101. Versammlung Vorläufiger Zeitplan (IV) (Februar 1960) FREITAG 23. September 1960

Chemiedozententagung (T.H.)

SAMSTAG 24. September 1960

Vormittag

Chemiedozententagung (T.H.)

Nachmittag

Vorstandssitzung 16.00 (Luisenhof)

Chemiedozententagung (T.H.)

Sitzung des Wissenschaftlichen Ausschusses 20.00 (Luisenhof)

Vormittag

Schultagung 9.30 - 12.30 (AEGI)

"Die Oberstufe der Gymnasien und der Übergang zur Universität"

9.30 S. Strugger, Münster

9.50 J. Trier, Münster

10.45 Mutscheller, Karlsruhe

11.40 Flitner, Hamburg

Nachmittag

Feierliche Eröffnungssitzung 15.30 - 17.45 (AEGI)

15.35 - 15.43 Musik

15.44 - 15.56 Eröffnung (O. Reuleaux)

15.57 - 16.05 Minister

16.06 - 16.14 Oberbürgermeister

16.15 - 16.23 Ehrengäste

16.24 - 17.19 Hauptvortrag (R. Wagner)

17.20 - 17.28 Musik

Oper 19.30 (Opernhaus)

Leitthema: "Neue Denkmethoden in Naturwissenschaft und Medizin"

Vormittag

Wissenschaftliche Sitzung 9.00 - 12.50 (AEGI)

Unterthema: "

9.00 Wagner

9.10 L. Schmetterer Hamburg

9.55 N. Wiener Cambridge, Mass.

10.40 K. Küpfmüller Darmstadt

11.25 W. Oppelt
Darmstadt

12.10 B.van der Waerden Zürich

Das Vordringen der Mathematik in Naturwissenschaften und Medizin

Gedankliche Grundlagen der In-

formationstheorie

Übertragung und Verarbeitung von

Nachrichten

Technik der Steuerung und Regelung

Pollenkörner und Informationstheorie

13.15 - 14.45

Vorsitzender empfängt

Vorstand, Redner, Ehrengäste
(?)

Nachmittag

Unterthema: "

15.00 W. Reichardt Tübingen

15.45 B. Hassenstein Tübingen Systemanalyse der Lichtreaktion eines einzelligen Pilzes (Beispiel einer kybernetischen Analyse)

Wie sehen Insekten Bewegungen? (Beispiel einer biologisch-kybernetischen Analyse)

16.30 Damen des Vorstandes

19.30 Konzert (Galerie Herrenhausen)

Leitthema: "Neue Denkmethoden in Naturwissenschaft und Medizin"

Vormittag

Geschäftssitzung 8.15 - 9.00 (AEGI)

Wissenschaftliche Sitzung 9.00 - 12-50 (AEGI)

Unterthama: "

9.00 K. Matthes

9.10 R. Wagner

München

9.55 H. Mittelstädt

Seewiesen

10.40 J. Stegemann

Dortmund

11.25 I. Kohler

Innsbruck

12.10 F. O. Ranke Pöcking

Die Regelungstheorie als methodisches Werkzeug bei der Verhaltensanalyse

Die Regelung der retinalen Leucht-

stärke

Zentralnervöse Korrekturen an der

optischen Wahrnehmung

Grenzen der Übertragbarkeit der Re-

gelungslehre auf biologische Probleme

13.15 - 14.45

Regierung empfängt

Vorstand, Redner, Ehrengäste und

Ausländer (

Nachmittag

Wissenschaftliche Sitzung 15.00 - 16.30 (AEGI)

Unterthema: "

15.00 A. Gierer

Tübringen

Molekulare Grundlagen der Vererbung

15.45 F. Kaudewitz

Tübingen

Genetische Steuerung bei der Merkmalsausgestaltung von Lebewesen

16.30 Fr. Vogel

Berlin

Öffentlicher Vortrag 20.00 - 21.00 (Lichthof T.H.)

C. F. von Weizsäcker Logik und Wirklichkeit

Hamburg

Leitthema: "Ökologische Struktur und junge Entwicklung der Erdhülle"

Vormittag

Wissenschaftliche Sitzung 9.00 - 12.45 (AEGI)

9.00 C. Troll

9.10 N.N.

10.05 C. Troll Klima und Pflanzenkleid der Erde in Bonn dreidimensionaler Sicht

11.00 J. Büdel Morphogenese des Festlandes in Ab-Würzburg hängigkeit von den Klimazonen

11.55 E. Neef Landschaftsökologie Leipzig

Nachmittag

Wissenschaftliche Sitzung 15.00 - 16.30 (AEGI)

15.00 E. Seibold Der Boden der Ozeane und die ErdKiel geschichte

15.45 H. Hoinkes Die Antarktis und die geophysikaInnsbruck lische Erforschung der Erde

Schlußsitzung 17.15 - 18.20

17.00 W. Brednow Der Kranke und seine Krankheit Jena

17.50 Schlußwort: E. Fauvet



Technology Press
Massachusetts Institute of
Technology
Cambridge 39, Massachusetts
U.S.A.

Mr. Luis Francisco Maltese Ingeniero Mecanico Electricista Obispo Ceballos 288 Cordoba Republic of Argentina

Dear Mr. Maltese:

I have your letter of February 3rd inquiring about the Spanish rights to our book entitled <u>Cybernetics</u> by Norbert Wiener.

All the translation rights for this book are controlled by Hermann et Cie, 6 Rue de la Sorbonne, Paris 5, France, so that you will need to apply to them for legal permission for this translation.

Very truly yours,

Lynwood Bryant Director

LB:cw
C.C. to Mr. Andrew H. Neilly, Jr., John Wiley
and Sons, Inc.
Professor Norbert Wiener, Massachusetts
Institute of Technology

HARVARD UNIVERSITY CAMBRIDGE 38, Mass.

DEPARTMENT OF MATHEMATICS
2 DIVINITY AVENUE

February 1, 1960

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

Dear Norbert:

As you may know, the American Mathematical Society will hold a Symposium on Instability in Hydrodynamics at the meeting in New York in April. On behalf of the Committee planning this Symposium, I hereby ask you to serve as Chairman for the Session indicated on the attached tentative Program. There will be morning and afternoon sessions on each of Thursday and Friday, April 14 and 15.

I hope very much that you will accept this invitation, thus helping to assure the success of our Symposium.

Sincerely,

Garrett Birkhoff

GB/1bs

[aus 2/3/60]

I.	STABILITY OF CONTINUOUS FLOWS. Chairman: K. Friedrichs	
1.	Boundary layer instability (C.C. Lin and D.J. Benney)	
2.	(Hydrodynamic instabilities with mixed spectra?) (K. Case)	(?)
3.	Flow between rotating cylinders in hydrodynamics and hydromagnetics (S. Chandrasekhar)	
4.	Stability theory in plasma physics. (N. Rosenblueth)	
II.	STABILITY AND STATISTICS OF DISCONTINUOUS FLOWS. Chairman: J.J. Stoker	
1.	Helmholtz and Taylor instability (G. Birkhoff)	
2.	(Wave generation by wind?) (J. Miles)	(?)
3.	(Wave generation by wind?) (O.G. Phillips or F. Ursell)	(3)
4.	(Statistical models for ocean waves?) (Longuet-Higgins)	(3)
III	. STATISTICAL APPROACHES. Chairman: E. Hopf	
1.	Random solutions of partial differential equations and statistical mechanics of continuous media (J. Kampé de Férie	et)
2.	Propagation through stochastic media. (J. Keller-P. Lax)	(?)
3.	A statistical model for turbulence (R. Kraichnan)	
4.	Statistical Stability of many-body systems (S. Ulam)	
IV.	CONTROL OF INSTABILITY. Chairman: N. Wiener (alternate R. Oldenburger)	
1.	Stability and control of random functions (R. Bellman)	
2.	Control of linear systems (B. McMillan)	
3.	Asymptotic stability criteria (J.P. LaSalle)	
4.	(Control and steering of ships?) (St. Domis)	(2)



SCHOOL FOR ADVANCED STUDY

February 1st, 1960.

Prof. Norbert Wiener Room 2-276 M.I.T.

Dear Professor Wiener,

It is regretted that the School for Advanced Study dinner-meeting planned for February 11th has had to be cancelled owing to unforeseen circumstances. It is anticipated that the meeting arranged for March 3rd will be held as scheduled.

Sincerely yours,

M. J. Buerger
Director, School for Advanced Study

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DEAN OF HUMANITIES

AND SOCIAL STUDIES

Dear norbert my congratulations on your forthright and effective essay in Jech. Rev. For February 1960,

John Zurchauf

The CENTENNIAL REVIEW of Arts & Science

204 MORRILL HALL . MICHIGAN STATE UNIVERSITY . EAST LANSING, MICHIGAN

February 1, 1960

Professor Norbert Wiener Massachusetts Institute of Technology Cambridge, Massachusetts

Dear Professor Wiener:

The CENTENNIAL REVIEW is planning an issue devoted to the social, scientific, technical, political, and economic implications of the nuclear revolution and its consequences. In view of your work in this area, I wonder if you would care to write a paper along the lines of your current interests in this subject for this issue.

The CENTENNIAL REVIEW is a quarterly journal sponsored by the College of Science and Arts of Michigan State University, and is concerned with the interrelations between the arts and sciences. Our articles usually run about 5,000-6,000 words, and we are able to offer a modest honorarium for articles published in The CENTENNIAL REVIEW. The deadline for this issue will be March 1, 1961.

I do hope you will be able to send us a paper for this issue.

Sincerely yours,

Herbert Weisinger

Editor

HW: ih

[ans 3/9/60]



MATHEMATICS RESEARCH CENTER UNITED STATES ARMY

THE UNIVERSITY OF WISCONSIN MADISON 6, WISCONSIN

RUDOLPH E, LANGER, director

February 1, 1960

Announcement

The Mathematics Research Center, United States Army, will conduct at the University of Wisconsin, Madison, Wisconsin, during the period 7 June to 15 June, 1960, an

INTERNATIONAL CONFERENCE ON PARTIAL DIFFERENTIAL EQUATIONS AND CONTINUUM MECHANICS

A considerable number of invited addresses will be given. At this date the following ones have been assured.

Relation between the Boltzmann Equation and Continuum Equations in Gas

Dynamics

Professor J. M. Burgers, University of Maryland

Hodograph Method for Transonic Nozzle Flows
Professor T. M. Cherry, University of Melbourne

On the Applications of the Theory of Singular Integral Equations to Partial Differential Equations of Inhomogeneous Anisotropic Elasticity

Professor G. Fichera, University of Rome

On Existence of Solutions of Differential Equations
Professor L. Hörmander, University of Stockholm

Asymptotic Behavior at Infinity of the Flow Past a Body, for the Case of a Compressible Viscous or Electrically Conducting Fluid

Professor I. Imai, University of Tokyo

Statistical Fluid Mechanics

Professor J. Kampé de Fériet, University of Lille

Atypical Partial Differential Equations
Professor H. Lewy, University of California

Existence and Differentiability Theorems of Variational Problems for Multiple Integrals

Professor C. B. Morrey, Jr., University of California

Laplace Transforms with Finite Limits of Integration, and Their Use in Solving Linear Propagation Problems

Professor M. Picone, Istituto Nazionale per le Applicazioni del Calcolo, Rome

Certain Indefinite Differential Eigenvalue Problems
Professor Åke Pleijel, University of Lund

Contributions to Mathematical Methods Applied in Fluid Mechanics
Professor D. Riabouchinsky, Institute sup.
technique rusee en France, Paris

Finite Deformation of Plates into Shells
Professor B. R. Seth, Indian Institute of Technology, Kharagpur

The Transonic Gas Flow and the Equations of Mixed Type
Professor F. G. Tricomi, University of Turin

Bounds for Eigenvalues of Partial Differential Equations
Professor A. Weinstein, University of Maryland

There will be sessions for contributed papers. Such papers are solicited. Twenty minutes will be allotted to each paper for its presentation and discussion. Notification of the intention to present a paper, and the title of the paper, must be submitted on or before April 15.

The invited addresses and abstracts of the contributed papers will be published as the proceedings of the Conference.

Elizabeth Waters Hall, a very attractive dormitory on the University of Wisconsin Campus, and on the shore of Lake Mendota, has been reserved for Conference participants and those accompanying them. All meals except the banquet, will be served at the Hall, and there are sunning and swimming facilities. Linens, blankets, towels, soap, and daily maid service are furnished. The rate for lodging and meals combined, is \$7.25 per person per day, double occupancy. The rooms do not have private baths but conveniently located bathrooms are available for both men and women. Depending upon the number of registrants, we may be able to accommodate a limited number in single rooms. If you wish us to consider this possibility please note on the enclosed registration form. The daily rate for single room and board will be \$8.50 per person per day. Children, not over nine years of age, will be accommodated at half the stated rates.

Among Madison hotels, for those preferring such accommodations, the following are noted.

Loraine Hotel: single, \$5.75--\$10.50; double, \$11.00--\$15.50 Park Hotel: single, \$5.00--\$8.00; double, \$9.50--\$14.00 Belmont Hotel: single, \$5.25--\$5.75; double, \$10.00 Edgewater Hotel: single, \$8.00--\$15.00; double, \$12.00--\$25.00 Town and Campus Motel: single, \$8.50--\$10.00; double, \$13.00--\$15.00 Ivy Inn Motel: single, \$9.00; double, \$13.00

A banquet is planned for the evening of June 14 (\$3.25).

An early return of the enclosed blank is requested.

[ans 2/3/60]

Registration Request

(To aid us in making necessary arrangements, would you kindly return this blank by May 1, 1960?)

Mathematics Research Center, U. S. Army University of Wisconsin, Madison 6, Wisconsin
I shall attend the Conference, and enclose a check (made out to R. E. Langer) to cover registration fee of \$3.00 [] (please check appropriate boxes)
I must defer my decision, but I would like to receive the complete program when it becomes available [].
I shall give a paper []. The title of my paper is
I shall wish to lodge and board at Elizabeth Waters Hall. Please arrange for accommodations as follows:
I would like to share a double room with (give name)
*I will share a double room with someone you will assign.
I would like a double room for myself and wife (or husband).
I would like accommodations for myself and wife (or husband) and the following children (give names and ages):
Elizabeth Waters Hall will be available after 1:30 p.m. Tuesday, June 7th. Serving of meals begins with breakfast Wednesday, June 8. *If registrations permit, please change my reservation to a single room.
I expect to arrive on June; depart on June (Last night accommodations available in dormitory June 15.)
I shall make my own hotel reservation
I plan to come by air, by rail, by car
Name Best mailing address:
Affiliation

Confirmation will be sent you.

February 1, 1960

Mr. Morton Bromfield Condado Beach Hotel Puerto Rico P. R.

Dear Bromfield:

I am enclosing a copy of the February number of SCIENCE DICEST. On page 95 there is an account of a new invention which is closely related to the work you are doing, and in particular, to the comments I made during our last meeting. As you notice on the same page, SCIENCE DICEST tells you how you can find out the firm working in this field.

I am having your secretary alerted at this so that if you are away for an appreciable time, she can take the matter up with you, and so that you are aware of the state of matters in your negotiations.

Sincerely yours,

Norbert Wiener

NW/emr

cc: Mr. Bromfield's secretary

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION

TELEGRAM

1000 FEb 1301

SYMBOLS

DL = Day Letter

NL = Night Latter

PLT = International
Letter Telegram

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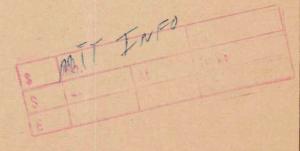
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LT DR NORBERT WEINER MIT (WIENER)

CAMBRIDGE (MASS):

MANY THANKS I PHONED OFFICE FOR IMMEDIATE ACTION ON FURTHER INFORMATION LETTER FOLLOWING

MORTON BROMFIELD.



1001st Army Reserve Research and Development Group(Tng)
Boston Area Command
XIII U.S. Army Corps(Res)
Army Base, Boston 10, Massachusetts

3 February 1960

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

Dear Professor Wiener:

In behalf of the officers of my Command, I wish to thank you for your kindness in speaking to the Group on LEARNING MACHINES during the evening of 21 January 1960 in Room 16-310 at the Massachusetts Institute of Technology.

Your well-organized talk and the discussion concerning it were of unusual interest and value to the Group.

We have been honored by your participation as a guest speaker.

With best wishes.

Yours sincerely,

CECIL G. DUNN
Colonel, QMC-USAR
Commanding

Dear Professor Wiener,

I was amused when I lived in Boslon to read Mr. Lan Menzies news tem about you about your authoring a book you did not write, it being based on the Tape recording and Camera work of your students who used this means of getting down your proligie blackboard equations. This struck me as the first instance of a literary parthenogenesis! I was assigned in a modern polly class I was taking then to write a somet about The slars. I have tried To incorporate in the seslet some reference to your original observations. The octave Concerns a Camping trip 9 made in the High Sierra in June 1958, I believe it was I checked with the astronomers at mt. Wilson on the way

What I had seen.
I thought you might like to see
The sonnet, perhaps comment on it.
Two questions I'd like to
ask: your study of brain patterns,
were they of normal - functioning
brains or diseased ones? Two:

are the graph dips of orbiting

home to make sure I had seen

asteroids more "dippy" than the

pallern of orbiting planets would be? my limited reading (Lovell, Jeans, Patrick et al.) tells me the planets pattern of orbiting would be a flow rather than a dip! am I on the right track? also astronomers seem to be uncertain about what may have caused The asteroids in the first place. Patrick in the B.B.C. 's Listener thinks they may not have Caused by the Collision of planets. What do you think, as of this moment? halvally everyone - let us include the poets - is aware of all These new efforts to explore into The bright blue yonder. I, a tay person, Certainly am. Sincerely yours, Billie Shetton Harrison Mrs. T. Carter Harrison 425 Riverside Prive-apt. 16B. New york 25, n.y.

On First Seeing Mars and Venus in the High Sierra

my pulse began to beat so fast one night In the High Bierra I awoke. I know
The planets from stars: Mars in the west a glow
Of reddish light and Venus bluish bright
In the East identified. From the schiolose height
Of the langon wall they shine on me below.
A strange whiteness pervades the Canyon so,
I cland to watch, still-struck by the sight.

Professor horbert Wiener, genius and seer,
Equates the dips of pulse by lines on a graph
To the dips of orbiting asteroids. The can hear
His book on tape and film by graduate staff.
I see the light, I hear the stillness here
Of orbiting planets not yet broken in half.

* An asteroid is a broken-off chunk
of planet floating around in outer
space between Mars and Jupiter. One
theory has been that they are Caused
by shattered planets. Professor Wiener's
studies were of encephalographs and
astrophotographs as reported in The
Boston Globe.

DIOGÈNE

Revue Internationale des Sciences Humaines

Le Rédacteur en chef

Paris, February 3, 1960

Dept. of Mathematics Massachusetts Institute CAMBRIDGE 39, Mass.

Dear Professor Wiener,

In the absence of Mr. Roger Caillois who is now in Central America, I take the liberty of writing to you again to let you know that we are in the course of preparing Diogenes ' table of content for 1960 and how glad welshould be to have your name in one of our next issues. You were kind enough last January to let us hope a paper by you on cybernetics and I wonder if you could find, in spite of your numerous commitments, a little time to write

Yours sincerely.

eandOunello d'Ormesson

6, rue Franklin, Paris - 16° TRO 82-20

Conseil International de la Philosophie et des Sciences Humaines 9, Place de Fontenoy X Paris-7 (X Tél. W Suffren 98x70 et 86:00 Lans 3/18/60

INTERNATIONAL FEDERATION OF UNIVERSITY WOMEN FEDERATION INTERNATIONALE DES FEMMES DIPLOMEES DES UNIVERSITES

1. Sedding Street, Sloane Square, London, S.W.1

Cables: Ifederuw, London

Telephone: SLOane 8281

Telegrams: Ifederuw, Knights, London

17a, King's Road, Sloane Square, London, S.W.3

ER 111-03 (IV)

CONFIDENTIAL:

3rd February, 1960

Dear Sir,

The International Federation of University Women awards from time to time a bursary to enable one of its members to attend meetings of Intergovernmental Organisations held in Geneva, and to report on such meetings. The purpose of the Bursary is to assist one of our members to gain further experience of such meetings so that in due course she may give her own National Association the benefit of her added knowledge.

We hope in this year to award a bursary to one of our members to assist her to attend the following meetings in Geneva:

The 44th Conference of the International Labour Office in June; and

the 26th Session of the Economic and Social Council of United Nations in July-August.

Among candidates for the award of the Bursary is Mrs J. Gertrud Walther of Darmstadt, Germany; she has informed me that you are prepared to act as a referee on her behalf, and I should be grateful if you would be so good as to let me know what you think of her abilities, and whether she is likely to profit by the opportunity which the Bursary would afford her of gaining further experience of the work and procedure of Intergovernmental Organisations.

Yours sincerely,

FELICIA STALLMAN
Executive Secretary

Professor Dr Norbert Wiener, M.I.T., Cambridge. Mass. U.S.A.

[ms 2/10/60]

Gentlemen:

Details of the A.S.T.M.E. 1960 Honor Awards Dinner, and presentation of the Society's 1960 National Honors, have now been completed. As a participant in this occasion, will you kindly keep in mind the following:

- 1. Time and Place: All activities will take place Saturday, April 23, 1960, at the Sheraton-Cadillac Hotel, Detroit, Michigan.
- 2. Dress: Black tie, dinner jacket
- 3. Pre-Dinner Reception and Briefing: All participants Awards recipients, marshals, M.C., chaplain, and head table guests will assemble, in dinner jacket, in the Normandie Room, starting at 6:15 p.m. At this time the order of ceremonies will be explained, press pictures taken, and hospitality extended.
- 4. Awards Ceremonies: At 7:30 p.m., all participants will proceed in predetermined order of march to the Grand Ballroom, and be seated at the head table.
 - (a) The M.C. introduces the chaplain, and the invocation is given.
 - (b) Dinner
 - (c) The M.C. makes any pertinent announcements
 (1) Eli Whitney Lecture Award to be presented at a special luncheon Monday, April 25.
 - (d) The Society President is introduced by the M.C.
 - (e) The President introduces head table people, makes introductory remarks; calls up the Honor Awards Committee for recognition, and also all other Past Presidents present.
 - (f) The President confers the six Gold Medal National Awards, the Progress Award being conferred last.
 - (g) The President asks the Progress Award recipient to accept the National Honors in behalf of all the recipients, and make other appropriate remarks.
 - (h) The M.C. makes closing remarks, and adjourns the meeting.

ORGANIZED TO FURTHER RESEARCH IN TOOL ENGINEERING AND TO ADVANCE THE SCIENTIFIC AND EDUCATIONAL PROGRESS OF CREATIVE MANUFACTURING

- 5. Table Reservations Other Than Head Table: Tables near the head table will be reserved (a) for Society Past Presidents not acting as marshalls (dress optional), and (b) for their wives and the wives of Awards recipients.
- 6. Ladies Hospitality: It is our custom that the wives of our Past Presidents extend hospitality to the visiting wives of Awards recipients, and later to escort them to the Honor Awards Dinner. A suite for this purpose will be open from noon on (See Contact below).
- 7. <u>Hotel Accommodations</u>: Reservation forms have already been sent to Awards recipients. We urge you to return them promptly, because housing will be scarce.
- 8. Contact and Information: For any desired help or information upon your arrival at the hotel you may contact Mr. Otto W. Winter, Chairman of the A.S.T.M.E. National Honor Awards Committee, who will be in residence. Mrs. Winter may be contacted for ladies' hospitality. The undersigned may be reached through Society Information Center at the hotel.

Cordially,

Frank W. Wilson Technical Director

FWW: caf

Prof. Garrett Birkhoff
Department of Mathematics
Harvard University
Cambridge, Mass.

Dear Garrett:

I shall be delighted to act as a sub-chairman of a section at the April meeting of the American Mathematical Society. It is quite likely that I will be able to give a paper if there is room for it on the program. My subject will be "Certain Phenomena in the Harmonic Analysis of Brain Waves".

Sincerely yours,

NW/emr

Norbert Wiener

February 3, 1960 Mr. G. J. DeRousse Endicott-Johnson Corporation St. Louis 2, Mo. Dear Mr. DeRousse: There is no question that the brain is a computation machine far more complicated and a far more total power than any man-made machine. The man-made machines, however, have definite advantages in speed and in precision, and within limited fields they can more than compete with the brain. It does not follow that because they are man-made, we have complete ability to understand and anticipate their operations. As to the use of more of our brain power than we are accustomed to use at present, this really involves the effort of understanding more and more complicated processes and is not a mere numerical matter of amount. The whole problem is extremely complicated and cannot be given an offhand answer. Sincerely yours, Norbert Wiener NW/emr

February 3, 1960

Dr. Rudolf Eckert Universum Press Wyler & Co. Genf 75, Ch. des Eidgenots Switzerland

Dear Sir:

I am enclosing, as you requested, a copy of my address at the Chicago meeting of the American Association for the Advancement of Science.

My article is to appear in SCIENCE in the near future. If you wish to translate it and publish it, you would do best to take the matter up with that periodical. I shall leave the matter of permission entirely in their hands.

Sincerely yours,

Norbert Wiener

NW/emr

P.S. SCIENCE is published by the AAAS. The address is 1515 Massachusetts Avenue, N. W., Washington 5, D. C.

February 3, 1960 Dr. R. E. Langer Mathematics Research Center, U.S. Army University of Wisconsin Madison 6, Wisconsin Dear Langer: I am very much interested in the conference on Partial Differential Equations and Continuum Mechanics which is to take place next June. If it were not for the fact that we shall already be on our way to Europe, I would certainly come and participate at least in the discussion. I have some ideas about Hamiltonian systems which have not yet solidified completely and it would please me very much to discuss them with my colleagues. With best wishes from house to house, Sincerely yours, Norbert Wiener NW/emr

February 3, 1960 Mr. Joseph Polowsky 4126 Sheridan Road Chicago 13, Illinois Dear Mr. Polowsky: I look very sympathetically on all attempts to improve world relations and relations between individuals across the dividing line between East and West. It is quite possible that I shall find myself in the Soviet Union in the near future discussing my work and their work with my colleagues. I regret that I will not be able to participate in the meeting on April 25, as I am heavily loaded down at that time with talks and meetings. Please accept my good wishes! Sincerely yours, Norbert Wiener NW/emr

February 3, 1960

Dear Mrs. van der Pol:

I was terribly shocked to hear of your husband's death. It was a great loss to science, to engineering, and a great personal loss to my wife and myself. Both of you have been good friends to us, and we admire both of your greatly. It must be a considerable consolation to you to think that your husband was active up to the end and happy in the breadth of his interests and the strength of his powers. He was a great figure in contemporary science and a great encouragement to his colleagues both by word and example.

Margaret and I are going to be in Europe this summer where I shall talk before the Deutsche Naturforschervereinigung around the 20th of September. The meeting will be in Hannover, and as this is not too far from the Netherlands, we may have the chance to look you up. If you ever come to the neighbourhood of Boston when we are either here or on our farm in New Hampshire, we hope you will be able to find the time to look us up.

With sincere condolences,

Norbert and Margaret Wiener

hassenaar 10 Fyde weg hethelands



JUAN, PUERTO RICO - Cable Address: "CONDADO"

Frederick E. Dieterle Resident Manager

Dear Dr. Wiener,

February 4, 1960

letter. Del be most interested in learning just what action can cause raptile to stretch. As you may know, of all leather referer materials, this is by all odds the least flexible. And the brief description would indicate lettle moisture input as extraction is required. We should have some answer this coming week.

While I'm using this cueck to relay, I can't help but think it is a critical one. If your remember our last conversation, I mentioned that our two English men on Sunday, when they first saw our tormulast?

registern told me that their Kresident had had his vacunations and was forsed ready to fly over; all he needed to Know was that the lasts could be remarked safely in 24 hours and he would be here to sign a contract. thery shartly they found I've hours was adequate and gave a shape Metter than that of a sleffer held on-the-wood (last) 3 days. But they then talked of further tests on English leathers at home and the desire to unmediately visit SATTRA House (their central industry research facility). The your suggested, they too felt that SATRA must have done work in this area. However, just before they left their discussion shifted to "those dever

Janeashire slifter makers" who it

2m- 537

James Weber President & Managing Director

N JUAN, PUERTO RICO -- Cable Address: "CONDADO"

Frederick E. Dieterle Resident Manager

Mo doubt in private discussion they realized that even if SATRA had done work ar even published such work, the fast that English industry was not violed removing lasts quickly was proof that we were not properly auticipated.

However, anticipation in a small, little known slipper manufactures could be easily "found." Conseyors are common; also conveyors with drying means. By adding some steam sprays at the autset, who could teld how long these fellows had been doing such a thing? While this is surely a suspecious analysis on my part, the muge stakes

-4-

involved would certainly provide an incentive. And, in answer to a calle that I sent Sunday slaling we could begin a Sterney of their Joelory application next Monday, they used sales meetings as a reason for putting things off a month. This is sterely an additimeonsistency for a President who was ready to fly over at the hint of a 24 hour cycle (which turns out to be 12 hours). So thanks to "The lengther and the above I'm genunely concerned. Fortunately, my English contact at SATRA has been alerted of this situation and probably can quitly learn of any purported find " But, to say the least, I am concerned for here hier all Thanh you again for your heartening letter. When Wraturn best I woday & will call for a convenient lunetien Time. Sincerely, Morton

MASSACHUSETTS INSTITUTE OF TECHNOLOGY DEPARTMENT OF PHYSICS CAMBRIDGE 39, MASSACHUSETTS

February 4, 1960

Professor Norbert Wiener Room 2-276 M.I.T.

Dear Professor Wiener:

This is just a note to remind you that we are looking forward to hearing you speak at the Physics Graduate Student Dinner on Monday, February 15. We will meet in the Campus Room of the Graduate House at 6:00 p.m.

If you should have any questions concerning this event please contact one of us at your earliest convenience. We appreciate your help and look forward to an enjoyable evening. Thank you very much.

Sincerely,

	Ext.
Charles Buntschuh	2550
James W. Mayo	3695
Winthrop W. Smith	4859
William T. Walter	4859

WWS:JGA

BROMFIELD ASSOCIATES

175 HUNTINGTON AVE. BOSTON 15, MASS.

COPLEY 7-7161

an organization for the application of scientific management February 4, 1960

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

Dear Professor Wiener,

Found this clipping in last Sunday's New York Times and thought you might be interested in seeing what became of our "mutual friend".

I enjoyed our little talk that Saturday - hope we can do it again sometime.

I arrived at my engagement party along with the other guests — you might say, just in time.

With best regards,

Jack Ferner

JF: Imh

COMMITTEE ON JUDICIARY

HOME OFFICE: 214 NORTH FIRST STREET WATERTOWN, WISCONSIN

Congress of the United States House of Representatives

Washington, D. C.

February 4, 1960

Mr. Norbert Wiener Institute of Technology University of Massachussetts Cambridge, Mass.

Dear Mr. Wiener:

A few months ago we wrote to you in the hope that you would help us write a liberal Syllabus which could be used to purposes of the Democratic Party and force the consideration of a more meaningful political program for the United States.

Since you have not as yet replied we are wondering whether you wish to take part in this project.

With kindest regards,

Sincerely,

ROBERT / KASTENMEIER Member of Congress

RWK: jlr

[aus 3/9/60]

74 Gerdes Avenue Verona, New Jersey February 4, 1960

Dr. Norbet Weiner

Dear Dr. Weiner,

I have been in charge of production in a manufacturing plant for a number of years. In this capacity I realized the growing trend towards automation and I felt it was quite necessary for me to gain as great a knowledge as possible on the subject. As a result I first read your book "The Human Use Of Human Beings" and am now reading another of your books "Cybernetics".

Both books have been very enjoyable to read and have given me a much greater insight on the fundamentals of automation. In addition, I was very surprised and delighted to get an entirely different perspective on Hearing. This is quite important to me since my daughter has been diagnosed as a child with communication problems that stem from a central involvement, k.e., "central auditory imperception". It is in respect to this that I write this letter. It seems to me that so many solutions you have already accomplished with machines are exactly parallel to solutions needed for this type of deafness.

First I must explain my interpretation of my daughter's communication problems. According to Dr. William Hardy who is in charge of the Hearing and Speech Center of the Johns Hopking Hospital in Baltimore, Md., Kathy is able to hear sound fairly normally. The psychogalvometric skin resistance (PGSR) tests bear this out. However, the breakdown occurs somewhere along the line between the end organ (cochlea) and or including the higher centers, i.e., nerves, various relay stations and other centers possibly including the cortex. As I understand it, sound is distorted to the effect that Kathy cannot differenciate between foreground and background sound, nor can she differenciate between high and low frequencies. In other words, she hears like a radio that is not tuned in properly, plenty of noise but nothing distinguishable.

At one point in your book you mentioned finding a message contaminated by background noise. The problem was to eliminate the extraneous disturbances and restore the original message. Your answer to this was in the design of wave filters. Doesn't this seem to be an exact parallel to my daughter's problem with a possible parallel type of solution?

You also mention the principal of feedback in which the machine is constantly checking, comparing, and then if necessary, correcting its own errors. Naturally the same thing is happening when we talk, hear ourselves talk, and then correct any defects that we may notice. If there is a breakdown in this feedback mechanism then everything else naturally goes haywire. Since you also mentioned that techniques have been used to check out feedback mechanisms by Servo-engineers, it does not seem too improbable that the breakdown for this type of communication problem can be located, and then either corrected, or by some means by-passed.

I feel certain with your genius in the field of cybernetics and your wonderful interest in helping people, that much could be done, possibly in collaboration with Dr. Hardy, to meet a really great need in this particular field. Dr. Hardy is doing pioneer research in this field as you are doing in your field and it would be a marvelous thing if you could meet and find a common means of solving some of these overwhelming problems.

If there is anything I can do to help facilitate such an arrangement, please call upon my services.

Sincerely yours,

Jack Lamb

If you should wish to telephone me, please call collect. My number is:Pilgrim 6-6338

[ans 3/25/60]

Elizabeth H. Court

DETROIT 30, MICHIGAN

February 5, 1960

Mr. D. G. Brennan Lincoln Laboratory Massachusetts Institute of Technology Lexington 73, Massachusetts

Dear Mr. Brennan;

Your letter of the 21st was really quite exciting and thought provoking bringing almost new dimension of insight for me. I will try to rewrite my ideas into more reasonable terms.

Has it ever occurred to you that urban civilian defense is only useful in this country if we plan to rely on massive retaliation, that is, to use the threat of a first strike against the Russian homeland to deter some sort of local aggression by them?

In my writeup I really don't think I had a doomsday machine in mind. I was only contemplating enough threatened retaliation to make it inacceptable to the enemy. And as far as the triggering is concerned I think now even a purely passive deterrent should be triggerable by a group of men as well as by a nuclear attack in order to handle a biochemical first strike against 18.

You are certainly right that any purely passive deterrent such as I suggest would require building our conventional forces to deal with local attention. In fact, one of the merits of a strictly passive deterrent is that it forces us to face the Kissinger-Taylor line that our present massive retaliation program is incredible and therefore dangerously ineffective.

Very truly yours,

(Mrs. William Court)

HERMANN

6 RUE DE LA SORBONNE, PARIS V



S.A.R.L. AU CAPITAL DE 3 888 000 FRANCS TEL.: ODEON 14-19 REGISTRE DU COMMERCE: SEINE 232 254 B DIRECTION ET SERVICES COMMERCIAUX: 115 BOULEVARD SAINT-GERMAIN, PARIS VI TEL.: MEDICIS 12-18

Paris, le 5 Février 1960

Monsieur,

Nous vous remercions de votre aimable lettre du 25 janvier et nous empressons de vous communiquer les renseignements que vous nous demandez concernant votre livre : Cybernetics.

Nous vous remettons sous ce pli le compte de vos droits d'auteur arrêté au 31 décembre 1959, accusant un chiffre de vente de 126 exemplaires dont 42 sur la nouvelle édition. Nous donnons l'ordre à notre banque de vous transmettre le montant de ce compte.

Nous joignons à cet envoi une somme de Fr 12 144 représentant vos droits sur la traduction de votre ouvrage faite en Tchécoslovaquie.

Nous vous prions d'agréer, Monsieur, l'assurance de nos sentiments les plus distingués.

> Pierre Berès Directeur Général

Monsieur Norbert WIENER Massachusetts Institute of Technology Department of Mathematics Cambridge 39 (Mass.) U.S.A.

HERMANN

6 RUE DE LA SORBONNE, PARIS V



S.A.R.L. AU CAPITAL DE 3 888 000 FRANCS TEL.: ODEON 14-19 REGISTRE DU COMMERCE: SEINE 232 254 B DIRECTION ET SERVICES COMMERCIAUX: 115 BOULEVARD SAINT-GERMAIN, PARIS VI TEL.: MEDICIS 12-18

Paris, le 5 Février 1960

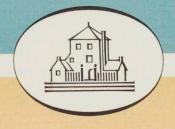
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Monsieur Norbert WIENER Cambridge 39 (Mass.)

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	nouvelle édition :				
	42 ex. à 120 Fr	5	040		
Année 1959	212 ex. à 120	25	440		
				38 376	
Droits dûs su	12 144				

somme que nous prions notre banque de vous faire parvenir.



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Jason Epstein, EDITOR

February 5, 1960

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

Dear Norbert:

Yes, we did arrange for German translation of THE TEMPTER with Econ Verlag on the following terms: $7\frac{1}{2}\%$ on the first 5,000, $8\frac{1}{2}\%$ on the second 5,000 and 10% on all over 10,000 copies. Presumably Mrs. Walther is to be the translator for the German. So far there are no other translations in prospect. I too am most satisfied by the way the book has done, and though total sales to date have been only about 5,000 copies, this is not bad for a novel these days. I think we should be selling it for a long time to come.

Best wishes from house to house.

Yours,

Jason Epstein

SOUTHWEST RESEARCH INSTITUTE

8500 CULEBRA ROAD

SAN ANTONIO 6, TEXAS



February 5, 1960

Dr. N. Weiner Professor of Mathematics Massachusetts Institute of Technology Cambridge, Massachusetts

Dear Dr. Weiner:

The School of Aviation Medicine, USAF Aerospace Medical Center (ATC) is planning a symposium to be held at the Center here in San Antonio on May 26-27 of this year. The subject will be "The Psychophysiological Aspects of Space Flight", a tentative program of which is enclosed. Southwest Research Institute has the responsibility for the symposium arrangements.

This unclassified meeting promises to be of great significance in presenting information in this important field. Somethirty leading authorities will present papers which we expect to be published in book form and widely distributed.

We should be pleased if you would present a paper on the subject "PROBLEMS OF HUMAN RELIABILITY - Performance and Dynamics of Stress: Intellectual Functions (The potential to take in information, synthesize and integrate it under stress)", as indicated on the enclosed tentative schedule. The time limitation given your oral presentation need not govern the length of the formal paper which can be longer than the oral presentation. We would need a short abstract of your paper by April 15, and three (3) finished copies of your paper should be in our hands on or before May 1. Last minute modifications of your manuscript can, of course, be made at the symposium. We should appreciate your suggestions if you wish to vary the subject of your presentation.

We have a special budget which will permit us to offer you a modest honorarium of \$150; and we can reimburse you for first class air travel to and from San Antonio. In addition, we could allow you \$12.00 per diem allowance for a period of four days.

We will be honored if you accept our invitation. To assure a "firm" program, we should appreciate your letting us know as soon as possible if you can participate.

Encl.

cc: Lt. Col. B. Flaherty

Jack Harmon

Symposium Coordinator

SYMPOSIUM

PSYCHOPHYSIOLOGICAL ASPECTS OF SPACE FLIGHT

FIRST DAY - Thursday, May 26, 1960

I <u>INTRODUCTION</u>			TION
	9:00	Wel	lcome
	9:10	Ove	erview and Conference Objectives
II	TECH	INICA	L BACKGROUND AND EXPERIENCE
	9:25	Α.	Technical Objectives and Requirements
	9:30		Operator Requirements
	9:45		Project Mercury
	10:00		Project Dyna Soar
	10:15		Personal Experiences
	10:30		Personal Experiences
	10:45		Personal Experiences
	11:00		Discussion
	11:10		Break
	11:25	В.	Biotechnologic Problems and Achievements
	11:30		The Space Flight Situation: Neurophysiological Aspects
	11:45		Small Animal Experience
	12:00		Observations in Space Flight Simulator
	12:15		Discussion
	12:25		Lunch

Psychophysiological Aspects of Space Flight

First Day - Thursday, May 26, 1960 - cont'd

III CRITICAL PROBLEM AREAS

1:55	Α.	Selection, Training, and Evaluation
2:00		Project Mercury
2:15		Project Dyna Soar
2:30		Training and Evaluation
2:45		Discussion
2:55		Break
3:10	В.	Physiological Problems
3:15		Neurophysiological Aspects of Stress
3:35		Neuroendocrine Aspects of Stress
3:55		Physiological Cycling
4:15		Endogenous Rhythm
4:35		Physiological Data Acquisition
4:55		Discussion
7.00		Social Europian and Banquat
7:00		Social Function and Banquet

Psychophysiological Aspects of Space Flight

SECOND DAY - Friday, May 27, 1960

IV	PROBLEMS	OF	HUMAN	RELIABILITY
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ΤΛ	PROBL	EMS	OF HUMAN RELIABILITY
	8:00	Α.	Altered Sensory Input
	8:05		Sensory Deprivation
	8;25		Sensory Alteration: Application to Space Flight
	8:45		Assessment of Individual Resistance to Sensory Alteration
	9:05		Interpersonal Relationships in Isolated Small Groups
	9:25		Fear, Anxiety and Motivation
	9:45		Discussion
	10:00		Break
	10:15	В.	Performance Under Adverse Conditions
	10:20		Sensory Overloading
	10:40		Time and Load Factors
	11:10		Skill Maintenance in Adverse Environments
	11:30	_	Performance and Dynamics of Stress: Intellectual Functions DR N. Weiner
	11:50		Discussion
	12:00		Lunch
	1:30	C.	Special Techniques of Control
	1:35		Hypothermia
	1:55		Drugs
	2:15		Conditioning and Hypnosis
	2:35		Discussion
	2:55		Break
	3:10		Summary and Conclusion

INSTITUTE FOR DEFENSE ANALYSES

Advanced Research Projects Division



February 5, 1960

Professor Lynwood Bryant, Director The Technology Press Massachusetts Institute of Technology Cambridge 39, Massachusetts

Dear Lyn:

I am returning Norbert's draft preface, with a few annotations. It is a bit too diffuse and "first-draftish" for detailed working over, but a few general comments can be made.

The first comment concerns an error in judgment. The time average of two voltage waveforms is not really technically easy to obtain. If it were, Gabor would not have his pupils fritter their time away on it. To the best of my knowledge, there does not yet exist an autocorrelator capable of producing a real-time analysis of a speech wave of enough detail to be of value. The best we can do is to take samples of a few seconds duration, slow them down, and go through lengthy and laborious computation. In principle, Norbert is right, but in practice it has not worked out. His own doubt shows in the fact that he argues the point in two places.

Second, "black box" is a dead metaphor to an electronics engineer. Antithesizing to "white box" necessarily brings it to life, and risks a succession of mixed-metaphor disasters. A dyed-in-the-wool electronics engineer will feel uncomfortable on pages 4-5, unless, e.g., you contrive to make a pun out of it. But I don't think the integration issue belongs here.

Third, after page 9 the whole thing loses its senstof direction. Rather than limping to a lame closing, Norbert must want to build out its strength.

Minor comments are noted in the margin.

Professor Lynwood Bryant - 2 - February 5, 1960 You note that I have said nothing good about the manuscript. Let me say that everything that I have not specifically recommended altering seems good to me, and the overall impact is superb. It is simply that some parts are not as singularly uniquely optimally perfect as others. As for the points in your letter: I have written to Ikehara, requesting an English version of his notes and permission to publish with acknowledgment. A bibliography seems to me like too big a job, unless someone can hand you one ready-made. About further essays, I agree with you that all general remarks should be put into the preface. If, however, he has anything of substantial mathematical or technical content to add, an appendix is in order. The development of the theory of non-linear systems threatens to be too technical for a preface. About the Chicago talk, if the newspaper accounts represent it fairly, I endorse your opinion wholeheartedly. Other background material which might make useful filler is a list of translations with dates, etc.; a list of societies devoted to Cybernetics; a list of symposia devoted to Cybernetics and information theory, etc., etc. He does deserve a list of "other books by the same author," even though they are not by the same publisher. But you really don't need filler, do you? Very truly yours, Tobay Enclosure: Preface to "Cybernetics" (draft) (under separate cover)

February 5, 1960

Prof. John H. Holland Logic of Computers Group 4001 Angell Hall The University of Michigan Ann Arbor, Mich.

Dear Prof. Holland:

Thank you for your prompt reply of January 28. As to travel arrangements, time of arrival and departure, it has been decided that Prof. Wiener will leave Boston by train on the 22nd of February at 2:30 and will arrive at Ann Arbor at 9:00 in the morning of the 23rd.

Of the two alternatives suggested for the more technical talk, Prof. Wiener prefers the morning of the 24th, at 9:00. He plans to leave the same day, at 2:30 p.m., by plane from Willow Run and would appreciate it very much if it would be possible for him to be driven there. Your suggestion to make arrangements for a room at the Michigan Union for the night of Tuesday, February 23rd is an excellent one and would be of great help.

The title of Prof. Wiener's University lecture will be "The Construction and Problems of Learning Machines".

Sincerely yours,

Eva-Maria Ritter Secretary to Prof. Wiener

Prof Holland called: Prof. Wains will be picked up at draw station Felo. 12.

5 Fevrier 1960

Dr. Paul Rossi Lou Ventoulet 16 Avenue de la Mitre Mourillon Toulon (Var) France

Monsieur le Docteur:

Avec des sentiments très agreables j'ai reçu votre communication du 19 janvier. Je vous enverrai des exemplaires des articles que j'ai écrit sur le thème des dangers et possibilités d'automatisation. Comme vous verrez, nous sommes du même propos. Il me plairait beaucoup si vous auriez la bonte de m'envoyer vos opinions sur le conténu de mes articles.

Je serai en Europe de juin 1960 - Fevrier 1961. C'est bien possible que nous aurons l'occasion de voir l'un l'autre. Il ya une société a Napoli, Italie, nommé la société de la médécine cybernétique. Il y aura une séance de cette société autour le 23 septembre à laquelle je ferrai une conférence. Probablement sur les travaux que je viens de faire sur les ondes du cerveau. Peut-être vous pouvez la visiter. Le président de la société est Prof. Aldo Masturzo.

Veuillez recevoir, Monsieur le docteur, l'expression de mes sentiments amicaux,

Norbert Wiener

NW/emr

Sent 3/14

February 6, 1960

To The Members of The Speckled Band:

Our dinner this year (as you will be notified) will be on April 22nd. It will be our twentieth birthday. We want to make a birthday present to ourselves.

Your Executive Committee have voted to publish "The Third Cab." It will be a \$5.00 book in which will be included the best of our manuscripts for the past ten years. The edition will be five hundred copies.

The B. S. I. gives us an immediate underwriting of one hundred copies and a fair assurance of two hundred copies, but this will be at the B. S. I. discount: income to us \$600. We have voted to give free copies to the Speckled Band and to our guests on April 22nd. The balance we hope to peddle at \$5.00 per copy.

We hope to take in from \$1600. to \$1800. The cost will be \$1300.

We need an underwriting fund of \$1000. Will you participate in this underwriting? The amount of each subscription will participate in the distribution on the ratio that each subscription bears to the total subscription.

If there is a profit, 10% should go to the Speckled Band treasury.

If you participate, you may get back 80% of your money; 90%; 100%; 110%; 125% (tops as I see it.)

Copies of our Second Cab are selling at \$10. bonus.

Speed is of the essence. Please reply immediately, and - - - a happy April 22nd.

Yours sincerely,

Douglas Lawson, Keeper of the Band

DL:bm

P. S. Tissues for speed and economy.

VEB GUSTAV FISCHER VERLAG JENA

Durch Luftpost

Herrn Norbert Wiener Massachusetts Institute of Technolo Mar. 1868 (KENN-NR. 110030)
Department of Mathematics

FERNSPRECHER: 4141 und 4142 BETRIEBSNUMMER: 93/259/4097 DRAHTWORT: FISCHERBUCH JENA POSTSCHECKKONTO: ERFURT NR. 986 BANKKONTO: DEUTSCHE NOTENBANK



Cambridge 39, Mass. / USA

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THRE NACHRICHT VOM

UNSERE ZEICHEN

JENA, VILLENGANG 2 POSTSCHLIESSFACH 176

NW/emr

27.1.60

13 Li/El

6. Febr. 1960

Sehr geehrter Herr Wiener!

Wir bedanken uns recht herzlich für Ihren freundlichen Brief vom 27. 1. 60. Mit großem Interesse nahmen wir Ihre Ausführungen bezüglich Ihres Werkes "Cybernetics" zur Kenntnis. Vor allem interessierte uns natürlich Ihre Mitteilung, daß Sie z.Z. eine Überarbeitung Ihres Buches vornehmen. Sofern wir uns für eine Übersetzung in die deutsche Sprache entscheiden sollten, melden wir uns wieder bei Ihnen.

Mit den besten Empfehlungen und

dem Ausdruck vorzüglicher Hochachtung

VEB GUSTAV FISCHER VERLAG

(Lichtenstern) Lektor

Linktenstern

815 Darrison Carthage, Tujas February 6, 1960

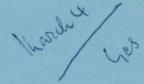
Dear Doctor Wiener,

I am in the seventh grade science class ut P. B. Loonce School, Carthage, Texas. The science teacher has assigned the class a six to ten page them on the life and accomplish ments. I was wondering if you would please write back to me with a short history of your life and any first hand information you deem to be of value I am enclosing a self-addressed envelope for your convenience Thank you very kindly for your trauble

> Sincerely, Linda Pike

[ans 3/16/60]

GENERAL E ELECTRIC
COMPANY



DEFENSE ELECTRONICS DIVISION

TECHNICAL MILITARY PLANNING OPERATION

735 STATE STREET, SANTA BARBARA, CALIFORNIA . . TELEPHONE WOODLAND 5-0551

February 8, 1960,

Professor Norbert Wiener Massachusetts Institute of Technology Lexington 73, Mass.

Dear Dr. Wiener:

It was a pleasure talking to you briefly last week. In the meantime, I have discussed with members of the Air Force Ballistic Missile Division your possible participation in their forthcoming Conference to be held in Washington. I was led to believe that they were about to extend their invitation directly to you and that I, as Moderator of one of the sessions, was to explain briefly the purpose of the meeting or, at least, of the session for which I am responsible.

In general, the three-day meeting will deal with the broad and specific aspects of technical communications and their effects on our progress in missile and space technologies. In this connection, various representatives from the Air Force, the Atomic Energy Commission, Academic Institutions, Intelligence Activities, the Canadian Defence Research Board, and Industrial Research and Development Contractors will gather in the hope that, by meeting and by bringing to light their difficulties, a concrete step will have been taken toward an ultimate solution to our technical communications problem.

One of the subjects to be discussed will be the conflict between the need for national security and the needs of researchers for ready access to scientific information. Another vital problem is that of handling the masses of information now being generated by the vast research effort and of seeking aid, hopefully, by some means of automation which would be able to retrieve existing information very swiftly and accurately and possibly establish new inter-relations of known facts.

I am most reluctant to specify to you explicitly any subject area for discussion. Rather, I would like, quite frankly, to interest you enough for you to offer an outspoken comment at the time of the meeting. At any rate, it is my firm belief that these topics are of national significance and therefore seem worthy of your participation.

..../....

Dr. Norbert Wiener

February 8, 1960,

I regret that you were given such short notice before the meeting which is to be held on March 2,3, and 4. I would therefore appreciate that, if your schedule permits participation, you let me know the day of your preference at your earliest convenience. Until such a time, the Program of the Conference will be held in abeyance.

Sincerely yours,

KLAUS G. LIEBHOLD, Manager Technical Information Services

KGL: jba

Cc.: Mr. Dan Cetone, Air Force Ballistic Missile Division

Hqs. Air Research and Development Command

P.O. Box 262, Inglewood, California

W.O. Code No. 56789.

BALLISTIC MISSILE FIRING DRILL

PAMPHLET No. 4 (Revised)
Intercontinental Ballistic Missile Mk IV
1961

Prepared without the knowledge of the Chief of the Imperial General Staff.

THE WAR OFFICE, January, 1961

General

1. The purpose of the Intercontinental Ballistic Missile is to hit the enemy for six.

2. The weapon has an accuracy of plus or minus 200 miles. Its trajectory is subject to Droop, Jump, Drift, Boggle and Clatter. Allowances for these are incorporated in the Celestial Co-efficient at the time of firing.

3. There is a built-in Asiatic Correction for all missiles with a point of impact in the Eastern Hemisphere. A Middle East Atmospheric Compensation automatically operates when the missile passes Longitude 15E.

4. An Intercontinental Ballistic Missile Group can function with full efficiency only if:

(a) The war diary is maintained up to date at all times;

(b) There is no smoking on the launching pad.

Preparing for Action

On the order "Prepare for Action," by the Forward Firing Officer (F.F.O.), No. 1 doubles his detachment to the rear of the missile dressing by the right.

The F.F.O. orders "Tell Off," and the detachment numbers smartly. Any man uncertain of his number will be doubled six times round the launching pad.

The odd numbers insert ear-plugs in the ears of the even numbers, and vice versa.

The F.F.O. orders "Take Post."

2, 3 and 5 remove the polythene cover from the missile, and report "Cover Off." 8 and 9 pick up all elastic bands and remove them to storage.

4, 7 and 10 wind up the desiccators.

6 hands chalk to 12, who mounts to the warhead and inscribes on it the Message of the Day. 12 returns chalk to 6.

11 delivers the Meteor Telegram to the F.F.O., who orders the F.F.O. Ack to work out the Celestial Co-efficient. The F.F.O. then adjusts the fourth vernier of the overdrive.

1 ensures that the master gyroscope is functioning freely. He then reports "Ready for Action."

If tactical situation permits, cocoa is served to all ranks.

Counting Down

The final figures will be read in this order: Ten, nine, eight, seven, six, five, four, three, two, one, zero.

On the word "ten," 2, 3, 5 and 7 slacken the tommy-nuts retaining the gimbals by one quarter-turn.

On the word "nine," 1 orders "Detachment Rear."

On the word "eight," Army Form G9099, fully completed, is handed to the Quartermaster, who now ceases to hold the weapon on charge.

On the word "seven," the F.F.O. switches on the red light. On the word "six," the detachment double away behind the blast walls, except 13, who reports to the F.F.O.

On the word "five," no action is taken.

On the word "four," 13 ensures that his right thumb is functioning freely.

On the word "three," 13 poises his right thumb above the firing button.

On the word "two," all Other Ranks sit to attention.

On the word "one," the F.F.O. salutes the missile.

On the word "zero," 13 pushes the firing button, using normal digital pressure.

In the event of the missile taking off the F.F.O. reports "Missile Away."

If tactical situation permits cocoa is served to all ranks.

Misfires

	Order or	Given	Given	Action Taken, If Any
	Report	By	To	Action Taken, if Any
	"Misfire"	13	F.F.O.	F.F.O. Ack repeats
	"Blast!"	F.F.O.		Not repeated by F.F.O.
				Ack
	"Press	F.F.O.	13	13 presses button again,
	Button			using maximum bodily
	Harder"			force.
	"Change to	F.F.O.	1	1 returns to missile and
	Percussion"			kicks it smartly above
				the gimbals. If it still
				fails to respond, the
				following procedure will
	40 41			be adopted:
	"Something	1	F.F.O.	F.F.O. Ack orders, "Say,
	Wrong"			'sir,' when you address an officer."
	"Stand	F.F.O.	1	1 returns to his detach-
	Clear"	F.F.O.	L.	ment. They remain
	Cicai			behind blast walls for
				30 minutes, telling off
				and changing round.
				After 15 minutes an
				artificer releases the
				screw retaining star-
				board inspection panel
				and the Propellent In-
				spection Officer agitates
				the tickler of the ter-
				tiary fuel pump. If no
				hissing sound is heard,
				the following action
				will be taken:
	"Remove	F.F.O.	1	The warhead is removed,
	Warhead"			wiped clear of chalked
ı				messages and disposed
				of in accordance with
			-	ACI 187/1959 as amended by ACIs 865/
				1959 and LA/1960.
	"Rest"	F.F.O.	1	1 doubles away his detach-
	11031	1.1.0.	1	ment to attend Chap-
				lain's Half-Hour.
				rain a rian-riour.

Amendments

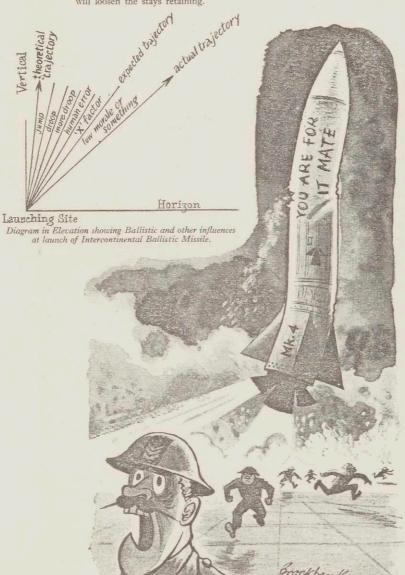
I.B.M. Shorter Manual, 1960. Page 217, lines 4-5: delete "get the hell out of it" and insert "retire to prepared positions."

Page 234, line 17: delete "apples" and insert "nipples."

Page 235, line 2: delete "bismuth" and insert "azimuth."

Page 301, line 30: after Para 2 add: "3. Haversack rations will not be consumed at the control panel."

Page 305, line 5: delete "4 and 5 will loosen their stays" and insert "4 and 5 will loosen the stays retaining."



* exploded here Target - Steady, The Buffs. buzzed by counter missiles under control ← Gresham's Law again control resumed interference O from Cairo Radio N.E. Trades x hit bird here Theoretical Axis of Fire drosscomponent of wind Launching Site

Diagram in azimuth showing factors governing the flight of an Intercontinental Ballistic Missile.

Although it overshot the target, this misile ended accurately on course.

Distribution

C.-in-C. Home Forces.
School of Nuclear Warfare.
Shetland Port Officers.
Military Mission to Saudi Arabia.
Vice-Admiral of the Nore.
Director of Public Prosecutions.
W.O. Time and Motion Directorate,
Masters in Lunacy.
Gathered Wool Officer, Bradford.

Prof. George G. Harvey Physics Department 6-113

Dear Prof. Harvey:

I spoke to you the other day about giving a statement concerning Dr. Shikao Ikehara in connection with his possible candidature for a Sloan fellowship.

Dr. Ikehara was born in Kobe, Japan, where his father at one period was acting mayor. His father was a liberal in politics and at a very considerable disadvantage and risk opposed the prevailing militarism. In this, Dr. Ikehara has followed him.

After a Japanese education Ikehara came to M.I.T. in the late 20's and worked for his Ph.D. in mathematics under me. He did a very valuable and still recognized doctoral dissertation in which he proved a most important Tauberian theorem useful in the proof of the Prime Number Theory. He taught here, 1929-31, in the Chemistry Department and, 1930-32, also in the Physics Department. Finally, he returned to Japan in the early 30's where he taught first at the University of Osaka and later at the Polytechnical Institute in Tokyo. He has come to the United States once since then and was appointed to the staff of the Research Laboratory of Electronics in January 1951, where he worked with Statistical Communications until December 1951. He made a very good impression here. Twice he has acted as my mentor on trips to Japan; once in 1935 and once about four years ago. He has been of invaluable assistance to me on these occasions, as translator into Japanese of my "Cybernetics", my "The Human Use of Human Beings" and other books, and as an extremely careful and accurate reviser and detector of mathematical and printing errors in my book "Cybernetics". To this, Prof. Bryant of the Technology Press and Prof. Lee of the Department of Electrical Engineering can bear witness.

Quite a few of the Japanese scholars who come here owe a great deal to their contact with Dr. Ikehara. Ikehara speaks a very good English, as does his wife whom we have met in Tokyo at their house and who is a charming lady. I believe Dr. Ikehara has four children at least one of whom is in college. Dr. Ikehara would like to be in the United States next year, and I can vouch for him as an able scholar, a valuable element

Prof. George G. Harvey--2

in the liaison between the United States and Japan and a particularly valuable element in the liaison between the Massachusetts Institute of Technology and Japan. Not only is he a man of high ability, but one of firm, upright and sensitive character.

Sincerely yours,

Norbert Wiener

NW/emr

P. S. Among his publications are: Kalmar's problem in "Factorisatio Numerorum", Mathematical Reviews, Vol. 7, 1946, also mentioned in Zentralblatt für Mathematik und Grenzgebiete, Vol. 21, 1939-40, "Factorisatio Numerorum", Zentralblatt f. Mathematik und Grenzgebiete, Vol. 18, 1938, and "Method of Wiener in Nonlinear Circuit", Mathematical Reviews, Vol. 14, 1953.

United Electrical, Radio and Machine Workers of Amer NEW YORK 22, N. Y. . PLAZA 3-1960 ELEVEN EAST FIFTY-FIRST STREET JULIUS EMSPAK ALBERT J. FITZGERALD JAMES J. MATLES **General President General Secretary-Treasurer Director of Organization** February 9, 1960 Professor Norbert Weiner Department of Mathematics Massachusetts Institute of Technology Cambridge, Mass. Dear Professor Weiner: In the event that my letter of last October may have gone astray, I am enclosing a copy of it. If it is at all possible for us to get together at your convenience soon I would appreciate this very much. I plan to be in the Massachusetts area this coming week and I shall attempt to reach you at your office. Sincerely yours,

CHARLES R. ALLEN, JR.

CRA:f

264 E - 2 - 59

1517 Yale Station New Haven, Conn. February 9, 1960

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

Dear Mr. Wiener:

Some time ago, I came across an article mentioning you in Mewsweek magazine (January 4, 1960). I am primarily interested in one statement of yours paraphrased in the article. It reads as follows: "... Wiener argues, the 'man in the street' has blithely assumed that 'machines cannot possess any ... originality --- that nothing can come out of them that has not been put in.' Definitely not so, says Wiener. 'It is my thesis that machines can and do transcend some of the limitations of their designers.'"

As you are undoubtedly well aware, the truth of such a thesis, particularly that a machine can possess some degree of originality, produces profound philosophical and even moral implications. A great deal of the problem, I feel, lies in your meaning of "originality". Although my knowledge of mathematics is slight, extending only into intermediate calculus, and that of cybernetics is virtually nonexistent, I hope that you might in an elementary way clarify this meaning for me. I am not so sure that there exists such a thing as "originality" even in humans.

The statement that "our supposed ability to control (the machine) may be postponed so much that by the time we have understood its dangers, our power to turn off the machine may be long past" arouses in me the idea of an autonomous mechanism. In this I can see an extention of the process of evolution. Man is an extention and, in effect, a creation of the lower organisms. Now man through cybernetics is extending that supposedly unique element of his, the "intellect", the capacity to "reason", into these new mechanisms, which if they become autonomous will completely (as they have already partially) subject the presently predominent form of intellect to them. But it would seem that the dangers you contemplate must be limited to the realm of pure intellect unless, of course, these mechanisms be given a mode of action nearly equal to that of humans. The question is

whether the efficiency produced by an increased speed and accuracy is sufficient to rule the actions of the less efficient mechanism" which does possess this ability to act.

I would welcome any comments and clarification you might offer me on the questions I have raised. Thank you very much for your consideration.

Very truly yours,

Gary Richardson

Law Offices HARRY N. ROSENFIELD 1735 DE SALES STREET, N.W. WASHINGTON 6. D. C. CABLE ADDRESS TELEPHONE "LAWYER," WASHINGTON, D. C. EXECUTIVE 3-0250 February 9, 1960 Professor Norbert Weiner Massachusetts Institute of Technology Cambridge, Massachusetts Dear Professor Weiner: May I impose upon you for some advice? In a matter with which I am concerned, it would be advantageous, if possible, to show the value of the history of science for 1) the education of scientists, and 2) the advancement of science itself. Your pre-eminence in this field leads me to turn to you. I am aware, of course, that there are other values for the history of science, but for my purpose the pragmatic one is most useful. Would you be so kind as to guide me to any relevant statements or writings by scientists, historians, university administrators, government officials and others? Are there any dramatic recent examples where a scientist's work was advanced through knowledge of the history of science? Any statement on this subject which you yourself could provide me would be helpful indeed. In particular, I understand that you have found in some of Leibnitz's work clues to the role of information theory which helped you to develop the theory of cybernetics. Your comments on this would be much appreciated. Your kind cooperation in this connection would be much appreciated. Sincerely yours, loverfuld HNR: js [aus 3/9/60]

K. C. KUSMER 4445° TUVUNGA ST. NO. HOLL VWOOD CALIF. FEB. 9 IH . 60

OR NORBERT WIENER MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DEAR SIR. THERE ANY WAY THAT I CAN DEVICE THAT 15 SKETCH OF A SEND YOU A HELP GUIDE A SATALITE 1 THINK MAY DEVICE MAY PROVE USELESS THIS ETHE IF YOU WOULD

BUT I WOULD APPRECIATE AUALUATE IT OR SUFEEST WHERE I CAN IT WHERE IT WOULD BE IN SEND HANDS.

THE PROPER MY AGENT HAS CONTACTED FEW SCIENTISTS HERE, BUT THEY ALL SAY THEY CAN NOT HAVE ANYTHING OF THIS NATURE DISCLOSED TO THEM, FOR FEAR IT WOOLD INFRINGE ON WHAT THEY ARE ACREADY SO SHOULD 1 60 70 WORKING ON. THE RUSSIANS

BE CLAS TO HEAR WOULD 1 SECRETARY YOUR FROM YOU OR

(Kremi

[aus 2/29/60]

CONFERENCE BOARD OF ASSOCIATED RESEARCH COUNCILS COMMITTEE ON INTERNATIONAL EXCHANGE OF PERSONS

Mailing address: 2101 Constitution Avenue, N.W., Washington 25, D. C. Office address: 1785 Massachusetts Avenue, N.W., Washington 6, D. C.

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February 9, 1960

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

Dear Dr. Wiener:

I am writing on behalf of the Committee on International Exchange of Persons to invite you to indicate your interest in lecturing abroad under the Fulbright or Smith-Mundt Educational Exchange Programs.

The Committee was appointed in 1948 to nominate candidates to the Board of Foreign Scholarships for university lecturing and advanced research awards under the Fulbright Act. To this end it conducts two open competitions each year. In 1953, the Committee also assumed the responsibility for recommending candidates to the Department of State for lecturing abroad under the Smith-Mundt Act. The enclosures describe the operation of both programs.

Since Smith-Mundt requests are made by individual universities to meet specific needs as they arise, the Committee has found it necessary to develop a register of professors and specialists who are interested in serving abroad. The register has also been useful in filling Fulbright awards for which candidates are not available through the open competition. The Committee is attempting to expand the register for this joint purpose.

If you would be interested in lecturing abroad under the Educational Exchange Program, would you be kind enough to complete and return the enclosed data sheet?

Executive Secretary

FAY: ai

[ans 2/12/60]

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LINCOLN LABORATORY

P.O. Box 73

LEXINGTON 73. MASSACHUSETTS

TELEPHONE VOLUNTEER 2-3370

February 10, 1960

Mrs. Elizabeth H. Court 850 Barrington Road Detroit 30, Michigan

Dear Mrs. Court:

Thank you for your kind letter of February 5.

(copy sent to N.W. several days ago.)

would be

I am moved to comment on your remark that "civilian defense is only useful in this country if we plan to rely on massive retaliation." It is certainly true that civilian defense (3) absolutely essential if we were to become serious about the threat of a first strike against Russia, but I should be reluctant to say that this is the only circumstance in which civilian defense would be useful. After all, the Russians might some day strike us first, and the effect of such a strike could be enormously mitigated by even moderate civil defense measures.

However, this should not be taken as a statement to the effect that extensive civil defense measures are in fact desirable. This subject is extremely complicated by subtle psychological questions, and whether on balance, we should initiate extensive civil programs is a completely open question, so far as I am concerned.

Very truly yours,

D. G. Brennan

DGB:jej

cc: N. Wiener

To broaden higher educational opportunities and to raise the educational sights of all our underprivileged students

FOUNDERS: Harry J. Carman, Chairman Marian Anderson, Senator John F. Kennedy, Thomas K. Finletter, Roy E. Larsen, David M. Heyman,

Branch Rickey, Howard A. Rusk

under the auspices of the national scholarship service and fund for negro students

February 10, 1960

Dear Professor Wiener:

Several weeks ago, in a fusion of resolution and inspiration, I invited a number of extremely busy people to form the group named on this letterhead. The response far exceeded my fondest expectations. Hence, I thought, if they thought the issue worth doing something about, why wouldn't you?

The attached memorandum clearly describes the issue and the purpose. It is the work of seven men and women who feel that the waste of extraordinary ability among disadvantaged young people is too costly for complacence or for action inadequate to the needs.

Will you read it? And then join with us?

We do <u>not</u> want mere use of your name. We don't require you to attend any meetings. We do, however, want your generous participation at whatever scale you can personally afford. We also ask for a <u>small</u> amount of initiative to help interest people you know and respect.

I will appreciate your answer. The beneficiaries of our program will be deeply grateful for your affirmative response.

Faithfully,

Harry J. Carman

Chairman

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COMMITTEE DIRECTOR Henry H. Urrows MEMORANDUM:

How we can salvage talent now being wasted

FROM:

Marian Anderson Thomas K. Finletter David M. Heyman Senator John Kennedy Roy E. Larsen Branch Rickey Howard A. Rusk, M.D.

We cordially invite you to help launch a new Committee to Salvage Talent. It means taking on a clearly limited responsibility for interesting others in your field and/or your community.

Educated intelligence is our most valuable resource for assuring national growth and survival. Not enough underprivileged boys and girls take advantage of our theoretically equal opportunity for higher education. Over 100,000 of our ablest young people every year, all capable of profiting from college, do not go beyond high school. Thousands of bright pupils drop out before finishing high school.

The largest known loss occurs among racial minorities whose economic and cultural handicaps — compounded by poor schools — lessen ambition. The largest of these are Negroes.

The Present Waste

Dael Wolfle, Executive Officer of the American Association for the Advancement of Science, wrote: "we must make better use of the potential resources of those segments of the population that do not contribute their share to the college population ... the children of Negro, Mexican and Puerto Rican families are less likely to enter college and less likely to be motivated educationally ..."

Only one per cent of the students in interracial colleges are Negroes. Authorities attest that this segment of 17 million Negro Americans composing 10% of the total population — contains the same range of native ability as the rest of our entire national community.

But talent in Negroes, according to the Rockefeller Brothers Special Study Report, The Pursuit of Excellence, in its section on the use and misuse of human abilities, "withers under the cumulative impact of poverty and ignorance at home, degraded neighborhoods, poor educational facilities, limited job opportunities and the ever-present fear of rebuff."

Our failure ''to develop and to make effective an important source of national talent too long neglected, '' President Grayson Kirk of Columbia University says, ''represents a wastefulness which we cannot afford.''

What Is Being Done

A few years ago a Harvard admissions officer, unhappy with the scarcity of qualified Negro applicants, made numerous visits to high schools in a large mid-West city. Three years' effort located one boy capable of meeting Harvard requirements.

Then he discovered a project, begun by educators who were in touch with hundreds of schools and colleges, seeking answers to the same problem. He began working with them.

Among those helped to qualify themselves at Harvard in the last six years have been some outstanding students. One was graduated with highest honors, won a fellowship to study at Cambridge University in England, had two stories published in the Atlantic Monthly and sold his first novel to Little, Brown & Co. One girl aided by this same program was elected to Phi Beta Kappa at Radcliffe, was First Marshal of her class, and president of Student Government.

A major steel company noticed that, although in over a decade it had granted above \$2,000,000 in scholarships and fellowships, none of its awards had gone to a Negro. Upon investigation it learned that the problem is complex, requiring organized effort which no single college is equipped to undertake. The firm also found the same educators' project - the National Scholarship Service and Fund for Negro Students - that the Harvard dean had found.

In ten years that work has helped over 6,000 Negro students enter over 350 interracial colleges. More than half were assisted to win more than \$2,300,000 in scholarships from colleges and other sources. Their average family income was \$3,000. Inseparable from financial aid have been the year-around jobs of finding the students, working with their school systems and families, and guiding each youngster toward the colleges best suited to his aptitudes, needs and interests.

This organization also began a talent search among junior high school students, enabling gifted pupils to attend leading preparatory schools on scholarships. Another achievement has been to intensify guidance and remedial work in two New York City schools, where the rate of juvenile disciplinary problems sharply declined among students reached and the proportion of college candidates multiplied five-fold. This program has already spread to 33 New York schools. It has stirred new programs in Washington, Philadelphia and beginnings elsewhere.

Why This Is Not Enough

The Fund is a modest operation. Its total budget has never exceeded \$150,000. Its roughest work has been refusing supplementary financial aid to promising students because there has not been enough money.

The national testing programs, administered by the College Entrance Examination Board and the National Merit Scholarship Corporation, work closely with the Fund. Because these programs now reach over a million students a year, the number of applicants for NSSFNS assistance is rapidly rising.

What We Can Do

The National Scholarship Service and Fund for Negro Students has grown beyond its demonstration phase, supported by Foundations, college campus chests and a relatively few individuals. Dollar needs are not large - \$250,000 per year - considering the results. It is now time to get a base of interested leaders in each major city to see to it that attainable goals are met.

One group is seeking \$50,000 from firms and persons in Chicago. Another has set sights at \$25,000 from Connecticut. More hands will make lighter work. It should not be difficult to assemble strong enough leadership for continuing support of this vital work.

Our Request

Join our group. As the Committee to Salvage Talent, we plan no large, laborious or formidable activity. Nor can our purpose permit mere facade or "window dressing." Each member will be expected to make a personal gift, tax-deductible to the Fund, and to take a reasonable part in limited efforts within his field or community for gaining the interest of others.

Please let us know on the enclosed form, required by New York State law, that you will work with us. The burdens will be neither onerous nor expensive. We can assure you that the satisfactions will be specific and enduring.

From America's Leading Educators

The efforts of National Scholarship Service and Fund for Negro Students to identify academically talented young people and find for them educational opportunities for the development of this talent does service not only to the Negro but to the country at large. I hope these efforts will gain increasing

A. WHITNEY GRISWOLD, President YALE UNIVERSITY

"More than ever before in its history, our country should have today at its disposal in the greatest measure possible the intellectual, cultural, and technical resources which properly are ours. Only the development of these resources in the fields of education, technology, the professions, the arts, industry, and other areas of human endeavor will bring to our society the rich fulfillment which is its potential.

"The National Scholarship Service and Fund for Negro Students strives to develop and to make effective an important source of national talent too long neglected. It is imperative that there be provided as quickly as possible the advantages of higher education for the able individual who through circumstances not of his making has lacked the opportunity to achieve in accordance with his abilities." ance with his abilities."

GRAYSON KIRK, President COLUMBIA UNIVERSITY

"The Fund is doing a much needed service in seeking out, encouraging, and finding financial assistance for talented Negro boys and girls who can benefit from a challenging educational experience in the leading secondary schools and colleges of this country. Much of this talent would be wasted if it were not for the time, money and effort which the National Scholarship Service and Fund for Negro Students expends in their work with schools and colleges throughout the United States. Negro students, and the interracial colleges which they attend, benefit from the imaginative program which NSSFNS has developed."

ROBERT F. GOHEEN, President PRINCETON UNIVERSITY

"If it were not for the counseling and referral services of the National Scholarship Service and Fund for Negro Students, a number of talented and able Negro students would not have aimed their sights at Vassar College. "Two graduates of the Class of 1958 entered Vassar because of the groundwork laid by the National Scholarship Service. Recipients of substantial scholarship aid from Vassar College, these students made academic records of impressive quality and made an excellent contribution to the campus community. One student, whose central field was English, is working as a reporter for the Washington Post; the other is teaching French in the public schools in Cleveland."

SARAH GIBSON BLANDING, President VASSAR COLLEGE

"Certainly the National Scholarship Service and Fund for Negro Students enables Negro youth to continue their education in the finest colleges and universities in the land. The Fund obtains tremendous mileage out of each dollar of its budget; it is multiplied in dollars by grants from colleges, universities and other sources, and it is multiplied in effectiveness through the encouragement, stimulation and motivation it gives to American youth of meager finances and environment, to prepare themselves to make large contributions as citizens. The Fund deserves the strongest support."

JAMES S. COLES, President

During its first eleven years the National Scholarship Service and Fund for Negro

BOWDOIN COLLEGE

"Union College has been awarding scholarships through the National Scholarship Service and Fund for Negro Students for several years. We have found the boys who have come to us under this program outstanding in their contribution to campus life. We would welcome more such students in the future since we feel dents in the future, since we feel that integration must become more and more the normal process on every American college campus."

CARTER DAVIDSON, President UNION COLLEGE

Students has helped almost 6,200 qualified

A REALISTIC START . . .

Negro students to enroll in inter-racial colleges. Last year it assisted 715 freshmen who entered 314 different colleges in the Fall of

The value of scholarships obtained or awarded in these eleven years totals about \$2,300,000, with awards to last year's students

Many more, virtually indistinguishable from these on the grounds of merit and need, would have been helped had the funds been

"For many years we at New York University have had the pleasure of working with the National Scholarship Service and Fund for Negro Students to our mutual advantage. Your organization has accomplished splendid results in providing educational opportunities for qualified Negro students, and it is my hope that your development program will meet with the success it deserves." CARROLL V. NEWSOM, President NEW YORK UNIVERSITY

"The aims and services of the National Scholarship Service and Fund for Negro Students deserve a warm commendation and spirited support of all friends of liberal education. The careful search for superior students conducted by this agency at various educational levels is an invaluable service to many schools and colleges and has helped to stimulate growing opportunities for Negro students in interracial colleges.

"This is so good a cause that the

"This is so good a cause that the appeal for added financial support for the continuance and extension of

the program deserves widespread attention and participation."

OTTO F. KRAUSHAAR, President GOUCHER COLLEGE

"The Fund has demonstrated that it has the organization and the personnel to effectively assist in the education of Negro children who only a few years ago were not being afforded educational opportunities in keeping with their abilities, but it is obvious that without financial support every dimension of the Fund's program must necessarily be limited.

"Although financial aid for the needy student is critical, we often overlook the equally critical task of identifying talented students and placing these students in institutions best suited to their needs and skills. The Fund has done an excellent job in both of these fields."

JOHN W. MACY, JR., Executive Vice President WESLEYAN UNIVERSITY

"In recent years American education has recognized the need to discover hidden talents early in the educational careers of our children. Not only must we discover ability, but pupils must be encouraged to develop that ability under favorable conditions in order to make these educational potentialities available through advanced training to the benefit of our society and culture.

"The National Scholarship Service and Fund for Negro Students not only has directed its efforts to the task of early recognition of potential ability but, equally important, it has made available services and financial aid to help make it possible for these students to complete formal college educations. As a pioneer in the search for and aid to deserving and potentially gifted children, the National Scholarship Service is rendering one of the finest programs of aid to American education."

LAWRENCE A. KIMPTON, Chancellor UNIVERSITY OF CHICAGO

"We cannot permit lack of opportunity to destroy the incentive of many Negro students to advance beyond high school and to develop fully their personal abilities. Such students often lose all hope of attending the great liberal arts institutions of this country.

"The National Scholarship Service and Fund for Negro Students is striving to combat this feeling of hopelessness by launching their Community Talent Search in high schools throughout the country. With guidance programs in elementary and high schools they aim to encourage and aid the Negro student psychologically, socially and financially to obtain a college education."

MILLICENT C. McINTOSH, President BARNARD COLLEGE

"I was a member of a group of educators that has just returned from the Soviet Union. We were deeply impressed by the monumental strides higher education is taking there. We Americans can no longer, if we ever could, deprive ourselves of the proven ability and talent of a large segment of our people. The National Scholarship Service and Fund for Negro Students is helping our Negroes, our universities, our country in this vital search.

"I have been most impressed by the extensive counseling undertaken in high schools in the South. This pragmatic approach to the search for talent has resulted in discovering talented Negro students, and, more importantly, encouraging them to pursue their education in institutions calculated to provide a wholesome environment conducive to learning in its totality. Our experience at the University of Pittsburgh with National Scholarship Service students has been, without exception, fruitful and rewarding for students and University."

EDWARD H. LITCHFIELD, Chancellor UNIVERSITY OF PITTSBURGH

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OFFICE OF SPECIAL PROGRAMS

February 10, 1960

Prof. Norbert Wiener Department of Mathematics Massachusetts Institute of Technology Cambridge 38, Massachusetts

Dear Prof. Wiener:

Under the provisions of a Carnegie grant we are enabled to invite distinguished members from other universities to come to talk to our Honors Students. What we have done in the past is to invite someone to meet with approximately twenty-five students in the evening under rather informal conditions, We have left it to the guest to either talk along on a subject in which he is interested stimulating the students to asking questions, or take part in a discussion; or, perhaps, selecting some text or work which he would like to have the students read beforehand in order to discuss it with them.

We would be very delighted if you would come to us for some evening in late March or April. We would arrange to call for you and return you afterwards. Since I have no idea what you would consider a suitable honorarium, I wish you would let me know in your reply.

Noo

Sincerely yours,

B Albert Dulamil

P. Albert Duhamel, Director

OFFICE OF SPECIAL PROGRAMS

PAD/js

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Iona 3/2/60]

Graduate School of Arts and Sciences BRANDEIS UNIVERSITY WALTHAM, MASSACHUSETTS February 10, 1960 Professor Norbert Wiener Department of Mathematics Massachusetts Institute of Technology Cambridge, Massachusetts Dear Professor Wiener: I am writing in the hope that you will accept an invitation to give an evening lecture in the unusual summer adult-education program that we will offer in the second week of August, 1960. We inaugurated this program last summer as a rather challenging academic experience for adults who wish to return to the college campus, and dormitory, if only for a week, and take intensive refresher courses that are designed to up-date their knowledge of contemporary society. You will find enclosed a copy of the brochure describing last summer's program. It was so successful -- the adult students responded with the enthusiasm of freshmen -- that we plan to repeat our summer institute for adults on an annual basis. Last year we had a student attendance of about one hundred persons, mostly married couples, drawn from ten states. This summer we expect the enrollment to double. The program this summer will be based upon six courses taught daily by members of the Brandeis faculty, plus evening talks given by distinguished guest lecturers, on subjects relating to contemporary western civilization. We would be extremely pleased if you would participate as one of the guest lecturers to speak for a period of about fifty minutes on some subject of your choice revolving around a broad scientific theme of general interest for a lay audience. The honorarium would be \$250 plus expenses. If it would suit your convenience we can also offer you our excellent facilities for staying overnite on campus. You may have a choice of dates -- any evening between August 8 (Mon.) through August 12 (Thurs.). We shall be honored and grateful to have your participation in our program. If you should like to discuss this invitation in greater detail before making a commitment, please do not hesitate to phone me at TWinbrook 4-6000, Extension 385, Waltham, Mass. Leonard WLevy Brandeis Adult Institute Dean, Graduate School of LWL:dr Arts and Sciences enc1 [ans 2/12/60]

Townshend.

Ibayle, Cornwall.

PHONE: LEEDSTOWN 223.

10th February 1960

Dear Dr. Wiener,

My book is now in galley-proof, and the Publishers are writing to enquire whether your eagerly awaited Preface is available. It occurred to me that the enclosed list of chapters and sub-headings might serve to recall the sort of thing I have written. I have made my approach to all these problems from the biological rather than the mathematical viewpoint.

I ought to have asked you before whether there is an L.S.D. side of writing a Preface. Ought I to make some approach to the publishers on the financial aspect of the great helpyou are giving us? Forgive my putting it like this, but I am quite ignorant of this side of Authorship.

I have read of the interest in U.S.A. in the problems of "freezing with fear", and "stampeding in panic". Surely Kybernetics has the answer they are looking for (apparently with so little success): both are head and tail of the same coin, namely runaway to zero and uncontrolled runaway to maximum, when the negative feed-backs no longer operate and positive reflection, unmonitored, gets out of control.

Cordially yours,

D. Stanley-fres

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February 10, 1960

Dr. Norbert Wiener Massachusetts Institute of Technology Cambridge, Massachusetts

Dear Dr. Wiener:

In connection with the International Lecture Series of the Postgraduate Center, we are bringing to the United States Professor A. R. Luria of the Soviet Union. This will be the fourth in the series of lectures which was initiated with Dr. Gray Walter and subsequently brought to the United States other lecturers including Dr. Konrad Lorenz and Dr. Erik Stromgren.

This fourth lecture series, with Dr. Luria, will include several meetings on the subject of: "Advanced Studies in Neurophysiology and Behavior." The third meeting which will take place on Tuesday, March 15th, at 8:30 at the Carnegie Endowment Center - 345 East 46th Street - will be a round-table discussion on the subject: "Meaning Systems in Normal and Abnormal Behavior."

We should be honored and privileged to have you participate as one of the discussants in this meeting.

If you will let me know as soon as possible that you will be able to accept, we will proceed with publication of the program.

Sincerely yours

Lewis R. Wolberg, M.D.

P.S. We shall, of course, be happy to reimburse you for your travel and hotel expenses.

LRW:VH

[ans 2/29/60]

A Tax Exempt Organization—Chartered by the Board of Regents of the State of New York

Mr. Jason Epstein, Editor Random House, Inc. 457 Madison Avenue New York 22, N. Y.

Dear Jason:

Many thanks for your account of the status of the Tempter. I think you will excuse an author for being over-sanguine, but I am really very much satisfied with the progress of the book and what you have done for it. I consider it quite possible that before the books are finally closed, we shall have made the 10,000 goal which we have set ourselves. However, this may take a long time.

I now wish to write you concerning another but related matter. You will remember that we discussed the possibility of a second novel concerning the television scandals and I think you will also remember that both you and a colleague of yours looked rather favorably upon it. While I am very busy with new scientific research and even with a new invention. I have been giving some thought to the subject. My present attitude is the following: First, I do not intend to devote any large amount of time to it until I have cleared my desk of a mass of research which is underway. This research involves writing a new introduction and new chapters for a revised edition of my book Cybernetics and also the development of an invention which has forced itself upon me which can be used, on the one hand, for the analysis of brain waves, and on the other hand, for the reception of frequency modulation signals in the presence of an over-whelming noise. Moreover, early in June, I shall be on the way to Europe where I shall remain until about a year from now. I have already firm invitations for lecturing before the Deutsche Naturforschervereinigung in Hannover next September, and thereafter at a new organization for cybernetic medicine in Naples. I shall remain in Naples teaching and doing research at the University of Naples until the end of my stay. It is also possible, but not certain, that I shall pay a visit to Russia in the summer.

Acknowledging these prior calls on my time and efforts, I want to go ahead with the novel. I have already carried my plan of it to the point at which I can write down a firm scenario covering all the important actions, characters and motives. This I shall do in the near future. In other words, I am somewhat further than I was with the Tempter on the first occation at which I broached my idea of the book to you.

However, this time I want to adopt a somewhat different course. I feel that the Tempter was a success in organization and message while

Mr. Jason Epstein--2 rather clumsy in dialogue and in certain matters of style that appeal to the contemporary reader's taste. As this new book deals with a contemporary theme, I feel that I need help and collaboration. I am in a position to find this help and collaboration, but there are certain problems that arise and I shall put them to you. Do you know of Isaac Azimov, the science fiction writer? He is much more than a science fiction writer, as he is Professor of Biochemistry at the Medical School of Boston University, and he has written at least one bang-up detective story in which the main theme is that of scientific integrity. He was also the teacher of my daughter who is working in biochemistry in Chicago and a good friend of mine. He was my interlocutor here in Cambridge on a radio program discussing the Tempter. It is Mr. Azimov whom I should like as collaborator. He has a very fine touch in dialogue and in contemporary writing. I have already broached the matter to him and he seems to be willing although he is eager that I should not interrupt my present scientific research but should go ahead with him when immediate responsibilities have been discharged. In other words, our plans dovetail. However, there is one point of difficulty in which you may be able to give me help. I am bespoken to Random House for my next book while

However, there is one point of difficulty in which you may be able to give me help. I am bespoken to Random House for my next book while he is bespoken to his publishers, who are Doubleday. Would it be possible to make any arrangements between the two publishers by which we should be able to work together? I am certain that his name has an appreciable drawing power among the readers of novels and I am equally certain of my drawing power, although not so general in nature. I believe that a book by both of us would be likely to appeal to an audience greater than the sum of the audiences of each one of us alone. I also think that it would be a better book. I would like very much your opinion and advice in these matters.

With best wishes from house to house, I remain

Sincerely yours,

Norbert Wiener

NW/emr

February 10, 1960 Hermann et Cie 6, rue de la Sorbonne Paris V, France Gentlemen: Thank you for your prompt reply to my inquiry of January 25 in which you so kindly gave me the figures for the years 1958 and 1959. However, to make myself quite clear, I find it necessary to write you a second time in order to obtain an accurate account of my percentage. Would it be too much trouble to check the following questions? 1. How many copies of the first edition of Cybernetics (1948) have been printed in France by Hermann et Cie, and how many have been sold? (Not counting those by Wiley, N.Y.) 2. How many copies of the second edition of Cybernetics (1958), of which you are the sole publisher, have been printed and sold? 3. How many rights of translation have been granted, and to which countries were they granted? We should appreciate greatly any help and information you can give us in this matter. Sincerely yours, Norbert Wiener NW/emr

February 10, 1960

Miss Felicia Stallman
Executive Secretary
International Federation of University Women
17 a, King's Road
Sloane Square, London, S.W.3
England

Dear Miss Stallman:

Mrs. J. Gertrud Walther of Darmstadt, Germany, is the wife of Professor Walther of the Polytechnic Institute. We have been friends since my semester teaching at Goettingen in the spring term of 1926. Prof. Walther is now working very largely in subjects connected with cybernetics which is my own field. Mrs. Walther has translated my book "The Human Use of Human Beings" into German and I believe, too, my book "Cybernetics". I have the impression that it is she who is doing the translation of my novel "The Tempter" which is about to appear.

Mrs. Walther has been an excellent and understanding translator of difficult material, and my wife and I have visited the Walthers within the last few years. I can give Mrs. Walther an unqualified recommendation as a woman of great intelligence, high education and thoroughly devoted to scholarship. I wish to support her candidature for the bursary in question and express my belief in her ability to profit greatly by the meetings of Intergovernmental Organisations held in Geneva, and in particular the

and the 26th Session of the Economic and Social Council of United Nations in July-August.

Sincerely yours,

Norbert Wiener

NW/enr