate him with ideas which will be the normal media of his thinking, and give him an opportunity to develop his own thoughts in conversation with people whose responsibilities and interests are in his field. Our main purpose is to get our members to think about this and hence about their jobs and their impact on students in a way which they normally don't.

We will open the conference on Sunday evening after dinner with an address by Dean Barzun of the Graduate Faculties of Columbia who will speak to the subject of the misbehavioral sciences. We will hear also from Professor Rickey who is head of the Department of Art at Tulane; and Professor Joseph Sittler who holds a chair of theology in the Federated Theology Faculty at Chicago; Professor A. H. Halsey, a sociologist from Birmingham, England; and possibly President Syms of the Pennsylvania Railroad.

We are asking each speaker to prepare a paper, and if you can let us have your paper a week or ten days before the conference, we will appreciate it. If you cannot do that, will you be kind enough to bring two copies of your address with you. I would also appreciate it if you would wire me collect a title for your paper.

Dr. Norbert Wiener
September 11, 1957
Page 2

The format of the conference is to have an address on Sunday evening, two addresses Monday morning, discussion groups Monday afternoon, free time Monday evening, two addresses Tuesday morning, discussion Tuesday afternoon, free time Tuesday evening, one address and summing-up on Wednesday morning, and closing the conference with lunch.

I want to express to you our delight that you are going to be with us, and we are all looking forward to having you as a member of our conference. With kind regards,

Sincerely yours,

Sherwood R. Mercer
Dean

SRM:mm

cc: Dr. Wiener
Massachusetts Institute of Technology ✓
Cambridge, Mass.

12th September 1957. *fel*

My Dear Norbert,

It was very nice to hear from you again and to know that you are still so closely in touch with the work on Alpha Rhythms.

We have a lot of information now which seems to coincide exactly with yours and I am most anxious to visit you and your colleagues in order to discuss some of the points of interest and agreement.

If you can possibly get down to New York I should of course be very deeply honoured if you would participate in the discussion of my paper on Cybernetics. I can quite understand that you are very heavily loaded just now but it would be good to appear again with you. Many people over here still remember our dialogue at Urchfont Manor on the way to Southampton.

Vivian sends her warmest greetings to you both.

Yours sincerely,

Greyhalls.

Your invitation to stay with you in Boston is most kind. May I let you know as soon as my dates are fixed? I have a tentative lecture engagement in Boston but the day is still uncertain - I have to follow the fees around the states!



Professor Norbert Wiener,
Massachusetts Institute of Technology,
BOSTON,
Mass.
U.S.A.

First fold here

Second fold here

Sender's name and address: Dr. W. Grey Walter.
Burden Neurological Institute,
Stapleton, Bristol.

AN AIR LETTER SHOULD NOT CONTAIN ANY
ENCLOSURE ; IF IT DOES IT WILL BE SURCHARGED
OR SENT BY ORDINARY MAIL.

To open cut here

Herrn Prof.
Dr. Norbert Wiener
Massachusetts Institute of
Technology, Dep. of Mathematics
C a m b r i d g e 3 9, Mass.
U.S.A.

Basel, 14. September 1957 V/AB

Sehr geehrter Herr Professor,

Als Beilage senden wir Ihnen eine Einladung unseres Mitarbeiters Herrn Dr. E. von Schenck zur Teilnahme an der Reihe unserer "Weltweiten Gespräche". Wir würden uns ausserordentlich freuen, unseren Hörern die wichtigen Probleme der Kybernetik aus erster Hand näher bringen zu können.

Wie Herr Dr. von Schenck schon ausführte, würde es sich um ein Vierergespräch handeln: je ein Fachmann hüben und drüben, und hüben und drüben je ein "Vermittler". Das Gespräch lässt sich von irgendeinem Radio-Studio in den USA aus durchführen, am besten wohl von New York aus; Sie und Herr Dr. Gautschy würden mit Herrn Prof. Pollock und Herrn Dr. von Schenck in Kurzwellenverbindung stehen. Diese Art von Gesprächen sollte bei unseren Hörern auch vom rein Technischen her Anklang finden; wir haben bisher ein solches Gespräch (mit dem früheren französischen Aussenminister Robert Schuman) durchgeführt und waren mit dem Erfolg sehr zufrieden.

Als Honorar für Ihre Bemühungen schlagen wir Ihnen 200 Schweizer Franken (plus allfällige Spesen) vor. Die Dauer des Gesprächs beträgt ungefähr 30 Minuten. Dürfen wir Sie um Ihre prinzipielle Stellungnahme zu unserer Anfrage und eventuell auch schon zu dem Gesprächsstoff, wie ihn Herr Dr. von Schenck skizzierte, bitten?

Wir freuen uns auf Ihre Antwort und verbleiben

mit vorzüglicher Hochachtung:

Studio Basel
Vortragsdienst

i.A.

A. Blatter

Beilage

TELEPHONE
CAPITOL 7-2600



CABLE ADDRESS "BOSMAN"
TELETYPE BS-43

ADJOINING NORTH STATION • BOSTON 14, MASS.

14 Sept. 1954.

Dear Prof. and Mrs. Wiener,

It has been long since you came to NAGOYA to deliver lecture on automation and to have a round table talk on cybernetics in general. We always appreciate your favours and useful suggestions which you gave us at that occasion.

By the way I was appointed Japanese delegate to the XIIth general Assembly of "International Scientific Radio Union" held at the University of Colorado, Boulder, Colorado from 22 Aug. to 5 Sept. After the post-assembly-tour to "Yellow Stone Park"

Manger - The Friendliest Name in Hotels

NEW YORK CITY
MANGER VANDERBILT - MANGER WINDSOR

SAVANNAH, GA.
THE MANGER

WASHINGTON, D. C.
MANGER HAMILTON - MANGER ANNAPOLIS - MANGER HAY-ADAMS

ROCHESTER, N. Y.
MANGER ROCHESTER

BOSTON, MASS.
THE MANGER

GRAND RAPIDS, MICH.
MANGER ROWE

CLEVELAND, OHIO
THE MANGER

on 6-10 Sept., I came to Boston on 11 Sept. to deliver lectures on "Wave-form of atmospheric" and "Correlation of atmospheric with weather phenomena" at Air Force Cambridge Research Center on 12 and 13 Sept., and in the afternoon of 13 Sept. I became free and telephoned to M. I. T and your residence, but unfortunately I could not make contact with you.

I must leave Boston for New York on the morning of 15 Sept., and so I postponed my pleasure to see you. The 2nd World Conference on Atmospheric Electricity is to be held in some place near Boston next May, and I am invited to the conference officially.

I hope I shall be able to meet you at that occasion.

TELEPHONE
CAPITOL 7-2600



CABLE ADDRESS "BOSMAN"
TELETYPE BS-43

ADJOINING NORTH STATION • BOSTON 14, MASS.

Sincerely yours,

B. Kimpura

Prof. Atsushi KIMPARA,
Director of
the Research Institute
of
Atmospheres,
Nagoya University,
Toyokawa-City, Japan.

Manger - The Friendliest Name in Hotels

NEW YORK CITY

MANGER VANDERBILT - MANGER WINDSOR

SAVANNAH, GA.

THE MANGER

WASHINGTON, D. C.

MANGER HAMILTON - MANGER ANNAPOLIS - MANGER HAY-ADAMS

ROCHESTER, N. Y.

MANGER ROCHESTER

BOSTON, MASS.

THE MANGER

GRAND RAPIDS, MICH.

MANGER ROWE

CLEVELAND, OHIO

THE MANGER

WABASH COLLEGE
CRAWFORDSVILLE, INDIANA
OFFICE OF THE PRESIDENT

September 16, 1957

Dear Dr. Wiener:

I am writing this letter to you and identical letters to Erich Fromm and Whitney Oates with a view to completing our plans for the symposium on liberal education here on October 10.

As I have previously explained, we have planned this symposium and the program for October 11 as a celebration of our 125th anniversary. Messrs. Sloan, Abrams, and Olds, who will be our guest speakers on October 11, will presumably use the anniversary as a point of departure to talk about the importance of corporate financial support of private higher education. In like manner, I presume the three of you could use the anniversary as a point of departure for talking about the importance of liberal education. At any rate, our faculty committee in charge of this program regards the symposium as a means of dramatizing our mission as a liberal arts college.

Your audience will consist of our faculty, members of our student body, members of our Board of Trustees, alumni, and representatives from our sister institutions in Indiana. It is hard to predict the size of the crowd, but I would suppose that it would be a minimum of five hundred and it might run as high as one thousand.

I should add at this point that I have been astonished at the amount of interest that has been expressed in this two-day program. Its announcement in the newspapers resulted among other things in my being notified that TIME MAGAZINE would like to cover the occasion. Also, newspapers have inquired if copies of the papers to be read at the symposium and the speeches to be given the next day would be available in advance for news stories which would go to press before the programs have been completed. This causes me to suggest that if it is possible for you and Fromm and Oates to bring extra copies of your speeches with you for release through our offices, it would be helpful.

I do not presume to suggest to the three of you the tenor of your remarks, but let me review briefly our reasoning in inviting you, Dr. Fromm, and Dr. Oates to be the participants in this symposium. Our curriculum adheres to the conservative

tradition of the liberal arts. Our whole effort is confined to an undergraduate program and we offer only one degree, the Bachelor of Arts. All of our students are required to take much the same work in the first two years and in the junior and senior years they concentrate in one of the three major divisions of the curriculum -- science, humanities, and social studies. Our faculty is organized with respect to these three divisions and the divisional organization, I believe, means something more here than it does at most colleges, at least in this part of the country. Despite considerable pressure from the competition of other institutions and the way the public generally thinks about education in the Middle West, we have consistently resisted modifying our curriculum by the introduction of courses in business administration, engineering, physical education, graduate work, and the like. With all of this in mind we have assumed (1) that each of you would speak primarily from the point of view of your respective fields and (2) that all of you would discuss among other things the relevance of liberal education to the kind of world we shall have to live in the years ahead. Both of these suggestions are meant to be very broad and need not limit you in any other way which you might wish to proceed.

It occurs to me that it would be helpful if time permits for the three of you to communicate with each other in some way about what you each generally propose to do with a view to giving the symposium a certain amount of unity.

Finally, I would like to submit for your approval the program procedure which we have tentatively planned for the symposium. We are announcing that the program will begin at ten o'clock in the morning. It is our thought that we would have each of you speak in succession with perhaps a fifteen-minute break between papers. We have assumed that each of you would probably speak from thirty to forty-five minutes, although if you prefer to modify this in either direction, that, of course, would be all right with us. Following lunch, it is our thought that we should reassemble at two or two-thirty, for a discussion period. This could begin with some informal discussion among the three of you about each other's remarks in the morning, following which I am sure there would be questions and observations from the floor. If you would prefer to have this discussion period organized in some other way, we shall be happy to alter our plans accordingly. For example, it has been suggested that it might be more useful to have each of the three of you meet representatives of your respective groups in separate rooms in the afternoon, although our preference is for the form I have already suggested.

Dr. Wiener

-3-

September 16, 1957

Forgive me for having written at such length, but as you can tell from this letter and my earlier letter, I am most anxious to do all I can to assure a successful program and I hope you will tell me if there is any way in which I can be helpful to you as you complete your plans.

Yours sincerely,

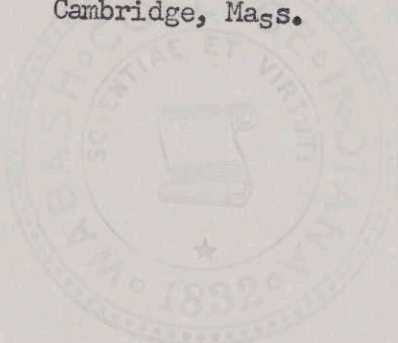
B. K. Trippet

B. K. Trippet

P. S. (1) On the chance that it might be helpful to you, I am enclosing a brief statement about Wabash in this letter and in a separate envelope I am sending you a copy of our current catalogue.

P. S. (2) I shall appreciate it if you will let me know your travel plans so that I can make any arrangements we need to make at this end. I presume all of you will be coming to Indianapolis, which is the nearest rail and air terminal to Crawfordsville, on Wednesday, October 9. If you will let me know your time of arrival, I shall see to it that you are met and brought to Crawfordsville that evening or taken to the Columbia Club in Indianapolis for the night and then brought to Crawfordsville the next morning. We shall, of course, provide transportation for you back to Indianapolis to meet your return schedule.

Dr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Mass.



File

JOHN SIMON GUGGENHEIM MEMORIAL FOUNDATION

551 FIFTH AVENUE · NEW YORK · N · Y ·

17 September 1957

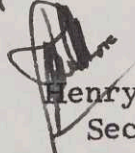
TO THE FELLOWS:

This is my annual request of the Fellows to help us find applicants who will be worthy of being your fellow-Fellows.

Each year those applicants who have been suggested to us by the Fellows yield a higher and higher percentage of new Fellows. And not only that, but it is clear from where I sit that the applicants suggested by the Fellows are pioneering in their fields--as I myself would expect of those who are suggested by the Fellows who are themselves pioneers!

As usual, the due date for applications will be 15 October; but this date is in no sense a deadline. We accept applications as long as we can, consistent with having enough time to prepare them for the consideration of the Committee of Selection.

As you know, your suggestions are appreciated.



Henry Allen Moe
Secretary

Dr. Norbert Wiener
Massachusetts Institute of
Technology
Cambridge, Massachusetts

NEW ENGLAND CHAPTER, INC.

American Material Handling Society

c/o BRODIE INDUSTRIAL TRUCKS, INC.

50 Commercial Street Malden 48, Massachusetts MA 2-1410



OFFICERS

EXECUTIVE COMMITTEE

PRESIDENT

E. S. Westervelt
Bath Iron Works

VICE PRESIDENTS

R. V. Schneider
Norton Company

J. P. Cunniff

Ford Motor Company

J. Ford McGowan
McGowan Associates

Barney Singer
Korn Leather Co.

SECRETARY

E. J. Fitzmaurice, Jr.
Electric Storage Battery Co.

TREASURER

H. H. Beaudet
Draper Corp.

D. P. McDonald
Stop & Shop, Inc.

M. J. Rowan
Modern Materials Handling

M. S. Bromfield
Bromfield Associates

NATIONAL DIRECTOR

S. C. Traudt
Bird & Son, Inc.

September 19, 1957

Mr. Norbert Wiener
South Tamworth
New Hampshire

Dear Mr. Wiener:

Further to your letter of August 13th, we are delighted to have you as our guest speaker on the 21st of January.

The honorarium is agreeable, and anytime you are ready to talk about your talk or send me a sketch of your talk will be fine.

Thank you very much for your cooperation in this matter.

Yours very truly,

BRODIE INDUSTRIAL TRUCKS, INC.


W. Geisenhainer
Program Chairman

WG/ea1

Shulhov n. Belou, le 19 septembre 1957

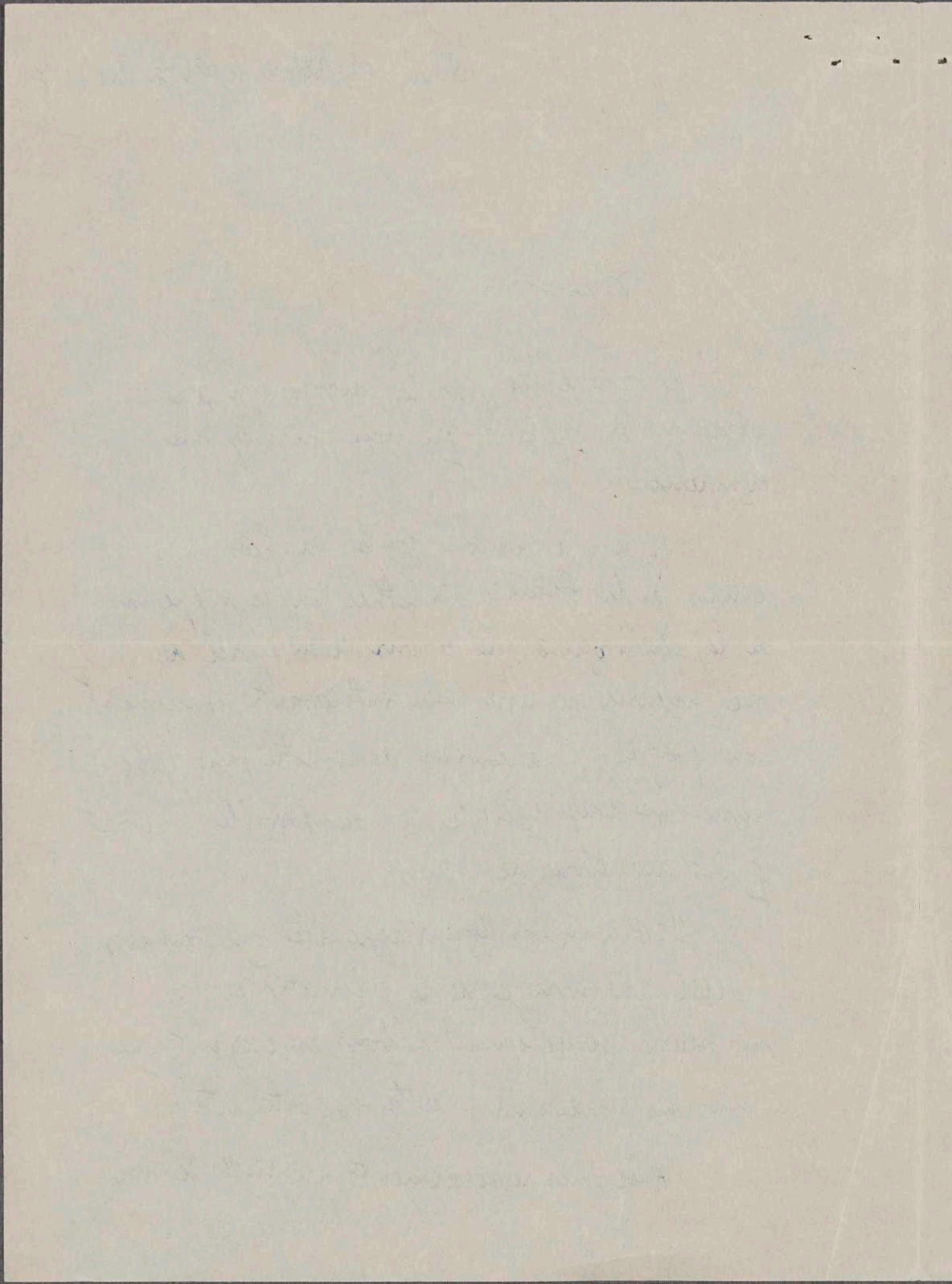
Monsieur,

Je vous écris pour la saison un peu étrange en espérant que vous pourriez me comprendre.

Il n'y a pas longtemps j'ai fini mes études à la Faculté des lettres où je m'éprenais de la philosophie. Ce ce jour je m'efforce de me procurer les livres bien intéressants concernant son progrès. Néanmoins, dans notre pays cette chose est assez difficile (ou impossible), surtout quant aux livres de l'Ouest.

C'est pourquoi, lors d'apprendre que vous avez publié un ouvrage de la cybernétique, je m'adresse directement à vous en croyant que vous me pardonneriez cette importunité.

Avec mes remerciements anticipés je vous



prie d'agréer mes respectueuses salutations.

Zdeněk Kouřim

mon adresse: Zdeněk Kouřim
Skuhrov n. Bělou 67
Tchécoslovaquie

[ans 10/17/57]

For a copy of the original manuscript

see page 10

From the
Shelton N. Shelton
1870-1900

Celestino Fuentes Suárez

JULIAN ROMERO BRIONES, 13
LAS PALMAS DE GRAN CANARIA
(ISLAS CANARIAS)

20 SEPTIEMBRE DE 1957

SEÑOR NORBERT WIENER
MASSACHUSETTS

DISTINGUIDO SEÑOR:

ME COMPLACERÍA MUCHO POSEER SU ILUSTRE
AUTÓGRAFO Y LE RUEGO TENGA LA BONDAD DE CONCEDERMELO, EN
EL PLIEGO ADJUNTO, DISPENSANDOME EL HONOR DE CONSIGNAR,
ADENÁS, UNAMENCIÓN Ó DEDICATORIA, A SU MEJOR AGRADO.

SINCERAMENTE AGRADECIDO POR SU AMABLE
BUENA ACOGIDA A MI SOLICITUD, LE RUEGO ACEPTÉ LA EXPRE-
SIÓN DE MIS MEJORES BUENOS DESEOS Y DE MI ALTA CONSIDE-
RACIÓN.

DISPONGA ENTERAMENTE DE SU AFECTÍSIMO
Y CORDIAL SEGURO SERVIDOR,



[ans 10/17/57]

GRINNELL COLLEGE

GRINNELL, IOWA

September 23, 1957

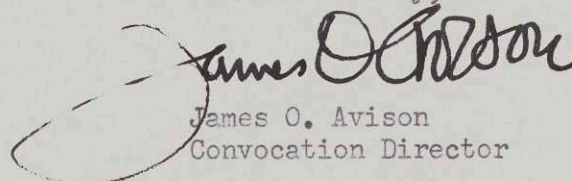
Dr. Norbert Wiener
South Tamworth,
New Hampshire

Dear Dr. Wiener:

This is to inform you that the Housing Committee for the fall Convocation has arranged lodging for you at the home of Dr. and Mrs. Irving Y. Fishman, 1127 Park Street in Grinnell. Dr. Fishman is a member of the biology department of the College. I am sure you will find them to be delightful hosts.

If you will let me know as soon as you can when and how you will arrive in Grinnell, I shall be happy to see that you are met either at the airport in Des Moines or at the railroad station in Grinnell.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "James O. Avison". The signature is fluid and cursive, with a large loop at the end of the last name.

James O. Avison
Convocation Director

joa/pd

already answered

American Forum - for Socialist Education
Room 221
1133 Broadway, New York 10, N.Y.

September 24, 1957

Dr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Dr. Wiener,

I learned from Mrs. Wiener over the telephone that it was definitely out of the question for you to come to our conference on "America's Future in the Age of Automation and Atomic Energy" even though we had been compelled to put it off until December 6th-7th. As you will gather from what I have written you, we very much regret this decision. However, we do understand the situation and appreciate your having given such serious attention to our invitation.

You will understand, also, that there are not many people who are both authorities on automation and related matters and who are concerned about their human and social implications. We are wondering, therefore, whether you have any suggestions as to persons who have such qualifications and whom we might approach. We are not thinking merely or chiefly of people in Boston or its vicinity. The most convenient thing would be if there were such people in New York or nearby whom you could suggest to us.

Thanking you for any help you might be able to give us at this point and with personal regards, I am,

Sincerely yours,

A. J. Muste
A. J. Muste (m)

mca

THEODORE DREIER

2121 UNION STREET

SCHENECTADY 9, NEW YORK

September 25, 1957

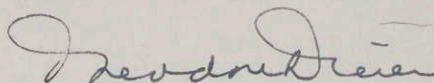
Prof. Norbert Wiener
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

Dear Prof. Wiener:

From those of your writings that I know, I have never been certain whether you were concerned with the philosophy of science or not - but have had a hunch that you might be. At any rate, I'm taking the liberty of sending you herewith a copy of a letter I have just written to "Science" expressing some ideas that have been germinating in my mind for a long time, in hopes that you may be interested to look it over and comment on it - either positively or negatively.

I plan to send copies of my letter to J. Robert Oppenheimer; R. B. MacLeod (Cornell); and Michael Polanyi (Manchester, England), whose articles last March in "Science" also interested me; as well as to my old classmate, Marshall Stone, at Chicago. If you think of any others who might be interested, I should appreciate any suggestions.

Sincerely,



Theodore Dreier

TD:mhb
Enclosure

P.S. I am an electrical engineer, and met you once some years ago when taking some graduate courses in math at MIT while on sabbatical leave from Black Mountain College in North Carolina. This was an experimental college that I helped to organize and got involved in for a good many years. Now I am in charge of the Metallurgical Laboratory at the Knolls Atomic Power Laboratory, helping to build atomic reactors for the Navy.

2121 Union Street
Schenectady 9, New York
September 11, 1957

To the Editors of "Science":

Several articles in "Science" and talks before the AAAS during the past year or two have raised or implied basic questions with regard to the framework of modern scientific thought, leading me to think that the time may be ripe to seek a much broader framework than any to which, as scientists, we have allowed ourselves to become accustomed. I am therefore writing to suggest that the Editors of "Science" (or an appropriate committee of the AAAS) invite a series of exploratory papers to consider possibilities of enlarging the logical framework within which scientific thought and work should operate. And if perchance anyone should then take this proposal seriously, I have a couple of suggestions to offer. These make no claim to being new. But if they are adopted by all of us, I am confident that they will lead to a great deal that is new.

Perhaps the proposal should be "to state a logical framework" rather than "to enlarge" what we have - for there is surely no framework existing that has been stated in such a way as to be acceptable to all leading physicists, let alone to the leading scientists of what should be a continuum of fields ranging from physics to psychology, and from engineering to psychiatry. (I am including the applied sciences for reasons that should gradually become apparent.)

However, the idea of enlargement of outlook is one that should also be stressed. For nearly all of us, difficult questions arise the

moment we try to match our own thoughts with those in even a contiguous field - to say nothing of a field with which our own work has no obvious relation. An enlargement of point of view is healthy even in an old framework, and it may either suggest desirable modifications of it or else burst right out of it.

It is probably fortunate that men working in different fields do not usually concern themselves too much with the modes or frameworks of thought characteristic of each other or they might be wrongly inhibited. Still, we would be shocked to find out that these frameworks were too different from one another, for we do all assume that we are exploring or dealing with the same real world. At least they should not be inconsistent with each other. If they do seem to be so - and one may question whether physics and psychoanalysis, for example, have yet found a common framework - then some effort to find one is certainly overdue. (Some may prefer to throw out psychoanalysis as a science - just as some once wished to exclude quantum theory and relativity from physics - but the results and understanding that have come from psychoanalysis are by now sufficient to insure that it is a productive, growing method and not a misfire.)

There is another reason why it becomes increasingly important that the scientific point of view should be enlarged. Science, both basic and applied, has become one of the most characteristic features of our culture - indeed lay attitudes that regard it either as a sacred cow or as a dangerous form of black magic are uncomfortable reminders of more primitive cultures - but has yet to achieve a valid, intrinsic relationship with other aspects of our culture or with the direction

of human affairs. This has nothing to do with the fact which we all recognize that science has become a powerful force in itself that has to be, and is, taken into account by people everywhere - thereby of course increasing the urgency for finding valid internal relationships through which more successful guidance of human affairs can be sought.

Now it seems to me that the gateway through which science has to pass in order to achieve a valid and increasingly necessary intrinsic relationship to the affairs of men is the Study of Man, himself - or psychology in its broadest sense.* But here we run into a difficulty - for the scientist himself is a man. Is he then only to study other men, or is he to include himself in the study?

Valiant efforts have been made to avoid facing this question, but there are two reasons why it will have to be faced sooner or later: one is that complete objectivity on the part of the observer or scientist can no longer be guaranteed, or even hoped for if we are frank, except in very limited respects, in the newer realms to which scientific method is being extended. The second reason is that we would thereby throw away our most promising single source of information or observations about individual men. A man can observe things about himself (e.g., his own sensations, feelings, and thought) that no one else can observe directly.

The suggestion is therefore made, that in now seeking to state a valid broad framework for scientific thought and work, a basic requirement should be that the observer or experimenter be taken into account

*Including psychology of individuals and of groups - and including also anthropology, archeology, and all of human history.

as an essential part of any experiment, conceptual or actual. Although attempts to do this have been made, I do not believe that they have been sufficiently thoroughgoing nor logically adequate. The basic questions that need to be raised have been dodged by the device of introducing a second observer and "observing the observer". While this may in fact be a very good thing to do - it would be for reasons that are essentially secondary in nature. When we do this, the trouble is that we then leave out the second observer and reduce the first observer to an object - whereas the intrinsic characteristic of an observer (or of anyone performing an experiment) is that he inherently is a subject!

What I am talking about of course is the basic subject - object relationship that characterizes all of everyone's experience including both the physicist who observes a pointer of an instrument in an experiment he is performing and the psychologist (or a patient) who observes sensations, feelings, thoughts within himself; and also the everyday man in all of his experience and actions. He who experiences or acts is a subject;* and all that he observes or otherwise experiences or acts upon are objects. Indeed, every object observed or experienced implies a subject, though the converse is not necessarily true.

I need hardly mention here the strenuous efforts that have been made throughout the history of science to eliminate the observer as a factor in all experiments. Recognizing how unreliable data or conclusions might be where the human factor was not eliminated, this

*Though, as we shall note later, for other subjects he may be an object.

objectivity of all observations and of reasoning was considered a sine-qua-non of all scientific work. Moreover, science began with astronomy and physics where this was both most possible and most commendable. Further, the concern with physics rather than with man as a subject of scientific investigation had strong historical reasons. It was dangerous enough for Galileo to concern himself with physics. If he had dared to concern himself with the study of man, his fate would surely have been sealed. Altogether, it was undoubtedly a very fortunate set of circumstances that caused science to develop in the way it did - starting with physical science, where it was indeed practicable to eliminate the observer as a factor affecting the results, (though he was vitally important as representing the purpose behind the experiment and its significance.) No one will dispute how spectacular the results have been.

But now we are well embarked on an era in which the need and incentive to enlarge the scope of science are enormous. For various historical reasons already indicated, which may well have been fortunate originally in their limiting effect, science has through all of its modern history been unwilling to give due weight to the essential facts that characterize everyday human experience: such things as the existence of human purpose, communication, ability to recognize and understand one another are taken for granted in our everyday activities but ignored as factors that should be taken into account or "explained" by our scientific thinking. In fact, most of our thinking has been so canalized by the scientific frameworks of thought as they have historically developed, that we are first surprised at the suggestion that these things should

be our concern, and then rather shocked if we go into them far enough to recognize the essential difficulty and probable impossibility of including them satisfactorily within these frameworks. The point of view of determinism was that such things as purpose, recognition, understanding - at least as subjectively experienced - were merely apparent phenomena that had no basis in the real world - and the problems of how these apparitions or illusions came into being were dismissed as essentially secondary in nature.

But whether they are of secondary or of prime concern depends actually on the framework that we choose to work within. For we must recognize that we do choose the framework. We create it. We try to base it on our overall view and appraisal of the total situation that we are willing or able to consider. In so doing, moreover we implicitly make many decisions - consciously or unconsciously - that affect it, and determine its various kinds of limitations and boundaries. Moreover, this creation, as we all know, is not accomplished at any one given time. It has in fact been in a continuous process of change for the last three hundred years and more since the new outlook that came in the 16th and 17th centuries enabled modern science to get underway. Every time we encountered important facts in our work and couldn't fit them into our scheme of things, we took a fresh look at our model and, if necessary, modified it. Sometimes we could not easily accommodate the scheme to fit the new facts and major revisions have been necessary. Sometimes so many new facts have come so fast that we have not been able to find any adequate modification, and we have had to "mark time". But our intentions have always been clear - whenever we

encountered facts in our scientific work that would not fit the framework, we tried to make a better model into which they would fit. Postponement - except for those of us who tried to run the operational viewpoint into the ground - was only to be until enough additional clues were found to give us a better idea of how to proceed. At least this was true in the physical sciences. Outside their realm the situation was different - because it seemed that biology, sociology, economics, psychology were too young as sciences - if indeed they could be called sciences at all. There has not even been agreement as to what must be admitted as facts - or indeed as to what constitutes a fact. In an attempt to emulate the physical sciences, whose progress had long been so spectacular, some workers in these fields tried to force their thinking to fit within the same framework, long seeking to reduce everything, at least conceptually, to a mathematically determinate system.

But this hasn't worked. The most promising advances have been made by those who did not restrict themselves to this sort of an outlook. Moreover, two other things have happened. First, in the physical sciences, basic determinism has had to be abandoned anyway in view of the Uncertainty Principle. Second, in the studies of human beings, it has been increasingly evident that no adding up of mechanistic or deterministic phenomena is ever going to account for purpose, recognition, understanding, and those types of thinking that may be called creative (as distinct from reactions, recollections, etc.).

Perhaps we are asking too much. Perhaps we cannot bring all these things under one roof. But I don't think that we have really taken time to try recently - taking into account all our modern, piece-meal under-

standing of computers, mathematical logic, conceptual model building, possible hierarchies of phenomena, of relations, and of thought. Those who think this is asking too much will wish to retreat before the new challenges to science to enter into a larger field. Behaviorism and an operationalism that believes it can only "describe" represent this sort of a retreat.

But now I believe there are many who feel we must attempt to widen the scope of science, and this means we must take a fresh overall look that will include more than we have attempted to include before. Even in physics, if we really wish to understand the relation of an experiment to physical theory we have to take into account the intervening thought of the scientist. And in psychology we are on very insecure and limited ground indeed if we fail to do so. Of course we have to remember that the theory, the framework of thought, the purpose of the experiments or observations, as well as the observations themselves, are all within the head of the scientists and are not usually part of the outer, real world in which the experiments or events to be observed take place (though observation in cases where they are - i.e., where the processes of observing and of scientific model building are themselves observed - perhaps in oneself - are very much needed!) It is a rather remarkable fact, which in itself requires explanation (if indeed it is a fact, as we all assume), that the same theories, frameworks, and purposes can exist in other minds (i.e., the minds of other scientists); and even more remarkable and demanding of explanation is our feeling of assurance that we can recognize the similarity or identity in the mind of another. Recognition and communication are both so

familiar to us that we take them for granted - but I am not aware of any scientific explanation of how either one of them is possible. We hear or see two beings, one of whom may be ourselves, make the same noises or make the same gestures: How do we know they have the same meanings? We do know, at least we think we do, within limits. But how? A creative act (by a subject!) is involved in every recognition of similarity or dissimilarity. (If someone says that the simpler comparisons could be made by a computer and the human brain is a computer and much more - it is of course agreed - but how did these computers get designed, constructed, and instructed? These, to say the least, are significant questions. Moreover, it is not even clear that the computer concept of recognition can be extended from numbers to forms in the many different media in which recognition by human beings is possible.)

This is the sort of thing we tend not to notice as long as we restrict ourselves to a pure (objective) study of objects. However, the moment we start thinking in terms of subject-object relationships we have to recognize the possibilities that not only can every subject become an object (in the world of some other subject) but also that every object may be a subject - i.e., having "a world" - perhaps a very elementary world - of its own. It may be worth postulating that an electron or a photon can be a subject, and have a "field of action" - or a very elementary "world of its own". Is the old view of these as objects only, inherited from determinism, not inadequate?

A second suggestion is offered in considering how to construct a framework for scientific thought: Here what I have in mind is that possibly there can be some agreement as to what sort of "view of the

whole" we should start with. Seventeenth century scientific thought started with the idea of a world made up of essentially separate, discrete objects* that reacted on each other, within an abstract framework of time and space. An ether of space was then added to make it possible to account for action at a distance (gravity, electromagnetic forces, etc.). Einstein persuaded us to abandon the concept of an ether, brought in the notion that absolute rotation exists but that absolute translational motion is meaningless. Nevertheless, we now think of all space as being to some extent filled with radiating fields, with energy concentrations in the forms of various particles (electrons, neutrinos, mesons, protons, and twenty or so others at least) having variable extensions (or durabilities) and densities in both space and time.

The sort of picture of the whole that still seems to make sense is that the world really is all of a piece and that our attempts to separate it into discrete components - though it may seem to be a very practical way to proceed at first - never really succeed because inherent and important relationships to the whole still exist. We construct all kinds of models in our minds of how we think things are and these

*This is the world of elementary human experience - on the basis of which we have built our languages - it is a world so deeply ingrained, in our minds, partly because of the tie-up with language, that we find it difficult to break away from. Nevertheless, scientific development over three centuries has led to a higher degree of sophistication that should make possible a more perceptive view.

models have been surprisingly successful in helping us to "understand", "explain" past phenomena and to predict new ones. One might almost say that the whole history of human thought, and particularly of scientific thought, is one of obtaining right answers from wrong models. How is this possible? Does it not seem likely that there is no "true model" unless we imagine one that represents the world itself in its entirety and any such would be far too complicated to be conceivable in detail? So we may always have to do with inadequate, partial models. But the amazing thing is that these seem to work - so long as we don't push them too far. The structure of our brains seems to be such that we can construct models or patterns of thought that are analogous to patterns in nature or the external world over significantly extensive regions.

What this means is simply that the world in all its many manifolds and hierarchies of phenomena and relationships is characterized by a structure that exhibits recognizable patterns, some more durable than others - at every level and in every aspect. Somehow in the course of evolution we have developed remarkable body computers - characterized particularly by our brains, but actually comprising our whole bodies. These body computers have evolved such structures and elements* that we are capable of producing models analogous to those apprehended or comprehended in the outside, real world. These models may be thought of as

*Because of their intrinsic relationship to a real world in which they have learned how to grow so as to survive.

comprising many simultaneous yet still independent pictures on a radar screen. In other words, the "screen" within us may be thought of as representing a "field of action" or "world of our own". The "screen" concept is, as a matter of fact, obviously inadequate even if supplemented by an enormous, instantly accessible memory. It is better (though this is probably inadequate, too) to think in terms of the body computer full of, and continually taking in, assimilating, and digesting information, some of which originates from the external world and some from within the body itself.* Part of this process consists in setting up patterns analogous to those which we perceive in the outside world. These are then acted upon internally by other parts of our body computer, according to instructions that are either built in, spontaneous, or both, leading to some action or continuing action by the body as a whole.

In the above discussion it should not be thought that the "patterns" or "models" created within the body computer are all conscious. Far from it. Only a very tiny part is conscious. Probably all life has some sort of "body computer" associated with it, whose field may be thought of as a "field of action" or "world of its own" for the individual in question considered as a subject - though we may discuss it as an object. Any positive initiative in relation to the representations in "the field of action" is that of a subject. Thus we may define a subject as an element within a living body that treats the body computer

*A whole class of built-in "instructions" must exist which compares information from outside with material in the memory according to numerous rules that characterize us.

as a tool - in short, as an object. But anyone's own mental experience, if carefully observed within oneself, will show them that the line of demarcation between subject and object can be drawn at various points - and, with it, the point of control is correspondingly shifted - depending upon how conscious one is, or takes time to be, or is able to be, of what is going on inside one. One may accept or reject - censor or not - instinctive reactions or actions as they are thought out at first. At least this seems to apply at the conscious level where there may be justification for the concept of the "soul" - something within that can watch and know all that goes on consciously and even, by practice, extend the field of consciousness. But we must allow for the appearance of spontaneity in the unconscious mind too.

How far in the opposite direction in the scale of evolution the concept of a "body computer" should be applied is open to question. Wherever there is life it should apply in at least elementary form - for life is characterized by action and is capable of being a subject. (The computer is merely its tool.) It may or may not be profitable to apply it at more elementary levels than the simplest forms of life. Exploration of the possibility should be worthwhile, however.)

An interesting question arises in connection with our recognition of subjects. Perhaps the most important characteristic of a subject is its creative ability or purposiveness. A subject does something. Recognition of purpose makes possible consideration of what Aristotle called Formal Causes.* But a basic question arises as to the nature

*His "material reasons" and "efficient causes" are already characteristic of scientific reasoning. Cf. article by Robert B. MacLeod in Science, March 15, 1957.

of the purposes that we can recognize. Some of them are undoubtedly "built in" and may be likened to the purpose of a homing guided missile in seeking its prey, which is built into it. Exploration of how the "building in" is accomplished during the growth and development of an organism presents a tremendous task in itself.* But beyond this - are all purposes built in? Are there different basic ways and levels in which they are built in? Are there some that are not "built in" at all but which, rather, are spontaneous and represent what might really be called "free will" - or is there a more subtle control exercised somehow by the rest of the external world or by something in it - which might still be called "free will" but with a different connotation?

The purpose of all this is, of course, not to find new answers to old questions - but rather to attempt to see whether we have been asking too many wrong questions (a certain number are always inevitable) and whether we had better not find some new questions that we ought to be asking. I have suggested a few that, though perhaps they have been asked before, seem to merit fresh attention today.

Moreover, if we consider the fact that we must view the real world as including, on our planet, a great many beings with marvelous body computers each of which builds internally a world of its own of great complexity and diversity - then we can study what these computers are like, how they develop, how they interact with each other, and with

*A first basic problem is to suggest a conceptual scheme (if possible without resort to chance and probability!) whereby an elementary feedback mechanism might first develop or be built in nature.

the rest of the real world. Some of the fields of action or internal worlds of these computers will be oriented toward politics, some toward literature, some toward science, most toward the myriad other varieties of human activity. I am merely recording an outlook that seems pertinent today as a basis for constructing a framework within which we can study all these things and how they come about and by means of which we may in the first place achieve a more significant way of observing and describing human behavior. Then secondly we may learn how to control up to a certain point and how to nurture at "the growing edge" a better development and growth, both in education and in the nature of the mature models that we create internally to live by, including our scientific theories.



Theodore Dreier

TD:ejs

Personal Note and Identification of Writer: I am a development engineer. My professional training was as an electrical engineer, but over the years I have developed interests in and devoted time to education, philosophy, and business.

Present Business Affiliation: Manager, Metallurgical Laboratory
Technical Operation
Knolls Atomic Power Laboratory
General Electric Company
Schenectady, New York

DOUBLEDAY & COMPANY, INC.,



575 MADISON AVENUE, NEW YORK 22

MURRAY HILL 8-5300

September 26, 1957

Mr. Norbert Wiener
Department of Mathematics
Massachusetts Institute of Technology
Cambridge, Mass.

Dear Professor Wiener:

I have just spoken to Mr. Whiteside who has agreed to read the manuscript though not to take the original copy I have. So if you can spare a second carbon and mail it to me I will send it along to him. It was good to see you and Mrs. Wiener in Boston yesterday.

With best regards.

Sincerely,

Jason

Jason Epstein

JE jdm

* You were certainly right! It is difficult indeed!

Re

[ans 10/2/57]

From the desk of —
ERWIN H. SCHELL

9/26/57

Dear Harbet

As usual, you lead
the list!

Erwin



We need to cultivate fertility in thought as we have cultivated efficiency in administration.

—Norbert Wiener

The only significance of life consists in helping to establish the kingdom of God; and this can be done only by means of the acknowledgment and profession of the truth by each one of us.

—Tolstoi

When we commend good actions we make them in some measure our own.

—Thomas Fuller

All greatness is unconscious, or it is little and naught.

—Thomas Carlyle

Youth is a quality, not a matter of circumstances.

—Frank Lloyd Wright

(Being) cordial . . . is being amiable on principle and about nothing in particular; whereas true amiability presupposes discernment, tact, a sense for what other people really feel and want. To be cordial is like roughing a man's head to jolly him up, or kissing a child that doesn't want to be kissed. You are relieved when it's over.

—George Santayana

This is the final test of a gentleman: his respect for those who can be of no possible service to him.

—William Lyon Phelps

Shadow owes its birth to light.

—John Gay

Our strength is not in politics, prices, or production, or price controls. Our strength lies in spiritual concepts. It lies in public sensitivity to evil.

—Herbert Hoover

The more we love our friends, the less we flatter them; it is by excusing nothing that pure love shows itself.

—Jean Baptiste Molière

Whether you call it national defense or world peace, it is one and the same thing.

—Neil McElroy

Perseverance is more prevailing than violence; and many things which cannot be overcome when they are together, yield themselves up when taken little by little.

—Plutarch

He who rebukes the world is rebuked by the world.

—Rudyard Kipling

INSCRUTABILITY

The seasons know the reasons

That December yields to May;

They note without excitement

God's mysterious display. But people build a steeple

In a vain attempt to pry, Inserting pointed fingers in

The vastness of the sky.

—ALFRED G. CURTIS

I think the great danger in public education today is the fact that we have failed to see the difference between knowledge and wisdom. We train the head and let the heart run hog-wild. We allow culture and character to walk miles apart, stuffing the head with mathematics and languages—leaving manners and morals out of the picture.

—Dr. Theodore H. Palmquist

There are two kinds of discontent in this world: the discontent that works, and the discontent that wrings its hands. The first gets what it wants, and the second loses what it had.

—Gordon Graham

Always act as if your acts were seen.

—Baltasar Gracián

A man is rich in proportion to the number of things which he can afford to let alone.

—Henry David Thoreau

A good scare is worth more to a man than good advice.

—E. W. Howe

The greatest pleasure I know is to do a good action by stealth, and to have it found out by accident.

—Charles Lamb

Knowledge comes but wisdom lingers.

—Alfred Tennyson

Be thine own palace, or the world's thy gaol.

—John Donne

What we do not understand, we do not possess.

—Goethe



In tennis, too, the basic plays have changed less than the attire since this print was made in 1887.

EVER SINCE COLONIAL DAYS, *sports have played a big part in what has come to be known as the American way of life.*

By DEANE and DAVID HELLER

Photos from Library of Congress

and Eclipse, a leading performer from the North. Sir Henry won the first heat easily, but Eclipse won the second two and the record-high purse of \$20,000.

Though off to a later start, baseball soon outnosed racing as "the American sport." In 1845 Alexander J. Cartwright, Jr., the father of baseball, founded the New York Knickerbockers, and set rules of the game that are still followed today. He placed bases 90 feet apart, established nine innings as a game and nine players as a team.

During the Civil War, Union prisoners introduced the game to their Southern captors. The Cincinnati Red Stockings was founded as the first "pro" team in 1869.

Sports have left their mark on the American language ("the real McCoy," a "Garrison finish," an "Annie Oakley") as well as on journalism (when Jesse James was a fugitive he wrote to his favorite sporting paper giving directions for forwarding copies) and on art. Lithography firms, principally Currier & Ives, turned out and sold sporting prints by the thousands. Some of the most popular of these are reproduced here. Today, when so many American sports have acquired the atmosphere of big business, the old penny prints give a nostalgic look into the past.



In the dead of winter, the outdoor sports enthusiast had to use a little imagination. Pickerel fishing was one diversion in the 1870's.

A solitary but satisfying sport in 1869, when this picture was made, was snipe shooting. Hunting is probably the oldest sport.



26.9.57

19 Stone Hall
Avenue
Hamilton
Lanarkshire
Scotland

Dear Sir

I understand you are a very busy man but I have tryed every way I can to get relieve of this terrible torment which is being Mentally inflicted on me by someone within my own country and who thinks them self save I because it is Radio and Mentally so secretly done. I hear voices my Doctor had me locked up for ~~obs~~ observation in a Mental hospital all because of this exultety by these people. Therir are 3 men voices and 3 woman but they talk of the Boss sometimes. What can I do if I have been known to have been in a Mental

Hospital no one takes me seriously they just laugh and say my nerves are getting the better of me and say you will have to controll your nerves a lot better than this go home and rest but, I get no rest from these voices 24 hours a day and at night I wake up to hear them discussing me among themselves it is getting worse as the situation at present now they are threatening to kill me if I post this letter also my Daughter live is threatned, Who these voices belong to God only knows but if you can tell me how a person can contact people by electric Brain power and pick up other peoples power and make these people afraid and try to run

their lives for them I may be well
on the way to get to the bottom of
all this terrible life I live in
constant mental torture and threats
daily insulted also. Its not being
able to do anything about it all that
makes it so unbearable and makes
me feel so helpless I even tried to
kill myself but they came into the
water after me and the doctor took
me to the police station and then it
all started over again. I have no
money so it can not be that they
are after but I keep thinking its
some people that are experimenting
with me ~~unknowing~~ to the police
but they would have to be traced
by radar or something that could
get them quickly before they get

away to somewhere else, You know
how this can be done I have seen
your name in a good paper which
said you have been given good
help to your country, please try
to help me I do not know whether
I will ever hear from you but I
will ~~try~~ pray to God that you
will help me or believe me
even though you may be too late.
Mrs Sarah
Mayo.

P.S I am no crank
this is true. if I am dead
when you do bring help
please try to save other people
from this terrible torture my
Daughters life may also be in
danger.



WAYNE STATE UNIVERSITY

OFFICE OF THE VICE PRESIDENT

DETROIT 2, MICHIGAN

ACADEMIC ADMINISTRATION

September 27, 1957

Dr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Dr. Wiener:

The date of the symposium on The College Professor has been set for April 16 and 17, 1958. This Wednesday and Thursday appear to suit the participants best and to fit into the University Calendar.

I have not yet had a final word of acceptance from one of the participants whom we hope will be able to come. Just as soon as this arrives, I shall let you know the full panel. I will also send a tentative program for your comments and suggestions.

Sincerely,

James P. McCormick
Assistant to the Vice President
Academic Administration

JPM:jg

Feb

THE JOHNS HOPKINS UNIVERSITY

BALTIMORE 18, MARYLAND

DEPARTMENT OF MATHEMATICS

September 27, 1957

Dr. Norbert Wiener
Department of Mathematics
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

Dear Dr. Wiener:

Dr. Wintner is still in Tamworth, so he asked me to mail to you the enclosed carbon of "Harmonic analysis and random time functions." I am keeping the original and another carbon for Dr. Wintner to work on and this is your working copy.

My husband and I enjoyed our visit with you this summer. I hope your work is going well.

Sincerely yours,

Ruth Roberson

Ruth Roberson
Secretary to Dr. Wintner

Enclosure

Acta Mathematica

Uppsala, Sept. 27, 1957

Acta Mathematica

Professor Norbert Wiener
Department of Mathematics
Massachusetts Institute of Technology
Cambridge 39
Mass., U.S.A.

Dear Professor Wiener,

Thank you very much for your letter.
We should be grateful to get the manuscript
and the printer's proofs as soon as it will
be possible for you to send them.

Yours sincerely,

Bengt Ulm

address:
Matematiska Institutionen
Trädgårdsgatan 18, Uppsala

29

COUVRIR ICI

AEROGRAM

**FLYGPOST
PAR AVION**



Professor Norbert Wiener
Department of Mathematics
Massachusetts Institute of
Technology
Cambridge 39
Mass., U.S.A.

Tjänsteförs.
Uppsala Universitets
Matematiska Institution

SENDER / EXPÉDITEUR :

FLYGBEFORDRAS ÖVER HELA VÄRLDEN UTAN TILLÄGGSavgift.
BEFORDRAS ICKE SOM AEROGRAM, OM NÅGOT LAGGES INUTI.

GODKANT AV KUNGL. GENERALPOSTSTYREISEN

From M.G. GOOD, M.D.

688 Finchley Road
LONDON, N.W.11.
Sept. 28. 1957.

Dr. Norbert WIENER, Ph.D.
Massachusetts Institute of Technology
U.S.A. *Cambridge*

Dear Dr. WIENER,

I have just read your book "The human Use of Human Beings, published in 1950. The fact that I am writing to you will convince you that I have been much impressed by its content.

As a physician, you will not be surprised that I was deeply moved by Ch. 2 on Progress & Entropy. What specially impressed me much is your analysis of the value of new inventions, & your statement: "we need some mechanism by which an invention of interest to the public may effectively be dedicated to the public!"

Your development of this theme shows conclusively that you are a true friend of mankind. Since you are obviously very familiar with the fundamental discoveries in Medicine & Therapeutics, in spite of the fact that you are the great mathematician of America!

From my own experiences as a Medical research worker, I can fully confirm your conclusions regarding the negative rôle of the great industrial laboratories & the employment of the mass attack in the development of biological & medical inventions.

Certainly you cannot be aware of fundamental recent discoveries regarding the Nature of Pain, & the Theory of the degenerative disease of rheumatoid & Osteo-arthritis the victims of which are topping the list of chronic diseases prevailing in America & UK.

It must appear incredible to you that the fundamental research has led to the evolution of a harmless most reliable & effective curative treatment of every form of Rheumatism, incl the different forms of Arthritis: the "myogenic Theory of Arthritis" has shown that the primary disease consists in a muscular disorder of the muscles, the primary movers of joint concerned, which represents a "secondary" phenomenon developing a long time later. The pathogenetic mechanism consists in a deficient blood flow of the contracting muscle, & relative lack of O₂ required for physical work. This relative Hypoxia is the true cause of Pain in general, not only in Rheumatism.

I have lectured for years to International Congresses in Europe, except in England & U.S.A. (very recently in Canada), where my submitted papers were refused! My numerous contributions were printed in reputable Periodicals in 5 languages & three continents (a few even in America). For years I have now been ostracised in my country & excluded from the Medical Press here & in America!



CIVIL DEPT

JOHN W.



Prof North Z Wiener, Ph.D. Sc.D.
Massachusetts Inst of Technology
Cambridge 39
Massachusetts U.S.A.

Second fold here

Sender's name and address:
Dr M. G. GOOD, M.D.
688 Finley Road
London N.W.11
England.

AN AIR LETTER SHOULD NOT CONTAIN ANY
ENCLOSURE; IF IT DOES IT WILL BE SURCHARGED
OR SENT BY ORDINARY MAIL.

First fold here

My theoretical concepts & most favourable therapeutic results have been fully confirmed by German rheumatologists who in 1954 have published their results on 400 cases of Arthritis of the Hip, generally considered to be incurable, kept under observation in the Rheumatism Sanatorium Bad Bramstedt (Hollstein). Even scientific letters have been refused publication by the English Medical Press & very recently by the American Medical Assoc (referring to an article on Myofascial Pain, June 1957.). Some years ago I offered to the your National Institute of Metabolism & Arthritis to give a lecture demonstration on "Modern objective Diagnosis of Rheumatoid Arthritis & its effective Treatment: ~~to~~ a negative jeering & extremely discourteous reply! Under special cover I am sending you some latest papers & a lecture delivered to the University of Berlin (1955)

It appears the fate of most scientific pioneers even of the XX. century *to be driven to despair!*

Cordially

M. G. Good, M.D.

To open cut

ERICH FROMM
180 RIVERSIDE DRIVE
NEW YORK 24, N. Y.

Sept. 30, 1957

Prof. N. Wiener
M. I. T.
Cambridge, Mass.

Dear Dr. Wiener:

Wabash College has asked me to
let them know something about the contents of
my speech there. I hope the enclosed is useful.

Looking forward to seeing you
there,

Sincerely yours,

Erich Fromm
Erich Fromm (a. n.)

EF:am
enc

THE UNIVERSITY OF ROCHESTER
COLLEGE OF ARTS AND SCIENCE
RIVER CAMPUS STATION
ROCHESTER 20, NEW YORK

DEPARTMENT OF PHYSICS
AND ASTRONOMY

30 September 1957

Professor Norbert Wiener
Department of Mathematics
Massachusetts Institute of Technology
Cambridge 39, Mass.

Dear Professor Wiener:

The officers of the Rochester Chapter of Sigma Xi would like very much to know whether you would be willing to visit the University at some time during the current academic year. We feel very strongly that the membership of the society, which includes scientists in all fields working within the University and in industrial laboratories in Rochester, would profit greatly from the opportunity to meet you and to hear you speak on a topic of your own choosing.

If you are willing to come, you will wish to know the dates of our proposed meetings, one of which you may find most convenient to you. The major event of the year is the initiation of new members, and this is being set for Wednesday evening, next May 28. The initiation will be followed by a cocktail hour and a banquet, after which you would be asked to speak for an hour or so. The talk would be a public lecture for which we would reserve our large auditorium, and I can assure you that your audience would be large and keen. This is the date that we would most prefer to hold for you.

The meeting that will compete with the initiation for size and variety of audience will take place on Friday evening, February 21. This is the eve of our annual Sigma Xi Day, devoted to the idea of bringing young scientifically minded people to the campus. The public lecture associated with this event is intended for a mature audience, but I am sure that your presence would attract in addition a crowd of devoted youngsters.

If neither of these dates is convenient for you, I invite you to suggest an alternative. We already have in mind the first

Professor Wiener

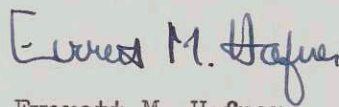
- 2 -

or second Friday evening in December as the time for an additional meeting, and you might wish to consider one of these times.

All of your expenses for as long as you wish to stay will, of course, be paid for by the society, as will your transportation costs. We wish, in addition, to offer you an honorarium of fifty dollars for your visit.

Please let me know, when you can, how you feel about this proposal; I shall be most delighted if you react favorably.

Yours sincerely,



Everett M. Hafner
Secretary-Treasurer
Rochester Chapter of Sigma Xi

EMH/wkb