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CORRESPONDENCE Oct. 1-13, 1953

N. WIENER · MC 22

UNIVERSITY OF CALIFORNIA

DEPARTMENT OF MATHEMATICS
LOS ANGELES 24, CALIFORNIA

October 1, 1953

Professor Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Professor Wiener:

We are most pleased to have you give the first lecture in the series on MATHEMATICS FOR THE MODERN ENGINEER. I appreciate your having sent the advanced copy of your notes. I am sure that this can be used as the basis of an excellent chapter. However, I would appreciate your looking through it in order to adjust the salutation and other small matters to the present lecture. For example, any applications which you think would be of interest to the engineer would be most welcome.

You will recall that in the form which I sent you there is a request that you furnish us with notes (no more than 10 double-spaced, typewritten pages for mimeographing and distributing at the talk) which should reach us preferably well in advance of your lecture. The Engineering Department advises me that these notes are highly to be desired. I hope you can find time to jot down a summary for me within the next very few days. Please advise.

The pre-enrollment indicates that there will be an extremely large attendance at the lectures.

We are indeed looking forward with most pleasurable anticipation to your visit.

Sincerely yours,

E. F. Beckenbach

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EFB:mh

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October 2, 1953

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Mass. Institute of Technology
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Do you know the book? What are its present day merits? How do you think it would sell at a moderate price?

I hope I am not imposing upon your time. As a token of my appreciation for your assistance, I shall be pleased to send you a couple of books complimentary from the enclosed catalog.

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Annandale-on-Hudson, N. Y.
October 2, 1953.

Professor Norbert Wiener
Belmont, Massachusetts.

Dear Professor Wiener:

The Social Studies Division of Bard College would like you to deliver the John Bard Lecture this Fall.

This annual lecture series often emphasizes the relationships between the various fields of learning. If you find it convenient to accept, perhaps you would talk on bridges between the physical and social sciences, or on the implications of cybernetics for the social sciences, although we certainly want you to pick your own subject.

The choice of dates we would suggest includes Monday, October 26; Tuesday, October 27; Wednesday, October 28; Monday, November 2; Tuesday, November 3; Wednesday, November 18; Monday, November 23; and Monday, November 30. Of these dates, Tuesdays and Wednesdays are preferable. The lecture is given in the evening.

There is a stipend of \$125, which figure includes travelling expenses.

I should be happy to hear from you at your early convenience.

Sincerely yours,

Fred A. Crane

Fred A. Crane
Chairman, Social Studies Division.

(2)

[ans 10/6/53]

THE NEW YORK ACADEMY OF MEDICINE

2 EAST 103 STREET, NEW YORK 29, N. Y.

TELEPHONE TRAFALGAR 6-8200

October 2, 1953

Dear Norbert:

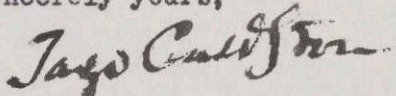
Thank you for your note of the 30th. I am afraid that we will have to leave the title as originally acted upon. I have got the programme already set up. I am sure that will not discommode you.

As to the expenses, of course, we shall be glad to entertain you and to defray the costs.

Do you want me to reserve a room at a hotel, or will you make your own arrangements?

My best to you.

Sincerely yours,



Iago Galdston, M.D.

Professor Norbert Wiener
Department of Mathematics
Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge 38, Massachusetts

/am



W · W · NORTON & COMPANY · INC · *Publishers* · NEW YORK · 3

October 2, 1953

101 FIFTH AVENUE
CABLES · SEAGULL · NEW YORK

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

Dear Professor Weiner:

I had the pleasantest exchange of letters with my old friend, Vernon Tate, and because of the long weekend I thought it best to telephone through to him and ask him by way of introduction to me to say that we'd be happy indeed to see the manuscript. Vernon, I gather, is reading a copy, and another copy may be available to us. I told him that I should be grateful if the manuscript were sent to my personal attention.

We seem to have a host of friends and connections in common, and I do feel that the fascinating world of ideas with which you are concerned has a natural relationship with the Norton imprint and with the kind of thing for which this firm has always stood.

I shall look forward with the greatest pleasure to seeing this manuscript, and I hope very much that it will prove out as a Norton publishing opportunity.

With cordial greetings, believe me

Sincerely yours,

Storer B. Lunt
President

SBL:mr

(4)

[ans 10/6/53]

[10/3/53]

Dear Dr. Wiener:

I am really glad that I wrote you because your reply has uncovered a very real piece of misinformation. In the September Newsletter of the New York Chapter of the Society for Advancement of Management, there is shown on page 2 the "1953-54 Program" of meetings; under February 18, it lists: "Electronic Tube - New Tool for Industry"; Speaker: Dr. Norbert Wiener." I guess, the editor's or some one else's wishful thinking ran ahead of actuality.

If I may say so quite frankly, I agree with what you say in your letter 100%. You were most kind and generous when you consented to choose the platform of this particular group, back in 1950, for your memorable address on 'Cybernetics and Management.' That evening made history not only for the New York SAM but for management all over.

Nobody has forgotten, I am sure, the effort and cost which this appearance meant for you. There is no reason under the sun - under any circumstances but most certainly not under the prevailing situation - why this chapter should enjoy any special treatment over the desires of literally hundreds of other equally deserving groups.

Naturally, I am disappointed - and so will be many folks - at not being able to look forward to seeing you here in February. But perhaps other reasons will bring you to New York with sufficient leisure time for lunch or dinner together. Whenever that should

From the Desk of PROF. ALEX W. RATHE

be possible, I would be most grateful if you would let me know. And I promise that I won't try any 'sales talk' toward the end of persuading you to change your opinion about an appearance here. I think you are absolutely right.

With best regards

Alex Rask

10/3/53

165 Westchester Avenue
Thornwood, N.Y.

COMDR. J. F. CUNIFF, CEC, USN
513 ESSEX CIRCLE
NAVAL ORDNANCE TEST STATION, INYOKERN
CHINA LAKE, CALIFORNIA

5 October 1953

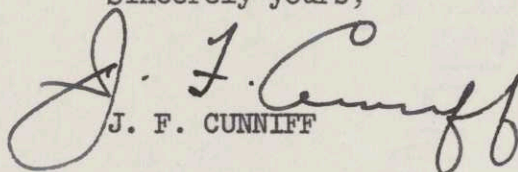
My dear Dr. Wiener:

Your letter of September 30th acknowledging mine of September 24th with reference to my invitation to luncheon on the occasion of your visit to this Station, has been received.

If Mrs. Wiener accompanies you to China Lake, of course she is included and Mrs. Cunniff will be very happy to show her around the Station during the afternoon.

Both Mrs. Cunniff and I look forward with great pleasure to seeing both of you.

Sincerely yours,


J. F. CUNIFF

JFC:ln

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

(5)

confirm receipt
of letter
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[ans 16/13/53]

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October 5, 1953

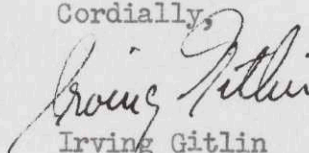
a. Norbert Wiener
Professor of Mathematics
Massachusetts Institute of
Technology
Cambridge, Massachusetts

Dear Prof. Wiener:

Many thanks for the most rewarding and stimulating few hours I spent with you on Thursday last. I think we are now ready to proceed on the new base you suggested, and as soon as we have it worked out, we shall be back to determine shooting schedules and specific content of the program.

My very best wishes to you.

Cordially,



Irving Gitlin
Producer,
THE SEARCH

IG:ba

(2)

[ms 10/7/53]

*American Association
for the Advancement of Science*

1515 MASSACHUSETTS AVENUE, N. W.
WASHINGTON 5, D. C.

Telephone ADams 4-7111
Cable Address—Advancesci

October 5, 1953

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

Dear Dr. Weiner:

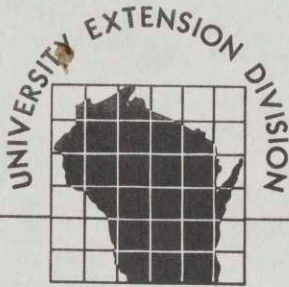
On July 21st we wrote and asked you to review "La Pensee Artificielle, Introduction a la Cybernetique," by Pierre De Latil, for the Scientific Monthly. As we have not received a reply from you, we are afraid that you did not receive our letter. The book is being held for you to review, if you will. We would like your review of it by November 25th.

The enclosed card is for your convenience in replying. If you say "Yes," the book will be mailed to you at once. I hope it will be convenient for you to do this for the Monthly.

Sincerely yours,

Mary Sheppard
Mary Sheppard
Book Review Section

yes



THE UNIVERSITY OF WISCONSIN

DEPARTMENT OF ENGINEERING
Madison 6, Wisconsin

October 5, 1953

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

Dear Dr. Wiener:

Thank you for your courteous reply to my letter of recent date concerning the possibility of your giving a lecture at the University of Wisconsin.

I was sorry to hear that you will be unable to schedule an engagement in Madison, for I know that there are many persons who are very anxious to have the opportunity of meeting you and hearing you speak. However, I can well understand the energy consumed in traveling and in giving these lectures, for I find in my own case that out of town lecture trips are very taxing.

Please consider this invitation to appear at the University of Wisconsin to be open at any time that you might be in the Madison area. The fee of \$200.00 plus travelling expenses could in all probability be arranged, providing we have sufficient time to plan and distribute announcements of the program.

We hope that we may have the opportunity of having you as a guest at the University sometime in the future.

Cordially yours,

Ray Tegtmeier
R. C. Tegtmeier
Institute Coordinator

RCT:js

reg
school full
①
+ interrupt
my journey

THE JOHNS HOPKINS UNIVERSITY

BALTIMORE 18, MARYLAND

DEPARTMENT OF
POLITICAL SCIENCE

5 October 1953

Mr. Norbert Wiener
Massachusetts Institute of Technology

Dear Mr. Wiener:

I am writing to ask your aid and advice.
I am trying to pull together what I can concerning
"control systems" with emphasis upon planning and
administrative application.

I have been toying with Britain's central statisti-
cal agency, input-output, operations research, and
the like.

I am especially interested in exploring the
planning and administrative significance of servo-
mechanistic systems for the processing of vast amounts
of data---especially for example, with regard to
some future central statistical agency in the US.

I am wondering if you can be of any help to
me in tracing this down? I am giving a seminar
this winter devoted to these problems and would
have a spot for someone you might be able to suggest
who could help us understand the planning and
administrative implications of cybernetics.

Very sincerely yours,

Harvey Wheeler
Harvey Wheeler

(1)

[ans 10/7/53]

October 5, 1953

Sir Shanti S. Bhatnagar
Secretary to the Government of India
New Delhi, India

My dear Sir Shanti:

I am looking forward very much to my forthcoming trip to India. In answer to your questions, I am enclosing a copy of the letter I have just written to Dr. B. N. Prasad, who has kindly offered to help me arrange my schedule. As you can see, I hope to leave for India about the 19th of December, and I shall return to Boston about the 10th of February

I am anticipating with great pleasure my visit to your country, and I am looking forward to meeting you.

Sincerely yours,

Norbert Wiener

NW:bbc

October 5, 1953

Mr. Carl Bridenbaugh
1617 Euclid Avenue
Berkeley 9, California

Dear Bridenbaugh:

Margaret will accompany me on my trip to California, and we shall certainly look you up. We shall telephone to you the minute we come into the Berkeley-San Francisco district.

I have missed you a great deal the last few years and I am looking forward to renewing our friendship.

Sincerely yours,

Norbert Wiener

NW:bbc

October 5, 1953

Dr. Lawrence Frank
72 Perry Street
New York, New York

Dear Dr. Frank:

Many thanks for thinking of my Manuscript for Basic Books. The manuscript has already been rejected finally by Henry Simon, who has given it careful consideration, but disagrees with me as to its interest to the general public. My friend the librarian here, Tate, has managed to interest Norton in the possibilities in the manuscript, and as I recently got an inquiry from Norton, I am to send them a copy first. If they don't take it, I shall send it elsewhere, and probably to Basic Books.

I thank you very much for your interest in it, and shall forward a copy to you someplace down my waiting list.

Sincerely yours,

Norbert Wiener

NW:bbc

October 5, 1953

Morris S. Hendrickson, Chairman
Department of Mathematics and Astronomy
The University of New Mexico
Albuquerque, New Mexico

Dear Mr. Hendrickson:

I just can't find the time either going or coming to give a talk at the University of New Mexico, particularly in view of the fact that I feel a moral obligation to cut my stay in California so as to lose not more than one week of lectures at MIT.

However, I appreciate your honest and forthright way of stating your problem to me, and I assure you that I hope to be able to visit you at some subsequent time when I go to California, and if I do make such a trip, I will consider a call at the University of New Mexico as having first priority after the talks which pay my way to the Coast.

Sincerely yours,

Norbert Wiener

NW:bbc

October 5, 1953

Mr. Lowell L. Holmes, Director
Management Research Associates
635 N. Pennsylvania Street
Indianapolis 4, Indiana

My dear Mr. Holmes:

Many thanks for your letter about the book, Ex-Prodigy. I'm glad it seemed to have some interest. I've completed a sequel, and now I'm repeating my toil and travail ~~of~~ finding a publisher.

I shall certainly look you up if I happen to pass through Indianapolis.

Sincerely yours,

Norbert Wiener

NW:bbe

October 5, 1953

Dr. B. N. Prasad
General Secretary (Out-station)
Indian Science Congress Assn.
Lakshmi Niwas,
George Town,
Allahabad - 2
India

My dear Dr. Prasad:

My passport and visa preparations are still hanging fire, but I do not anticipate any serious trouble. If everything goes all right, I shall leave for India about the 19th of December, and shall return to Boston about the 10th of February. On my way over I shall probably make brief stops in Paris and in Israel.

I would like to know something about what clothing and other equipment I should take with me for a visit to India at that period. In the matter of universities, I am mostly at your disposal, but I imagine that among the places I should see are Calcutta, Bombay, Allahabad, Delhi, Bangore, and possibly Benares. I should particularly like to see my friend Vigayaraghavan, at the Ramamujan Institute at or near Madras. Could you help me in working these and/or other necessary places into a reasonable schedule?

Sincerely yours,

Norbert Wiener

NW:bbc

October 5, 1953

Mr. Duane Roller, Assistant Director
Hughes Research and Development Laboratories
Culver City, Los Angeles County, California

Dear Mr. Roller:

Many thanks for your invitation to speak at your plant. I won't be in California until the evening of the 16th, and I must be back for my classes here on the morning of the 26th.

As a second part of my trip will be in northern California, you will see that it is out of the question for me to visit your plant. Furthermore, the plans that you are making for me are so comprehensive that they would involve a heavy day's work at a period when I am morally obligated to save my best strength for my lectures at the University of California.

Sincerely yours,

Norbert Wiener

NW:bbc

October 5, 1953

Miss Carol Schnitzer
77-12 Vleigh Place
Flushing 67, New York

Dear Miss Schnitzer:

While we are doing a considerable amount of teaching on cybernetic subjects at MIT, I can scarcely say that we have an organized course on the subject at this time.

Since your interests are largely biological and psychological, I suggest that you write to Dr. Rosenblith and Dr. Bavelas at MIT. I believe that they can give you information more relevant to your purpose.

Sincerely yours,

Norbert Wiener

NW:bbe

October 5, 1953

Mr. Henry Simon
Simon and Schuster, Inc.
630 Fifth Avenue
New York 20, New York

Dear Mr. Simon:

I want to thank you for your very meticulous and intelligent criticism of my manuscript. I regret greatly that Simon and Schuster find it impossible to accept the manuscript and I am quite certain that from your standpoint and theirs the reasons given are valid. Nevertheless I myself find it impossible either to give up the idea of publishing the manuscript or to accede to your suggestion that it be published as a series of separate articles.

There are certain individual points on which I should like to ~~give~~ you my attitude. In the first place, you find that there is insufficient conflict in the book as compared with Ex-Prodigy. It is true that the emotional conflict is and must be on a different plane from the reaction of a child or an adolescent or a very young man. Nevertheless, the career that I have had is one where I have been obliged to fight continuously for a long period of time for my intellectual views, for the right to possess my emotional nature, and for my integrity.

My fundamental quarrel is with the present age and with the narrow ideas of learning which it has been willing to accept. The scientist is often held up to ridicule as an egg-head, a narrow specialist who lives in an ivory tower remote from the world and from all sense of the philosophical and human bearing of his problem. Nevertheless, this is precisely what the present age wants the scientist to be and demands of him as his (revocable) passport to scientific work.

In the seventeenth century the scientist was a man of the world. Descartes remade the basis of mathematics and physical science, but he was a man of the army and a man of the court, and the learned ladies of that day were quite as interested in the theory of vortices and the new analytic geometry as they were in speculating about God and man. Pascal, the man of God and the literary man, made important contributions to the theory of probability, and is indeed the first inventor of the modern adding machine. Spinoza was a working instrument

maker, a keen student of optics, and his impassioned religious book, the Ethics, was written in what we now believe to be a mistaken, but was certainly a sincere, geometric language.

Spinoza was a saint. Leibniz, his contemporary, was a nasty little intriguer, but at the same time, in a purely intellectual way, perhaps the greatest mind that has ever lived. He contributed his share to the invention of the calculus, but he was also a great linguist and one of the founders of the theory of language and communication. Indeed, if I were to burn incense before an historical patron of what I have called cybernetics, it would be to the memory of Leibniz. He was a statesman and probably the brains behind the assumption of the English throne by the Hanoverian dynasty.

Most of us regard Cyrano de Bergerac as nothing but a character in a play by Rostand but he was a real person, and besides being a dueller and a man of letters, he was both in his actual life and in Rostand's play, a deep student of physics. Rostand has attributed to him in his more conventional character a profound individuality and loving respect for his whole function in life, and although this is intelligible to the theatre-going public in his capacity as dueller, lover, and poet, it equally colors his physical thought.

The present age is a Byzantine Age, and age of epigony, and it shares Byzantium's hatred for and fear of the whole man. Byzantium found its officials among the mutilated chamberlains of the royal wardrobe. We aim our knife more directly at the brain. A form of frontal lobotomy, per hatpin, has become an office procedure of psychiatrists, and this disrespect for the integrity of the brain in those whom society regards as misfits is merely the grotesquer extension of a policy which feeds its scientists with just so much half-knowledge as will make them subservient agents for policy formulated by our real heroes, the businessmen, and threatens them with dire penalties if they presume to think of the nature and consequences of the destructive policies which they are commanded to enforce.

My first book which you have published concerns itself with my devotion by my father to a life of learning which neither my father nor myself regarded as a job, but rather as a consecration. My second book, which you have found so free of conflict and so without interest to the general public, is devoted to my living this life when my father was no longer my active master, but when I was trying to live after those maxims which he has so severely and honestly inculcated in me. This meant that I have had to swim upstream, that I have had to be guided by a sense of the innerworking and meaning of my problems and not by their commercial value in an academic market which partakes of the nature of the slave block. I have had to choose the problems which have honestly seemed to me to be

significant and beautiful whether there was any immediate public which might be interested in these problems, or whether that public was a very doubtful possibility of thirty years hence. I have had to dree my weird and damn all advancement and extraneous honors. I have had to love my work as a painter loves his, with the knowledge and the emotional realization that I was serving an end greater than my bread and butter. I have succeeded to a very considerable measure, but I have succeeded against the jealousy of small men in power and against those surface ripples which have claimed to be the great stream of the age. I do not conform to the mean philosophy of the ant hill, which so many of our scienticulists have taken as the word of their God.

If this be not conflict and valid emotion, then damn emotion and damn conflict! This conflict and emotion is not weakened by the fact that is is displayed against a background of many places, many cultures, and many modes of life in which I have participated. I have worked in the austere and exacting medium of mathematics, whose beauty is displayed by its carving of cold logic into significant and compelling forms, but I have done this as a man with warmth in my veihs, even as the soul of the sculptor need not be confined by the coldness and hardness of the marble which he shapes.

If a life of this sort does not interest the large public, then the large public prefers to remain ignorant of a mode of life which in the persons of not a few of us has been responsible for consequences which Mr. Man-in-the-Street can neither burke nor ignore. I say these things and I have written my book because there is something in me that demands that I speak and that I write. There are those whom the book may interest, and I shall continue to try for a publisher to speak my message into ears that hear. But if there prove to be no ears that hear, or if the costs of publication prevent me from finding one man to help me to give my word to the public, I shall say, "Selah." At any rate, in default of those who understand what I have to say and find themselves in a position to help me in saying it, I shall deposit this manuscript until the coming of ears that hear, rather than cut it up and sell it in patches which do not carry the meaning I wish to give, and which, in fact, may carry a directly contradictory meaning.

I believe that I was legally committed to give you an option on my next full-size book manuscript after Ex-Prodigy. This I have done, and I believe that we have no contractual engagements together except those concerning Ex-Prodigy itself. I should appreciate a statement from you to this effect, which I can use in disposing of my present manuscript and those that may suceed it.

What I have said in no way, sir, detracts from my respect for you, and for my appreciation of what you have

done for me as a reader and as a friend. My wife joins me
in sending our respects to Mrs. Simon and yourself.

Sincerely yours,

Norbert Wiener

bbc

October 5, 1953

Mr. Henry Simon
Simon and Schuster, Inc.
630 Fifth Avenue
New York 20, New York

Dear Mr. Simon:

I want to thank you for your very meticulous and intelligent criticism of my manuscript. I regret greatly that Simon and Schuster find it impossible to accept the manuscript and I am quite certain that from your standpoint and theirs the reasons given are valid. Nevertheless I myself find it impossible either to give up the idea of publishing the manuscript or to accede to your suggestion that it be published as a series of separate articles.

There are certain individual points on which I should like to ~~give~~ you my attitude. In the first place, you find that there is insufficient conflict in the book as compared with Ex-Prodigy. It is true that the emotional conflict is and must be on a different plane from the reaction of a child or an adolescent or a very young man. Nevertheless, the career that I have had is one where I have been obliged to fight continuously for a long period of time for my intellectual views, for the right to possess my emotional nature, and for my integrity.

My fundamental quarrel is with the present age and with the narrow ideas of learning which it has been willing to accept. The scientist is often held up to ridicule as an egg-head, a narrow specialist who lives in an ivory tower remote from the world and from all sense of the philosophical and human bearing of his problem. Nevertheless, this is precisely what the present age wants the scientist to be and demands of him as his (revocable) passport to scientific work.

In the seventeenth century the scientist was a man of the world. Descartes remade the basis of mathematics and physical science, but he was a man of the army and a man of the court, and the learned ladies of that day were quite as interested in the theory of vortices and the new analytic geometry as they were in speculating about God and man. Pascal, the man of God and the literary man, made important contributions to the theory of probability, and is indeed the first inventor of the modern adding machine. Spinoza was a working instrument

maker, a keen student of optics, and his impassioned religious book, the Ethics, was written in what we now believe to be a mistaken, but was certainly a sincere, geometric language.

Spinoza was a saint. Leibniz, his contemporary, was a nasty little intriguer, but at the same time, in a purely intellectual way, perhaps the greatest mind that has ever lived. He contributed his share to the invention of the calculus, but he was also a great linguist and one of the founders of the theory of language and communication. Indeed, if I were to burn incense before an historical patron of what I have called cybernetics, it would be to the memory of Leibniz. He was a statesman and probably the brains behind the assumption of the English throne by the Hanoverian dynasty.

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significant and beautiful whether there was any immediate public which might be interested in these problems, or whether that public was a very doubtful possibility of thirty years hence. I have had to free my weird and damn all advancement and extraneous honors. I have had to love my work as a painter loves his, with the knowledge and the emotional realization that I was serving an end greater than my bread and butter. I have succeeded to a very considerable measure, but I have succeeded against the jealousy of small men in power and against those surface ripples which have claimed to be the great stream of the age. I do not conform to the mean philosophy of the ant hill, which so many of our scientificists have taken as the word of their God.

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- 4 -

done for me as a reader and as a friend. My wife joins me
in sending our respects to Mrs. Simon and yourself.

Sincerely yours,

Norbert Wiener

bbc

October 5, 1953

Mr. Stanley Zimmerman
1075 Gerard Avenue
New York 52, New York

Dear Mr. Zimmerman:

While we are doing a considerable amount of teaching on cybernetic subjects at MIT, I can scarcely say that we have an organized course on the subject at this time.

Since your interests include psychology and biology, I suggest that you write to Dr. Bavelas or Dr. Rosenblith here at MIT. I believe that they can give you information more immediately relevant to your purpose.

Sincerely yours,

Norbert Wiener

NW:bbc

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October 6, 1953

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

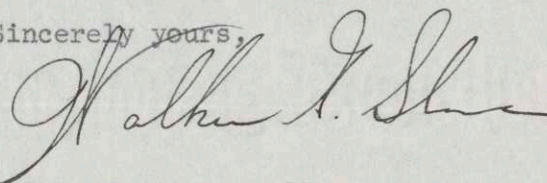
Dear Professor Wiener:

Your letter of September 30th arrived here in the office while I was talking with people at M.I.T. I was glad that I had an opportunity to talk with you, even though briefly, during my visit.

Mr. Matheson is very pleased to hear that you are already at work on the organization of the treatise on cybernetics. Naturally, we are always pleased to see you when you are here in New York. Please drop in to see us.

I am enclosing copies of the correspondence Mr. Wiley addressed to you at your summer address. I shall await your comments on Dr. Sholl's project with the greatest interest.

Sincerely yours,



Walker G. Stone, Editor
Engineering Sciences

WGS:bh
Encl.

[ans 10/8/53]

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MURRAY HILL 9-7630

COPY

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August 18, 1953

Dr. Norbert Wiener
South Tamworth, New Hampshire

Dear Dr. Wiener:

My good friend, Mr. Peter L.K. Wait, a Director of our London associates, Methuen & Company, Ltd., sent me a few days ago an interesting letter and prospectus for a proposed new book tentatively entitled THEORIES, MODELS AND BRAINS. I believe you may be acquainted with some of the work done by the author, Dr. D.A. Sholl of University College, London, and may even be personally acquainted with him.

By way of further explanation, I quote from Mr. Wait's letter as follows:

"I enclosed a prospectus drawn up by the author. His name is Dr. D.A. Sholl, and he is a member of the Department of Anatomy and Embryology (rather loosely so-called) at University College, London. He is carrying out a research project on the human brain and cortex, under the direction of Professor J.Z. Young. I think eventually he wants to write a long and learned book about the cortex, but in the meanwhile he offers a rather less technical book on the functioning of the human brain and the analogy of computing machines, and such like. This is rather unusual country for me, but I found Sholl himself rather an impressive individual. He has obviously done a good deal of valuable research, and published very little of it so far. He is, I think, known in the States, and I think knows Norbert Wiener. His book would, I imagine be not nearly so technical as Ross Ashby's, but probably rather more so than Grey Walter's THE LIVING BRAIN, and will be much less narrow in outline."

The prospectus referred to above is enclosed.

I do hope that you can let me have what I know will be your very frank opinion of Dr. Sholl should you be familiar with his abilities and his proposed book. We have done well with Ashby after a somewhat uncertain start and now look forward to that book enjoying a more than usual success for an import. Of importance to the success

Dr. Norbert Wiener

#2

8/18/53

of Ashby was the tribute you paid the book in the essay which you wrote for ELECTRONICS.

I shall eagerly await your reply.

With kind personal regards,

Cordially yours,

Vice President & Secretary

WBW/fp
Encl.

COPY

METHUEN AND CO., LTD.

COPY

11th August, 1953.

Bradford Wiley, Esq.,
Messrs. John Wiley and Sons Inc.
440 Fourth Avenue
New York 16, New York

Dear Brad:

I have had a scheme for a book put before me which rather interests me. I am in the middle of getting advice about it over here, but at the same time I would like to know whether you would be interested.

I enclose a prospectus drawn up by the author. His name is Dr. D.A. Sholl, and he is a member of the Department of Anatomy and Embryology (rather loosely so-called) at University College, London. He is carrying out a research project on the human brain and cortex, under the direction of Professor J.Z. Young. I think eventually he wants to write a long and learned book about the cortex, but in the meanwhile he offers a rather less technical book on the functioning of the human brain and the analogy of computing machines, and such like.

This is rather unusual country for me, but I found Sholl himself rather an impressive individual. He has obviously done a good deal of valuable research, and published very little of it so far. He is, I think, known in the States, and I think knows Norbert Wiener. His book would, I imagine, be not nearly so technical as Ross Ashby's, but probably rather more so than Grey Walter's The Living Brain, and will be much less narrow in outline.

I shall be interested to know your reactions.

Yours ever,

Peter Wait

THEORIES, MODELS AND BRAINS (Provisional Title)

by Dr. D. A. Shall, University College, London

This book discusses the relevance of the study of computing machines and similar models to the understanding of the organisation of the central nervous system and especially of the brain. Before studying this particular problem it will be necessary to consider the nature of scientific theories and the logical status of models from a general point of view. We shall then proceed to examine the factual knowledge of the nervous system and its organisation as observed by the anatomist, the physiologist and the clinician.

An extended account of the principles involved in modern logical and other machines follows and, finally, the values of these models to the student of the brain will be assessed in the light of the earlier chapters.

<u>Introduction</u>	Scientific theories and models
Part 1.	The nature and organisation of the central nervous system
Part 2.	The nature and organisation of computing machines
Part 3.	The adequacy of the machine model

Introduction Scientific theories and models

A scientific theory has been described as 'a deductive system in which observable consequences logically follow from the conjunction of observed facts with the set of fundamental hypotheses of the system'. This chapter will explain this statement, illustrate it in a simple way and discuss its implications. Pure mathematics relates to nothing; the physicist puts forward an interpretation of the calculus of pure mathematics and may then have a scientific theory. A model is a straightforward interpretation of a theory and to think in terms of a model is often the easiest way of thinking about the structure of a theory. There are, however, grave dangers in the use of a model; objects with which the model is concerned may be inadvertently thought to be the same as the theoretical concepts and properties may be attributed to these concepts which only belong to the objects of the model. Atoms are not solar systems and the model is only useful if we remember this all the time. A further danger of the model lies in the possibility of regarding logically necessary features in the model as being logically necessary to the theory. These principles apply to all scientific theories and models; our concern is to apply them to a specific part of natural science.

Part 1 The organisation of the central nervous system

The nervous system is an organisation whereby impulses arising from sense receptors of various kinds, eyes, ears, glands, skin and so on are analysed, related to past experiences and give rise to various kinds of activity. The anatomical units of this system are the neurones and these are connected to one another by synapses. These two fundamental parts of the system will be described and their physiological properties discussed at some length. The neurones are aggregated into more or less specific masses of gray matter and our main concern will be with one of these masses, the cerebral cortex. This part of the system is concerned with the most complicated kinds of activity, precision of movement, speech, recognition of patterns, solving of problems and so forth. Electrical recordings show that it is in a constant state of activity, even during sleep. Various experimental methods show that while certain parts are associated with certain kinds of behaviour, it is, nevertheless, impossible to map this cortex into sharply demarcated areas each with its own specific properties. Moreover, if some parts known to be responsible for a specific type of activity are destroyed, then after a delay some other part takes over the work although there is no regeneration in the central nervous system and nerve cells once destroyed cannot be replaced.

The organisation of the cortex as studied by the histologist has little resemblance to the hypothetical diagrams often used to describe it. Enormous variations are superimposed on a fundamental pattern and this pattern is largely unknown. We shall then consider in detail some types of cortical activity e.g. (a) what happens in the brain when an image is formed on the retina and (b) what happens in the central nervous system when I pick up a stone. This examination will show that we have considerable knowledge of the paths whereby information flows to and from the brain but little precise knowledge as to the manner by which information from various sources is organised, stored and transmuted into behaviour. At this stage it is hoped that the models may be of assistance.

Part 2 The nature and organisation of computing machines

The enormous speed at which the modern machines can compute is of little importance to us since the nervous system works comparatively slowly; we are more concerned with the principles upon which they operate and the problems with which they can deal. Moreover, man is not merely capable of solving mathematical problems; his nervous system maintains him stable in a changing environment, and enables predictions about his future activity to be made. We shall consider machines of various kinds and start with self-stabilising machines (automatic compasses) and machines capable of prediction (gun setters). The modern computing machines will be considered in greater detail and the major differences between analogue and digital machines explained. In order to clarify these questions, the principles of the general Turing machine will be explained and certain simple problems discussed to illustrate how the machine can deal with logical problems and be self-checking and self-programming. The chapter will show that, in principle, machines can be

made to carry out activities outstanding in man, remembering, adaption to environment, forecasting future modes of behaviour, solving complicated mathematical problems etc.

Part 3 The adequacy of the machine model

In the last part we were concerned with the general principles embodied in certain types of machines. In the present part we shall consider some of the models that have been suggested as being useful analogues for the central nervous system. Some of these (e.g. Pitts and McCulloch, Grey Walter) use a model embodying the scansion principles of the cathode ray tube, others (Wiener) make information theory the basis of the model while the self-stabilising system is fundamental in the Ashby model. These models will be discussed in some detail and related to the factual knowledge of the nervous system and the principles enunciated in the introductory chapter. It will be shown that in the opinion of the author none of these models is adequate; they make suggestions as to how the brain might work but none of them is supported by adequate grounds for thinking that, in fact, the brain does work in these ways. Moreover, none of the theories of which these models are the interpretations has led to verifiable predictions. These criticisms do not imply that it is impossible to find a suitable model. A model of more limited scope has been put forward by Sholl and Uttley and in this case the model has shown predictive possibilities capable of verification.

A final section will briefly refer to questions of self-consciousness, emotion and voluntary action. It is rather difficult to foresee the extent to which space will permit an adequate analysis of these problems but it will be possible to suggest at least some clarification.

October 6, 1953

Mr. Fred A. Crane, Chairman
Social Studies Division
Bard College
Annandale-on-Hudson, New York

My dear Mr. Crane:

I regret very much that my lecture schedule is full and that I shall be unable to deliver the John Bard lecture this fall.

While I appreciate the compliment of your writing me, I must tell you that I am not intending to continue my career as a public lecturer except in a very few cases which I have personally selected, as it consumes too much of my time and my energy, both of which I wish to devote from now on to creative and scientific work.

Sincerely yours,

Norbert Wiener

NW:bbc

October 6, 1953

Mr. Jason Epstein
Doubleday and Company, Inc.
575 Madison Avenue
New York 22, New York

My dear Mr. Epstein:

I am now ready to turn my attention to the revision of my manuscript on The Human Use of Human Beings, but before we go any further on the matter, I would like to summarize what I understand to be my position concerning our contractual relation and the last chapter in the book.

Previously in Spain, when a certain Spanish writer wished to ranslate my book with a serious modification on my position in the last chapter, I refused, and I have maintained my refusal. I would not put myself in the position of publishing a watered-down and dishonest presentation of my views for any group in any country controlled by religious or political pressure. I would consider myself a coward to accept a pressure in the United States when I would not accept in Spain. I am willing to do a considerable amount of work on the last chapter or on the others, but I am not willing to have that chapter appear against my views or not at all.

Our contractual relationships are a little complicated. You have already bought from Houghton Mifflin the right to reprint my book. I understand that that right only applies in the first instance to the book as it was originally published. Such arrangements as you may have made with me ~~for~~ revision or alteration of the text of the book represent a contractual relation with me alone which was not covered by your payment to Houghton Mifflin. Any changes in the book must be made with my consent, and I am not obligated in any way to consent to changes which have neither been initiated nor approved by me. As of the present, I have not received a single cent either from you or from Houghton Mifflin as

regarding your rights to the book. I now say that I will not give permission either for the publication of the book or for the use of my name with regard to the book unless there appears in it a version of the last chapter approved by me. As far as this concerns your relations with Houghton Mifflin, they have delivered what their contract called for, and I consider that so much water under the bridge. For what changes you want, you must establish a new contractual relation with me, and I refuse to establish this contractual relation for a book which does not represent my views, or which perverts them positively or negatively. I am tired of the insidious pressure of the church and other private organizations such as Communism in the United States, and I will not consent to make myself a partner in this pressure. I do not intend to write a book which has either explicitly or implicitly on the title page, nihil in stat imprimatur. I shall, if you so wish, busy myself with an improved version of the last chapter, more organically connected, perhaps, with the rest of the book, but I want it distinctly understood that no book in which the last chapter is so modified as to substantially change my views or to remove my expression of them will be accepted by me. I should recommend to you that you visit my office and talk over the matter with me, but until we have come to an agreement, I can't consent to the use of my name or the publishing of my material in a mutilated form.

The omission of the last chapter or any substantial watering-down of its contents is not a matter which I have agreed to with you at any time, and you must bear personally the odium and expense of any losses which Doubleday must suffer for the non-appearance of the book, as in removing the last chapter you have done something which does not lie within any agreement which we have made, explicit or implicit.

Sincerely yours,

Norbert Wiener

NW:bbc

October 6, 1953

Mr. Seth Fessenden
University of Denver
Denver, Colorado

My dear Mr. Fessenden:

Now that my plans for the coming academic year have become more definite, I regret that I must decline your kind invitation to participate in your program, "Toward a Theory of Communication."

On the 28th of December, 1953, I shall be in India and therefore, of course, unable to attend your meetings.

Sincerely yours,

Norbert Wiener

NW:bbc

October 6, 1953

Mr. Wallace Hamilton
Station K P F A
2207 Shattuck Avenue
Berkeley 4, California

My dear Mr. Hamilton:

My existing obligations for the week that I am to be in California will fully consume all the time that I care to spend in view of my health, and therefore I must respectfully decline to give a talk over your radio station.

Sincerely yours,

Norbert Wiener

NW:bbc

October 6, 1953

Mr. Storer B. Lunt, President
W. W. Norton and Company, Inc.
101 Fifth Avenue
New York 3, New York

My dear Mr. Lunt:

Let me thank you very much for considering my manuscript, I Am A Mathematician. I shall have a copy sent to you at the earliest possible moment, if indeed it is not already in your hands.

I hope we can work out a plan for its publishing.

Sincerely yours,

Norbert Wiener

NW:bbc

October 6, 1953

Mr. Larry Vinick
Simon and Schuster, Inc.
630 Fifth Avenue
New York 20, New York

My dear Mr. Vinick:

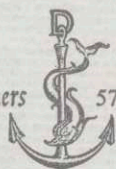
My lecturing schedule is complete for this academic year, and I shall be unable to undertake the talk proposed at the Society of Professional Engineers.

Since nothing is said of remuneration, I presume that this is not contemplated. In the future, except for a very few groups to which I feel a personal obligation, I shall give no lecture for which I do not receive my fee of \$200 plus expenses.

Sincerely yours,

Norbert Wiener

NW:bbc



October 7, 1953

Dear Professor Wiener:

Evidently there has been a misunderstanding about my suggestion that you deal differently with the last chapter of THE HUMAN USE OF HUMAN BEINGS. I have no interest whatever in sparing either the Church or the Communist Party your disapproval, and even if such were my intention I should hardly advance it in our editorial negotiations. My sole interest in calling for a more forthright summary is for the sake of greater clarity and precision in your concluding remarks. I repeat that I simply cannot agree that the Jesuits and the Communists sum up the obstacles to effective communication in the modern world. There are other obstacles too obvious to name. Attack the Church and the Party all you like, but I think it would be a grave rhetorical error to throw the whole burden of blame on them or even to suggest that these two organizations are in themselves sufficient to typify the problem.

An effective summary, I think, should begin with a brief restatement of your general position as it appears in the earlier chapters and should then go on to relate this to the specific interests of cybernetics (all of which can be done in a few paragraphs), and then you have the choice of dealing further with the political and social implications of the mechanized intellect or returning to the larger problem of free communication. If you choose the latter then clearly your comments on the Communists and the Jesuits will be in order as long as you surround them with further examples of the same thing or at any rate with a warning to the reader that you do not mean to be exhaustive in referring simply to these two groups.

As it stands now the last chapter seems to have only the most tenuous reference to the main part of the book and as a consequence carries very little impact. If your final remarks do, in fact, convey the

(P)



substance of your point of view then it is your obligation to your audience, which, with the Anchor edition in print, will be far larger than it has ^{ever} before, to be as cogent as possible. I think that cogency suffers in your present final chapter, and I should hate to see this extremely important book weakened by such an anticlimax. I hope you understand that nothing could be farther from my mind than censorship in this matter, particularly censorship on ~~the part~~ ^{what} of the Church or the Communist Party, neither of which pleases me personally in the least, and that my only interest in the matter is in providing the most distinguished book possible for the Anchor list.

I look forward to hearing further suggestions from you as to how we should handle the summary.

Sincerely yours,

Jason Epstein

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

JE:nr

UNIVERSITY OF CALIFORNIA

DEPARTMENT OF MATHEMATICS
STATISTICAL LABORATORY
BERKELEY 4, CALIFORNIA

October 7, 1953

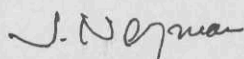
Professor Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

My dear Wiener:

We just learned from a printed announcement that before very long (October 22) you will be on this campus speaking on the Theory of Prediction. This came as a very pleasant surprise to us because all the arrangements were made without our being informed.

I know that you like to speak to the engineers; however, I suspect vaguely that you may wish to give another lecture to our distinctly non-engineering group. Will you kindly let me know what are your plans. Whether you consent or not to speak to us, I most sincerely hope that you will be willing to visit this Laboratory and have a meal with us. With best personal regards,

Yours sincerely,



J. Neyman

JN:so

BROWN MEMORIAL CHURCH

(METHODIST)

DAVIS AND DELAWARE ST.

SYRACUSE 4, N. Y.

③

ROBERT JOHN THOMAS
MINISTER

226 DAVIS ST.
PHONE 75-4333

October 7, 1953

Dr. Norbert Weiner,
Massachusetts Institute
of Technology
Cambridge 39, Mass.

Dear Dr. Weiner-

We have a little 8 year old boy, Craig, who is a victim of cerebral palsy and unable to walk by himself. However, he is normal in other respects and of superior intelligence. We are doing everything in our power to help him overcome his handicap. He is attending the Syracuse Cerebral Palsy Clinic where he receives physical and occupational therapy and where he is also in the 3rd grade of school. He has had many serious falls in learning to walk and even a broken jaw received while practicing walking on his crutches has failed to daunt his wonderful spirit!

Since we are unable to predict his future, we have started a hobby for him which we hope will prove both interesting and valuable to him as he grows older. He has letters, autographed pictures and mementos from some of our country's most famous people including President and Mrs. Eisenhower, General MacArthur, Admiral Nimitz, Prof. Einstein, Admiral Byrd and many others. Craig would be so pleased and we would appreciate it so much if he could have your picture to add to his collection. Thank you very much.

To: Craig Thomas
226 Davis St
Syracuse, N.Y.

Sincerely,
Mrs. Robert Thomas

[ans 10/13/53]

UNIVERSITY OF CALIFORNIA

DEPARTMENT OF MATHEMATICS
BERKELEY 4, CALIFORNIA

October 7, 1953

Professor Norbert Wiener
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

Dear Professor Wiener:

We hear with pleasure that you are going to be in Berkeley on October 22. Would you care to address the Mathematics Department in a colloquium on that day at 2 o'clock? We haven't heard you for many years and I am sure all of us would appreciate the chance of meeting and hearing you speak on your recent research.

Very sincerely yours,

Frantisek Wolf,

Frantisek Wolf,
Vice Chairman

FW/lak

⑨

[ans 10/13/53]

October 7, 1953

Mr. Hayward Cirker, President
Dover Publications, Inc.
1780 Broadway
New York 19, New York

Dear Mr. Cirker:

I am at present rather too busy to look into Lotka's work for publication, but I know pretty well what he has done, and I consider his work important.

Lotka was a pioneer in the application of good mathematical statistics to biology, and the only difficulty is that the subject has gone so far beyond him that a great deal of his work will necessarily be out-of-date.

I therefore suggest that you approach one of our leading statisticians, such as Feller, or Doub, or Tukey, to see if they might be interested either in editing Lotka's book and bringing it up to date, or in doing a new book to cover similar ground.

I am looking at your list of books and shall be glad at a later date to take advantage of your offer.

Sincerely yours,

Norbert Wiener

NW:bbc

October 7, 1953

Mr. Irving Gitlin
CBS Television
485 Madison Avenue
New York 22, New York

Dear Mr. Gitlin:

Thank you for your courtesy. I shall
be glad to be on any help to you that I
can.

Sincerely yours,

Norbert Wiener

NW:bbc

October 7, 1953

Dr. M. S. Sundaram
Embassy of India
2107 Massachusetts Avenue, NW
Washington, D. C.

Dear Dr. Sundaram:

I have now obtained my United States passport, and I am sending it to you for my Indian visa. I am delighted at the prospect of making my trip.

Could you be kind enough to get my passport back to me quite early, as I shall probably wish to get French and Israeli transportation visas.

Sincerely yours,

Norbert Wiener

NW:bbc

October 7, 1953

Mr. Harvey Wheeler
Department of Political Science
The Johns Hopkins University
Baltimore 18, Maryland

Dear Mr. Wheeler:

I shall have no free time to consider your problem until the second academic term here.

At that time, I shall be glad to confer with you.

Sincerely yours,

Norbert Wiener

NW:bbo

NATIONAL SOCIAL WELFARE ASSEMBLY INC.

345 EAST 46 STREET

NEW YORK 17

NEW YORK

MRS. DOUGLAS HORTON *President*

WM. H. BULKELEY *Chairman Executive Committee*

ROBERT E. BONDY *Director*

October 8, 1953

Professor Norbert Weiner
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

Dear Professor Weiner:

I am very glad to have talked with you on the telephone and to know that you can see Mr. Hans Floter of Bremen on October 29 and 30.

He is observing and studying in this country for three months under the joint sponsorship of the Department of State and the National Social Welfare Assembly.

We hope that you can arrange for him to talk with other professors and to sit in on classes if that seems advisable. He will be living with friends and I have advised him to telephone your office KI 7-6900, when he reaches Boston.

The enclosed biographical data and memorandum describing the Exchange Project will, I hope, give the information you need. If there are further details you would like to have, please write or telephone MU 7-8300.

We are extremely grateful for your interest and cooperation.

Very sincerely yours,

Wenonah Logan

(Mrs.) Wenonah Logan
International Exchange Project

wl:rl
Encl.
cc Mr. Floter

AFFILIATE ORGANIZATIONS

- | | |
|--|---|
| <p>American Association of Group Workers
 American Association of Medical Social Workers
 American Association of Psychiatric Social Workers
 American Association of Social Workers
 American Camping Association
 American Federation of International Institutes
 American Hearing Society
 American Jewish Committee
 American National Red Cross
 American Social Hygiene Association
 Association of the Junior Leagues of America
 Big Brothers of America
 Board of Hospitals and Homes of the Methodist Church
 Boy Scouts of America
 Boys' Clubs of America
 Bureau of Employment Security, U.S. Department of Labor
 Bureau of Labor Standards, U.S. Department of Labor
 Bureau of Labor Statistics, U.S. Department of Labor
 Bureau of Old Age and Survivors Insurance, Social Security Administration, Department of Health, Education and Welfare
 Bureau of Prisons, U.S. Department of Justice
 Bureau of Public Assistance, Social Security Administration, Department of Health, Education and Welfare
 Camp Fire Girls
 Child Welfare League of America
 Children's Bureau, Social Security Administration, Department of Health, Education and Welfare
 Community Chests and Councils of America, Inc.
 Cooperative Extension Service, U.S. Department of Agriculture
 Council of Jewish Federations and Welfare Funds
 Department of Christian Social Relations, National Council of the Protestant Episcopal Church
 Department of Social Welfare — Lutheran Church — Missouri Synod
 Department of Social Welfare, National Council of the Churches of Christ in the U.S.A.
 Division of Home Missions, National Council of the Churches of Christ in the U.S.A.</p> | <p>Division of Welfare, National Lutheran Council
 Family Service Association of America
 Girl Scouts of the U.S.A.
 Girls' Clubs of America
 International Social Service
 National Association for Mental Health
 National Board of the Young Women's Christian Associations
 National Catholic Community Service
 National Child Labor Committee
 National CIO Community Services Committee
 National Conference of Catholic Charities
 National Council of Jewish Women
 National Council of the Young Men's Christian Associations of the U. S. A.
 National Federation of Settlements and Neighborhood Centers
 National Jewish Welfare Board
 National League for Nursing
 National Legal Aid Association
 National Probation and Parole Association
 National Publicity Council for Health and Welfare Services
 National Recreation Association
 National Safety Council
 National Society for the Prevention of Blindness
 National Travelers Aid Association
 National Tuberculosis Association
 National Urban League
 Office of Education, Department of Health, Education and Welfare
 Office of International Relations, Department of Health, Education and Welfare
 Office of United Nations Economic and Social Affairs, Department of State
 Office of Vocational Rehabilitation, Department of Health, Education and Welfare
 Public Health Service, Department of Health, Education and Welfare
 Public Housing Administration, Housing and Home Finance Agency
 The Salvation Army
 United Community Defense Services
 United Seamen's Service
 United Service for New Americans
 Veterans Administration
 Youth Department, National Catholic Welfare Conference</p> |
|--|---|

ASSOCIATE GROUPS

- | | |
|---|--|
| <p>Conference of National Agencies and Schools of Group Work and Recreation
 U. S. Committee of the International Conference of Social Work, Inc.</p> | <p>Council on Social Work Education
 National Health Council</p> |
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MEMORANDUM FOR LOCAL SPONSORS
OF THE
INTERNATIONAL EXCHANGE PROJECT

LEADERS PROGRAM

National Social Welfare Assembly
345 East 46th Street
New York City

Memorandum to Local Sponsors

This memorandum attempts to provide local sponsors with information on objectives, program and operational policies of the foreign leaders exchange program, sponsored by the National Social Welfare Assembly at the request of the United States Department of State. The foreign visitors for whom the National Social Welfare Assembly serves as national sponsor are public and voluntary agency leaders in community social welfare.

Introduction

As the international crisis has intensified, the American effort has been directed increasingly toward the attainment of these objectives:

1. To strengthen the unity of those nations devoted to the cause of freedom and to show that their interests and those of the United States coincide.
2. To spread the conviction that the United States is an enlightened and strong power, determined to cooperate with and support other free nations in common undertakings for mutual benefit.
3. To stimulate among free nations the building of the unified strength necessary to deter aggression and secure peace.
4. To develop and maintain psychological resistance to Soviet tyranny and imperialism.

In order to attain these objectives it is essential to convey a valid picture of the U.S.A., a society described by Erwin D. Canham as "a system which is not a materialistic system, which is not by any means bounded by the satisfaction of human material wants but which is rather dedicated to the significance of the individual and the basic rights of man."¹ He goes on to say, "There is a misunderstanding of us in the world...that our system is merely a materialistic dedication - a dollar-mad society. Another misunderstanding of us everywhere is that we are fighting some sort of rear-guard action in defense of the status quo. I think it is true that in every aspect of our life what we are challenging is the status quo; we are insisting that in every respect there must be better ways of doing everything."²

A very effective and important means for disseminating knowledge of the principles underlying life in the U.S.A. is the Exchange Program of the United States Department of State which brings leaders of key groups in other countries, with special emphasis on tension areas, to the United States for periods of 45 days, three months, six months, or nine months.

¹Quote from "On the Basic Elements of a Free Dynamic Society." A Round Table Discussion held under the sponsorship of the Advertising Council. The McMillan Company. New York. 1952.

²Ibid.

Objectives

The broad purpose of the Exchange Program is to give leaders of other countries opportunity to gain an understanding of the basic principles governing American life in political, economic, social, cultural and educational fields, and to make ourselves known as we really are, and not as propaganda often misrepresents us.

The community and youth leaders who are part of the Exchange Program, should be provided with opportunities to 1) get acquainted with American people and American institutions, 2) gain an understanding of the concepts and principles which govern American life, and 3) observe the application of the concepts and principles to the field of work in which the visitors have a primary interest.

The following "Important American Concepts" are mentioned because they are basic ideas which are interesting to our visitors and on the other hand are so self-evident to Americans that explanation and interpretation to a foreign visitor is sometimes neglected.

Important American Concepts

"The great privilege of the Americans does not consist in being more enlightened than other nations, but in being free to repair the faults they commit." (De Toqueville)

It is both impossible and unnecessary to list here all of the important basic principles and philosophies which underly American life. Mentioned are a few which have proved to be of special interest to foreign visitors in previous years. For example:

The American Concept of the Individual

Our heritage of belief in the worth of human personality and the dignity of the individual is one of the most important concepts that Americans can share with people of other countries. To do so is not easy. The visitor observes the conflict between this concept and the emphasis on possessions, mass production, mass consumption, mass communication and standardization which are part of our industrial society. The fact that we continue to strive to make better conditions of life available to more people may be interpreted as a living demonstration of this principle as an enduring goal value in our society. Examples may be found in community health services, low cost housing programs, public education, libraries, museums and parks, unemployment, old age, and dependent insurance programs and the like.

The American Concept of Equality of Opportunity

It would hardly be feasible to evolve any one basic American principle; it is the pride of Americans to be able to differ, and diversity of opinion on any given subject is held to be highly desirable. Yet there is a large measure of agreement in one aspect: everyone should be given the same chance, should be offered equal opportunities. Wherever this concept can be demonstrated, it will facilitate understanding of life in the U.S.A., for example: 1) the schools, 2) adult education and 3) community activities.

The American Concept of Government

It is most desirable to give the visitor a clear understanding -- in theory and practice -- of the structure of the American Government. Especially interesting to many visitors is the relatively restricted power of the Federal Government and the powers of State and local governments. Equally interesting is the role of citizen groups. To demonstrate this point it would be helpful to have the visitors observe 1) Local government procedures, 2) Town Hall meetings and other public forums, 3) Preparation for elections, 4) Citizens' Groups, 5) The independent role of the newspaper and other information media.

The American Concept of Education

American schools differ from many others in that they strive primarily to educate future independent citizens and free men. Scholastic achievements, while important, are not the single function of the American public school. Also, American education attempts to give a chance to everyone who has the intellectual capacity to take up academic studies.

Suggested are visits to 1) elementary and high schools, 2) colleges and universities, 3) P.T.A. meetings, 4) meetings of the Board of Education, 5) adult education programs, 6) educational programs of community centers and organizations.

The American Concept of Human Relations

There is an ever-growing awareness of the importance of human relationships in American society. It is desirable to point out this fact to visitors, and to demonstrate its manifestations -- for example, in inter-group and inter-agency cooperation, in family and other adult-child relationships, in labor-management relations, in the treatment of minority conflicts, and interest in international collaboration. A great variety of opportunities to demonstrate this concept exist, such as 1) community councils, 2) community centers, 3) living with a family, 4) labor-management relations, 5) inter-racial and inter-faith committees, 6) U.N. seminars.

The Concept of the Citizen in the American Society

The responsibility of the individual citizen in American society is not easily understood by the visitor from abroad. Every opportunity to demonstrate the participation of citizens in public life will be of interest. Such opportunities include 1) volunteer work in social welfare, 2) citizens' committees, 3) jury duty, 4) youth group activities especially pertaining to public affairs and community service.

American Culture

There is much confusion, particularly in Europe, about culture in the U.S.A. It is, therefore, important to give the visitor an opportunity to judge for himself, including opportunities to visit 1) libraries, 2) museums, 3) theatres, 4) concerts, 5) important examples of modern architecture.

Foreign Visitors Sponsored by the National Social Welfare Assembly

It is expected that approximately 120 visitors will take part in the 1953 Exchange Program sponsored by the National Social Welfare Assembly. The majority will be German; others will come from other European countries, Asia and Africa.

In addition to these leaders, the National Social Welfare Assembly will sponsor 77 students who will come to the U.S.A. for nine months training in universities and in-service training in social welfare agencies. A special bulletin will be forwarded to local sponsors who deal with trainees.

The visitors are selected through cooperative plans involving national leaders and United States Department of State representatives in the person's own country. The objective is to select persons who will be able to interpret to other people in their own countries what they have observed in the United States. The Assembly's relationship with the visitors begins when they reach the U.S.A.

The length of stay of a visitor in one community will always be determined by the sponsor's decision and the desires of the exchangee. Final arrangements are made individually with each sponsor about each exchangee by the program staff of the Assembly.

The Visitor in the Local Community

The interests of the exchangees will reflect their professions, their associations, and their general concern in becoming acquainted with the U.S.A. Obviously, the visitor's own powers of observation and comprehension will determine how broad and objective a picture of the U.S.A. he will carry away.

As indicated by advance information, the visitors will want to observe or participate in some of the following kinds of community services:

1. Welfare - community planning, with emphasis on the cooperation of (a) professionals and volunteers, (b) governmental and voluntary agencies, (c) citizens' groups.
2. Recreation - public and voluntary, philosophy of recreation, programs and facilities for out-door and indoor activities, camping, etc.
3. Youth activities - inter-agency cooperation; youth councils, agency programs, both building centered and decentralized; youth programs with a citizen education emphasis and others with a religious emphasis; leadership education.
4. Small town and rural community planning - extension work with youth and adults; cooperatives; leadership education; community improvement projects.
5. Adult Education - programs under public and private auspices, with emphasis on citizenship, vocational and leisure time education.
6. Vocational guidance and youth employment - programs under private and public auspices; cooperative projects involving vocational schools and trade unions; industrial programs.

7. Local government - observation of governmental administration in medium-sized to small cities; citizens' groups; relationship of government to citizens; activity relating to elections; work of political parties.
8. Community centers - neighborhood houses; schools and agencies which serve as community centers for all ages as well as those for youth.
9. City planning

Opportunities to observe state-wide programs may be needed in the following fields:

1. Community Councils - state-sponsored programs to assist communities in developing citizens' planning councils.
2. Youth Commissions - planning to meet total needs of youth and the needs of special groups.
3. Recreation - long-term planning for recreation facilities, state-community cooperation.
4. City planning

Visits to universities providing opportunities to participate in or to observe institutes, short-term training projects and conferences will be needed in many fields, but especially in:

1. Adult education - extension work; curriculum planning; discussion techniques.
2. Group work and recreation - philosophy of group work and recreation; professional training.
3. Student activities - (undergraduate) in student government, employment, student cooperatives.
4. Vocational guidance and employment - professional training.
5. Agriculture - extension work, youth programs, farm cooperatives.

Functions of the Local Sponsor

We recognize that to serve as a local sponsor for foreign visitors is a time-consuming responsibility for persons who already have heavy schedules. However, it is important to have as local sponsors persons who are well-informed about their community, and can make available to visitors from abroad contacts with individuals and agencies that will help the exchangee grow in understanding of the United States and its people. This exchange program furthermore offers an opportunity for increased mutual understanding between the people of your community and the international visitors, and is quite essential to realize our American goal of world cooperation. It must be emphasized, however, that the sponsor in each community holds the key to the success of the local program.

It is the function of the person who assumes the responsibility of chief consultant in consultation with the visitor to arrange for the total program of the visitor in a community and to see that this program conveys as complete as possible a picture of the community as a whole and of the special field which is the visitor's major interest. As advance information the National Social Welfare Assembly will provide a biographical sketch on the visitor and information about his major interest derived from interviews. A conference with the visitor immediately upon his arrival in the community will give the sponsor an opportunity to learn about the previous placements and to clarify what experience will be of most interest to the visitor. It is hoped that the visitor's schedule will provide a well-balanced experience, will take advantage of special opportunities that occur during the visit, and will meet the needs and interests of the individual. Frequent consultations with the visitor are very desirable.

The local sponsor is asked to send a report on the visitor to the International Exchange Project, National Social Welfare Assembly. (Outline for this purpose will be forwarded) Information from this report will be most helpful in the coordination of the schedules, and the appraisal of the visitor's need in regard to later assignments. But most important, all comments concerning the visitor will be used for the total evaluation of the project. In addition, clippings of all articles concerning the visitor which appear in the local press would be greatly appreciated by the Division.

If questions or problems arise which cannot be answered locally, the chief consultant is urged to communicate with the National Social Welfare Assembly for assistance. Should any illness or other difficulties arise, the Assembly will need full information without delay.

In summary, the responsibilities of a local sponsor will be:

1. To assume the responsibility or to ask someone else to serve as local sponsor for the visitor; to aid in developing a satisfying program schedule; to provide opportunities for frequent consultation to help him sort and understand what he has seen, and to provide the NSWA project staff with a report after the visit. It is with this consultant that the project staff will correspond. In some communities, committees share this responsibility.
2. To arrange a schedule which combines: a) an over-all view of community services related to the well-being of people; b) specialization in the field of specified interest; c) a more extended and intensive experience in the specified field so that the visitor may learn the "whys" and "hows" of the service; d) opportunities to meet outstanding citizen and agency leaders.
3. To arrange visits to American families for an evening or week end.
4. To arrange wherever possible contacts with agencies or institutions which do good quality work with very simple facilities.
5. To try to avoid too tight a schedule. Many visitors are eager to "see everything" which over-taxes their strength and their ability to absorb new impressions.

The Program

The interests and wishes of the visitor should be the primary guide to the schedule. However, since the visitor does not know the community he will welcome suggestions on what is available and most interesting.

In arranging schedules with a visitor, the consultant should keep in mind the fact that most visitors are in a strange environment eager to see everything possible. He is constantly meeting new people, new situations, and talking and listening in a language which is not his native tongue. He needs time for rest, and for the evaluation of his experiences. It is suggested that one day and several evenings each week be left free for rest and relaxation. Crowding too much into the schedule should be avoided.

Seeing the community should be part of the visitor's orientation during the first few days so that he will get a picture of the community as a whole. It will be important, however, to schedule him long enough in one place to give him a clear understanding of its functions, methods and goals. A cursory observation of many agencies will not be as valuable as more detailed study of one or a few. In addition, it is most desirable to have the visitor not only observe the work but be given a chance, wherever possible, to participate in the procedures.

It is important to avoid plans for the visitors which would duplicate activities in other communities. This, of course, does not mean that having seen one school the visitors should see no others, but experiences should be planned in relation to the total program in this country. Local sponsors should not be disturbed if guests do not appear too interested in seeing some new school, newspaper plant, or community center which may be the pride of the community, the visitor may feel that he has seen similar institutions in other communities and therefore could spend his time more profitably in other activities. All visitors are requested to provide each new sponsor with written accounts of all earlier programs.

Each visitor is asked to report his program for each community visited. If the visitor wishes, time should be allowed for him to prepare such a report before he leaves the community. Those who are in their last placement may wish to have a day or two in which to prepare a final report.

Preparation of the Visitors on Arrival in the U.S.

Practically all visitors stay in New York for several days after their arrival. They are given a brief introduction to their specific fields, as for example: social welfare, group work, community recreation, adult education, and community organization. They are given time to see the United Nations, museums, libraries and universities, and visit theatres and sports events in New York. During the orientation effort is made to interpret the voluntary role of local sponsors and to ask the visitors cooperation in his local schedule.

The visitors also go to Washington, D. C. for general orientation planned and conducted by the American Council on Education, Washington International Center. This course gives an introduction to history and geography, religious life, labor-management relations, education, cultural life, etc. of the United States. The visitors have the opportunity to see federal governmental activities in the nation's capitol.

With this background the exchangeees go to the communities throughout the United States for observation and practical experience. Since the orientation programs are of necessity general and presented at a time when many new ideas and impressions are confusing to the visitor it is important that he be given an opportunity to ask for interpretation of much that he observes during his stay in a community.

Language Difficulties of the Visitor

Although most of the visitors have a knowledge of the English language, there is great variation in their ability to use it. However, it should be kept in mind that the change from their own language to English will always tire them, to a greater or lesser degree. It will be helpful if all direct conversations are conducted slowly and clearly in simple English.

Publicity Given to the Visit of an Exchangee

If the local sponsor wishes to give publicity to the visit, caution is recommended until the sponsor has an opportunity to talk at length with the visitor. Some visitors prefer to avoid publicity. Many visitors prefer to avoid public discussion of national and international political issues. Visitors obviously differ in their ability to interpret their own country adequately. Experience shows that visitors are often asked to comment on the U.S.A. This may prove embarrassing for a guest who has observed a complex nation such as the U.S. for only a few weeks. For some of the same reasons a degree of caution about advance arrangements for speaking engagements is recommended. Generally speaking, an informal meeting where Americans and visitors may have mutual discussion, ask questions and share opinions and experience will serve the purposes of the program better. However, some visitors are capable speakers, therefore no general plan will apply to all.

Hospitality Offered to the Visitor

Hospitality of people in a community can mean a great deal to this program and be of mutual benefit to the guests and hosts. Invitations to a variety of homes where mutual respect and democratic practices are inherent in family relationships will not only be a courteous gesture of hospitality but will also give the visitors a valuable chance to see American home life. However, the desire to make visitors feel welcome sometimes leads sponsors to entertain them for meals or concerts at considerable personal expense. The importance of meeting their own day-to-day expenses is discussed with the visitors in New York, and they are told that local sponsors have been discouraged from bearing the financial responsibility for entertainment. The contribution which the sponsor makes in time and interest is of inestimable value; a financial contribution by any American is unnecessary.

Living Expenses of the Visitor

The visitors are allowed an adequate per diem to cover their living cost, incidental expenses, and local transportation. Semi-monthly checks will be issued to them in advance. The visitor will welcome help of local sponsors to secure lodgings and meals at reasonable cost. Many visitors find the accommodations provided by small

hotels, the YMCA or YWCA, settlements, college dormitories or private homes suitable and inexpensive.

All visitors will be requested not to ask the sponsor for expensive literature, mailing of packages etc. Postage can easily be covered by the exchangee. Anyone who feels that he would like to present the exchangee with books, magazines, or pamphlets would of course, help the visitor; but this is not expected of any sponsor nor should it be requested by an exchangee.

Travel Arrangements for the Visitor

Travel is paid from a separate fund by the IEP office. Arrangements will be made by the project staff and tickets and instructions given or sent to the visitor. For over-night trips, first class accommodations will be used. Daytime trips will be made by coach. In some instances tourist flights will be used. Minor expenses for travel within the community or nearby should be met by the visitor from per diem funds.

Insurance

For Germans the Department of State has provided insurance to cover the medical costs resulting from illness or accident. Dental treatment is allowed only in cases of emergency. No money should be paid directly, but the physician should present his bill in 4 copies to the IEP office directly or to the visitor for forwarding. The visitor should fill out Insurance Co. forms which the IEP office will furnish on request.

A group insurance plan has been arranged by the National Social Welfare Assembly for any visitors from other countries who wish to participate; the charge is 50¢ per week.

If an accident or illness which requires medical care occurs, sponsors should, in any case, notify the International Exchange Project staff at once.

Staff of International Exchange Project

Bernice Bridges, Director
William Y. Bell Gilbert Kahn
Anna-Barbara Krueger Wenonah Logan
Mabel Shannon

Biographical Sketch of
Hans Hinrich Flöter
Bremen, Germany

Mr. Hans Hinrich Flöter was born August 3, 1910, in Brake, Unterweser, Kreis Wesermarsch; Germany.

Educational Background

University of Halle Saale, 1930-1932

University of Berlin, 1930-1932

Received Ph.D. from University of Halle Saale, 1934

University of Halle Saale and Research Institute of Religious Sciences, 1939-1945

University of Göttingen 1946-1950 (Institute of Oriental Languages and Religious Sciences; Seminary of History of Philosophy)

Scope of Studies: Religious sciences, including oriental languages, ethnology, psychology and so on; History of ideas, of philosophy and of sciences; social sciences, especially sociology and political science.

Present Position

Adult Education in following institutions:

Federal Institute of German Trade Unions (Bundesschule des DGB); Burgwall: sociology, comparative history of Trade Unions, International Organizations of Trade Unions; Political Sciences; Studium Generale; Industrial Relations.

State Police School Huckelriede (Landespolizeischule): Political Science, Studium Generale; Industrial Relations.

Institute of Psychohygiene and Social Science (Ford Foundation): He teaches Sociology here.

People's High School (Volkshochschule): Seminary for students of all faculties (a three years course: outstanding fundamental Problems of World Organization 1st Trimester 1953: India).

Top Organization for Cooperation of Adult Education, Bremen: Management of cooperation of heterogeneous groups.

Professional Experience

Clergyman in the Lutheran Church; Halle Saale, at Wittenbers Elbe, near Merseburg, 1936-1941.

University Assistant Halle Saale 1936-1941

Assistant Professor at the Research Institute of Religious Sciences, 1939-1945.

Free Researcher in the Oriental Institute of the University of Göttingen, '46-'50

Adult Education Specialist, Ministry of Interior since 1951 for City of Bremen.

Professional Interests

Adult Education - the whole field of it

Impact of Science on society - organization of scientific research and teaching.
The study of the Great Books - organization of it.

Cooperation between universities and adult education - especially cooperation between universities and trade unions.

Coordination of heterogeneous groups in adult education.

Leisure Time Interests

Swimming, Rowing, light athletics, visiting of galleries and museums
Monasteries, and factories.

Membership in Professional Organizations

Trade Unions (OTV, i.e. Civil Services)
Society of Friends:
Fellowship of Reconciliation
Institute of History of Sciences
Congress for Cultural Freedom
Mental Health Organization

Interests in Coming to the U.S.

Mr. Flöter says: I wish to get an impression of the States as a whole; I wish to see the impact of Science on Social Change especially in the field of Adult Education, the connection between Adult Education and social and political activities; I wish to see these problems in the different States of the U.S.A. and in the different fields of Adult Education; I wish to see how U.S. Adult Education is different from German Adult Education and how it differs (historical and social and cultural-religious-political background); I wish to exchange experiences with American Experts in Adult Education.

CLASS OF SERVICE

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SYMBOLS

DL=Day Letter
 NL=Night Letter
 LT=Int'l Letter Telegram
 VLT=Int'l Victory Ltr.

W. P. MARSHALL, PRESIDENT

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O.BLA 141 NL PD=WUX BERKELEY CALIF 8=

NORBERT WEINER MATH DEPT=MASS INST TECH

CAMBRIDGE MASS=

1953 OCT 8 PM 4 47

WE WOULD LIKE INVITE YOU ADDRESS THE INSTITUTE RADIO ENGINEERS
 , SAN FRANCISCO SECTION, ON THE SUBJECT OF RECENT DISCOVERIES
 IN FEED-BACK IN THE NERVOUS SYSTEM. WOULD YOU BE AVAILABLE
 FRIDAY EVENING OCT 23? I HOPE SUITABLE ARRANGEMENTS CAN BE MADE
 SO THAT YOU CAN EXTEND YOUR STAY IN BERKELEY. PLEASE LET ME
 KNOW BY RETURN WIRE COLLECT IF AN ARRANGEMENT OF THIS SORT IS
 POSSIBLE, AND UNDER WHAT CONDITIONS. IF DATE IS NOT AGREEABLE
 PLEASE SUGGEST ANOTHER DATE.

=OTTO J M SMITH ASSOC PROF DIVN ELEC ENGR

UNIV CALIF=.

① request refused

{ans 10/13/53}

October 8, 1953

Dr. Edwin F. Beckenbach
Department of Mathematics
University of California
Los Angeles 24, California

Dear Dr. Beckenbach:

Enclosed is the manuscript of the abstract of my talk on "Theory of Prediction" which I am to deliver to your group on October 19, and for use in your proposed work, Mathematics for Modern Engineering.

I hope that this is satisfactory for your purposes.

Sincerely yours,

Norbert Wiener

NW:bbc

P.S. I have in my files a copy of an agreement concerning my responsibility for my own work in the book. I am not altogether clear as to whether or not I have already returned one copy to you. If I have not done so, please let me know.

October 8, 1953

Mr. Walker G. Stone, Editor
Engineering Sciences
John Wiley and Sons, Inc.
440 Fourth Avenue
New York 16, New York

Dear Mr. Stone:

Dr. Sholl's project interests me greatly. It is in a field in which I myself am going to write in the future, and I should like very much to have a published book by Dr. Sholl in the field before commenting on the situation. I know Dr. J. Z. Young and his school and they are both first-rate in physiology and extremely alert in the study of scientific method.

Dr. Sholl's table of contents interests me greatly, and if I were you, I should go after the book.

Sincerely yours,

Norbert Wiener

NW:bbc

[and 10/17/53]

FORTUNE

TIME & LIFE BUILDING
ROCKEFELLER CENTER
NEW YORK 20

EXECUTIVE DEPARTMENT

October 9, 1953

Dear Professor Wiener:

I am writing in hope of correcting a misfortune arising from the hazards of the journalist's business.

Evidently our manuscript, The Communication of Information failed rather seriously in apportioning credit for the theory of communication.

I hope you will accept my word that the error was committed in all innocence. We were perhaps misled by your own modesty in discussing your contributions to the theory.

Inevitably a first draft incorporates the mis- impressions of the journalist doing his best to grapple with unfamiliar ideas. Our purpose in sending out our first drafts for rather wide reading and comment is to correct erroneous impressions before they become firmly locked up in type.

I think it is only fair to mention that some of the other M.I.T. people we interviewed, and who received our manuscript, were also concerned that we failed to make adequate recognition of your fundamental contributions to information theory. We have not yet heard from the Bell Labs people, but I feel sure that they will also recognize that an injustice was done.

Miss Jack and I both enjoyed our visits with you tremendously and hope you will forgive our journalistic errors. We shall do our best to make the final article as accurate as humanly possible.

Respectfully yours,

Francis Bello

Francis Bello,
Technology editor

(6)

[10/13/53]

INTERNATIONAL HARVESTER COMPANY
GENERAL OFFICE • CHICAGO, ILLINOIS
FARM IMPLEMENT DIVISION

ADDRESS REPLY TO
EAST MOLINE WORKS
EAST MOLINE, ILLINOIS

October 9, 1953

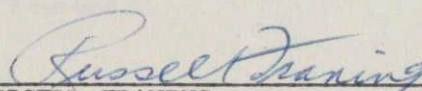
Mr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Mass.

Dear Mr. Wiener:

The writer has read with a great deal of interest all three of your books.

He will be in Boston at the Packaging Show during the week of October 18 and would like to talk with you regarding a problem he has on references. He will telephone you from his hotel to determine whether you will be able to see him.

Yours very truly,



RUSSELL FRANING
Materials Handling Engineer

RF:py

DARTMOUTH COLLEGE
: Department of Physics :
HANOVER · NEW HAMPSHIRE

WILDER LABORATORY

October 9, 1953

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

Dear Professor Wiener,

The mathematics department and physics department at Dartmouth which hold separate colloquia weekly are establishing a joint colloquium to meet once or twice a semester. In considering speakers for our initial meeting it is not surprising that each department separately suggested your name.

I am hoping that you will accept our invitation to speak here preferably sometime in November. The college, of course, will cover any transportation expenses and will arrange for accommodations in the Hanover Inn should you wish to spend the night.

I expect to be at MIT Thursday afternoon, October 15, and shall take the liberty of knocking at your office door. In the event that you will accept our invitation I could then discuss the nature of the audience which would consist primarily of faculty, graduate teaching fellows, and some senior majors in the mathematics or physics departments. Our meetings are usually on Wednesday afternoons at 4:00.

Professor Silverman, chairman of the mathematics department's colloquium, joins me in this invitation and asked that I transmit to you his warmest regards.

Sincerely yours,

Leonard M. Rieser Jr.

Leonard M. Rieser Jr.
Assistant Professor

LMR:t

(4)

[ans 10/13/54]



SIMON AND SCHUSTER, INC.

publishers

ROCKEFELLER CENTER, 630 Fifth Avenue, New York 20 • CABLE ADDRESS *Essandess* • TELEPHONE *Circle 5-6400*

October 9, 1953

My dear Professor Wiener:

I am indeed sorry that you feel so strongly about our being unready to publish *I AM A MATHEMATICIAN*. Your indictment of the society that tries to keep the specialist a specialist only is most eloquent; and if I had the temerity to bring up once again the subject of magazine articles, I should urge you to use some of these paragraphs to bring them to as wide a public as possible.

I do not believe that we can plead guilty to subscribing to any such point of view. As a matter of fact, one of Mr. Schuster's favorite campaigns is against what he terms "a hardening of the categories." Indeed, it was the very recognition of the breadth of vision in *EX-PRODIGY* that made us embrace the book with so much warmth. I regret that I am apparently unable to make entirely clear to you the reasons for our negative decision with regard to its sequel, but they certainly had nothing to do with any ambition to dehumanize a great scientist.

You are, of course, entirely free to have the book published any way and by anyone you care to. The submission of this manuscript and our decision in regard to it automatically works out the option clause in the contract for *EX-PRODIGY*.

With very best personal wishes, I am,

Sincerely yours,

Nancy W. Simon

P.S. The manuscript is being returned to you under separate cover.

Prof. Norbert Wiener
MIT
Cambridge, Mass.

hws:lf

Kansas City, Missouri
October 9, 1953

(C)

Dear Norbert Wiener;

I was in Central High School here when your father Leo Wiener was teaching there. I was not so fortunate as to be in one of his classes, but remember him quite well. Then, of course, I read about you when you were a Prodigy, and have followed your career with interest. I bought your Cybernetics, read it with interest, and gave it to a great-nephew who was a student at Oklahoma University - now on the U. S. S. Power in the Boston Navy Yard or on his way to Cuba.

In a meeting of Retired Teachers (I taught 52 years in our Public Schools) there were two "girls" who were students of your father's. Edmunda Von Unwerth belonged to the German Club that your father headed. They used to take long walks - out to Independence Missouri, ten or twelve miles, and over across the River to Liberty about fourteen miles. "Mudie's" sister Frida who finished Central

in 1888 went to New York to ^{teach} German in a High School, I think, the De Witt Clinton; then in the Ethical Culture School, and later at Hunter College from which she was retired. She has been dead several years now. All of Mudie's teaching was here in Central High. She is a very lovely person - has classes in the University Women's Club. She is quite good-looking still.

Maria Whitney, to whom I have loaned Ex-Prodigy, was another pupil who remembers her former teacher quite well. She also taught at Central High until retired a few years ago. Her work was Music - the orchestra and chorus work. Both of these teachers were eminently successful in their work.

Last night I saw another, Catherine Buehler, who was another Leo Wiener pupil. So you see there are a number of us who remember. As one of my pupils wrote me "It is nice to be remembered."

The Ex-Prodigy was very interesting to me. I remember the Newspaper articles when you and W. J. Sidis were "prodigies". And I remember pupils in my school who were

bright; one a boy, whose mother was Lottie Blatchley a fellow-student of mine in Central, was ready for fourth or fifth grade when he was six years old. I plead with her to let him be a little boy and play with children of his own age. She said "Oh, we play. We put on our Eskimo suits and play at shooting polar bears." They moved down south and I never knew how he came out. My school was the Joseph L. Norman named for a member of the "school-board" who was prominent when your father was here. I had a lovely district, fine patrons, and wonderful children. No one ever had a better time teaching and being a school principal than I.

I am glad you wrote Ex-Prodigy. I think it should help many bright children - in keeping their parents from crowding them forward. I liked both the books very much. I'll not go into detail as you know what is in them.

The next person to have my copy is the Education Chairman of the Woman's City Club. I suspect she'll have it reviewed for the Education Committee. I have not met any

men who were boys in your father's classes.
I think he was the Greek teacher in 1888-1889
when I was in J. P. Buchanan's Trigonometry
class across the hall. "Prof. Buchanan" was
the principal who went to New York to head
the De Witt Clinton High. If you are not
too young to remember M. E. Ravages' An
American in the Making, you'll remember
the reference "a warm-hearted old gentleman,
whom I later came to know as Dr. Buchanan",
the same principal to whom your father
was assigned as a teacher by Superintendent
J. M. Greenwood when he "discovered" him
in Kansas City.

Very respectfully,

Lucy J. Smoot (Miss)

4011 Baltimore Avenue

Kansas City 11, Missouri

[ms 11/9/53]

Whatever became of John Dewey's children - the
older not the adopted family? One time I sat at a
lunch table (Columbia U.) with Mrs. Dewey and she
was interested in finding a school where a son
would "fit in" - get the science work he wanted. How
did he turn out? That should be reported.

"This I Believe"

Presenting the Personal Philosophies of Thoughtful Men and Women in All Walks of Life

EDITORIAL BOARD
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October 9, 1953

LINCOLN-LIBERTY BUILDING
PHILADELPHIA 7, PENNA.

Dr Norbert Wiener
Massachusetts Institute of Technology
Cambridge 39 Massachusetts

Dear Dr Wiener

This is for you, a recording of your broadcast and seven others exactly as it has been sent to the 196 stations in the U.S. and 140 stations abroad.

I am delighted to enclose our new programming schedule for broadcasting of "This I Believe" during the 13 weeks from October 26 to January 23, which includes your broadcast. You will also be interested in the enclosed newspaper schedule which contains your script.

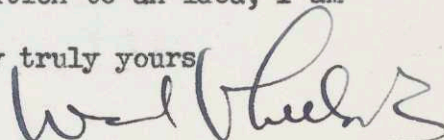
As you may know, most stations run "This I Believe" two or three times a day - maybe morning, dinner time and night. This means that you will be broadcast once in each time - generally two or three times on each station - at two week intervals - the first broadcast being in the most important time and on the day listed. Enclosed is a booklet which on pages 33 and 34 gives the extent you will be broadcast. This schedule is not accurate in all details since broadcasting schedules change radically. And since this has been printed our list has increased.

We appreciate your contribution to "This I Believe", and we would like you, if you see fit, to write the person anywhere in the United States, man or woman, who you think is best fitted to do a "This I Believe", asking him to do it and telling him that you have recommended his name to the Editorial Board who will within a few days send him an invitation and complete information. If you will do this and advise us of the guest you suggest, this will be done. This will be very helpful.

You may be interested to know that "This I Believe" in book form has sold over 300,000 since publication - second only to the Bible. It will be published in book form in Britain this month with 50 British and 50 American guests and in Arabic with 50% Arabic guests. Columbia Records is putting out a TIB record album this fall. All this because people are interested in and helped by "This I Believe".

Thanking you again for your great contribution to an idea, I am

Very truly yours



"This I Believe"
... a daily radio series
... a weekly newspaper feature
with guests and
Edward R. Murrow

P.S. We find we do not have a signed release from you in our files. We would appreciate it if you would sign and return the attached to us in the enclosed self-addressed envelope.

His telephone is PLoze 3-6749

① Come see

Mrs. Anthony H. Brackett
144 Middlesex Road
Chestnut Hill 67
Beacon 2-3620

October 10, 1953

Dear Dr. Wiener,

My friend and former neighbor Mrs. George Kandzie of Hingham has said I might use her name as a sort of introduction. I am intruding on you this way in behalf of a young man, Walter Breen, whose letter to you is enclosed.

My original idea was to beg a little of ^{your} very precious time, in hopes that in the give and take of a brief interview, in which you could ask me questions about this boy, you might become enough interested to make an appointment for him to come up from New York to see you. But since Irene Kandzie tells me you are going away very shortly, and may be gone a good part of the winter, I am sending you his letter forthwith, with just the high spots in explanatory data.

The best recommendation I can give you for Walter is that Dr. William H. Sheldon, to whose Constitutional Psychology Walter refers several times, has taken a personal interest in him. Walter tells me that Dr. Sheldon was enthusiastic about the possibilities of this "theory regarding some physiological aspects of intelligence." (And in the five years that I have known the boy I have found him to be more than honest--scientifically scrupulous.) He ought to have got a brief word of sponsorship to send along with the theory. But Dr. Sheldon's time is now spent mostly at the University of Oregon; and in their rather rare meetings in New York Walter hesitates to deflect him too much from their common interest, numismatics.

This young man is 23 years old, and employed by the New Netherlands Coin Co., N.Y.C. I believe he has been rated an unquestioned genius by every educator or tester who has ever known him. The range of his gifts is so wide that he himself mortally fears the morass of dilettantism (but without reason, I am sure.)

The most ghoulish imagination could hardly imagine, for such a child, a more unfortunate start in life than he had. An abandoned infant, he was found in the street and brought up by a paranoid woman of low intelligence, a fanatical Catholic, who eventually disowned him.

Because he has no family connections at all--and because I have sons of my own, and found him tremendously interesting and appealing--I have become a proxy mother to him, from the time when, as a Red Cross worker, I first knew him in a mental

ward in Cushing Veterans' Hospital.

He has made steady progress in adjusting to this world since his discharge from there in August 1950. While there he passed ten (I think) USAFI courses; and with these as credits he was accepted as an undergraduate in the New Plan at Johns Hopkins in July 1951. His GI rights entitled him to just one year of education. In June 1952, he was graduated, Phi Beta Kappa. (This one came in time, and was a life-saver.)

He still has some personality difficulties, of which he himself is aware. His psychiatric treatment was never finished, only interrupted; and he is about to continue it as an out-patient at the Payne Whitney Clinic of New York Hospital. Through their Social Service Department he was sent to a Vocational Bureau. After talking with him and seeing his scores in the Army tests, the director, a man named Von Arnold, has told Walter he believes he can get him a research scholarship (or is it fellowship?) at some university next year.

One of the things about which Walter is tremendously anxious to talk to you, is the possibility, if any, of working under you in one of your borderline fields. He would eagerly follow any suggestions from you as to study in the interim--his inadequate job leaves him a vast amount of unused mental energy.

If there is any chance of your seeing him either before or after your trip to California, I will telephone him. I had hoped it could be on a Friday or Monday, so as to have him here for the weekend; but he would fly up at an hour's notice if necessary, and I believe his employer, who is most understanding, would let him take any day for this purpose, unless he were needed with exceptional urgency.

Forgive me for taking so much of your time. I deeply believe that it is in the most worth-while of causes. But I might not have dared if I had not read EX-PRODIGY--and been so much absorbed and moved by it.

Very sincerely yours,

Kate Brackett

P.S. It is part of his waning maladjustment that he may show up for an important meeting needing a haircut, or even a shave. But he has never had delusions; and the early history which sounds melodramatic is tragically true -

I shall put his statement in a return envelope, as, in case you have no time to give to it at present, he would probably like to have it back -

KCB.

Box 1024
Grand Central Station
New York City 17.
4 Oct. 1953

Dear Dr. Wiener:

I realize that you are a very busy man, and that probably 90% of letters addressed to you by non-scientists are worthless time-wasters. Nevertheless, in the hope that this one will not be immediately dismissed as just another crank letter, and in the light of some remarks of yours in Cybernetics regarding the so-called interscientific boundary regions, I rush in where a wiser man might perhaps fear to tread.

Like you and Dr. Rosenbleuth and others of the Instituto, I too have long been intensely interested in problems of those boundary regions, and in the possibility of formulating field theories which might eventually serve to integrate the many presently overspecialized domains of science into a coherent whole, each of whose regions would be equally accessible to workers or theorists in all other regions. This interest preceded any acquaintance on my part with cybernetics; it is common to many of my theoretically inclined student friends and acquaintances, it was hinted at by Korzybski, and has been highly touted under the name of 'Nexialism' by a writer of science-fiction named A.E. van Vogt; in a word, it seems to be 'in the air' these days. However, adequate formulation of theories of this sort demands not only what you call a Leibnizian catholicity of interest, but a thorough acquaintance with the latest results and techniques in many fields at once; and where training or reading is deficient, the theories suffer.

And exactly this sort of difficulty is what motivates me thus to intrude on you. We have both been working towards what Dr. Sheldon calls an adequate humanics; your approach has been mainly mathematical, mine (and Sheldon's) mainly biological. Though my theory is physiological, the difficulty in it is mathematical, and I am at an impasse in seeking the necessary mathematical equipment.

In amateurish brief, I have been trying to develop the idea that what is called 'intelligence' in man (a very imperfect and not wholly univocal term)—or whatever it is that the so-called IQ tests purport to measure—actually contains at least two independent components, one of them hereditary and constant from birth, the other an environmentally influenced variable which I hope will eventually become expressible as a percentage figure. The first I designate OE, original endowment; the second, for lack of a better name, UQ, usage quotient. The former represents an upper bound to possible intellectual capacity in a given individual, and depends on the number of cortical neurons (which you say is constant after birth). It differs with different individuals. The UQ represents that fraction of the OE on which one can call at a given time or problem-solving context, and can vary spectacularly in the same individual. The so-called IQ is a function of both OE and UQ, and in any single individual changes with the UQ. Ideally, one should be able to mathematize the function in some adequate way. My impasse has arisen in attempting to do this; ~~arisen in the same way as that of many~~

Probably the single feature for which most people recall cybernetics is the demonstration of structural and functional similarities between human brain and digital computer "brain". One could pursue the analogy further and in speculation maintain without too much distortion that the performance capacity or 'intelligence' of a digital computer comprises the same factors, OE and UQ. The computer's OE would then include such items of preassigned, built-in, constant-from-'birth' capacity as number of relays, length of cycle in delay-line memory, number of cards ready to be notched for the punch-card memory, etc. (I am told that Dr. Heinz von Förster found that the human brain uses altered or 'punched' protein molecules, some 10^{21} of them, for this type of memory; so this item presumably forms part of the OE in either computer or human brain.) The UQ would then represent a measure of the computer's operating 'efficiency' in problem solving. (I do not mean this word in the sense in which one talks of the efficiency of a Carnot engine, but in a nontechnical sense: freedom from error or inelegance or unnecessary delay, etc.) Under normal operating conditions the UQ of the computer would presumably

be as near to 100% as you please, but still a variable, and one whose range could become unexpectedly great--as when it was discovered that a computer, on being 'awakened' in the morning, requires some time to reach its normal operating 'efficiency'--like a sleepy cerebrotonic human being who would be the computer's nearest analogue. Obviously here the OE is not affected.

I am aware that the single run on a computer corresponds to the entire life of a human being; but in the case of the computer the analogy proceeds as though its "life" began with powers fully matured, rather than with infancy. In fact, one might speculate that the reason for the extreme length of time required for human mental maturation is precisely that, with the very limited velocity of nerve-impulses, it takes years to feed the necessary information (particularly that which is destined for the punched-card memory) into the human brain; and the amount of such information necessary for proper functioning (always far greater than that required for the digital computer on account of the variety of problems the human is called on to solve) is steadily increasing with the complexity of the conditions of human life. It is possible that a point could be reached where this complexity--and the amount of information having to be so fed in--will exceed the capacity of homo sapiens, with his present life span and limited period of growth, and the only alternatives will be four: increase this period,--increase the learning 'efficiency' or UQ,--mutate into a species that will have what it takes,--or perish like the dinosaurs. It is not impossible that we are approaching this point in 1953.

--But to return to the theory proper. My main arguments are as follows:

1. The OE is physiological, hereditary, and unchangeable during life except by cellular changes in the cortex.
2. The UQ is wholly environmental, and depends largely upon factors of language, habit, education, etc. It is variable, and limited methods exist for altering it.
3. Though 'genius' may be either a result of high OE or extremely high UQ, most (if not all) feeble-mindedness is a result of low OE.
4. All instances of alleged improvement in feeble-minded children are attributable to educationally or biochemically induced increases in UQ. Some instances of 'genius' may be attributed partly or wholly to similar increases--a hypothesis which can be tested before the UQ and OE are rigorously mathematized.
5. In at least some individuals in the uppermost decile of IQ scores (and possibly in others), there occur apparently spontaneous sharp temporary increases in the UQ with remarkable psychophysiological correlates, subjectively experienced and objectively observable. These spurts appear to be 'triggered' by conditions amounting to severe challenges to learning ability.
6. The accidental discovery that certain physiological effects of various chemicals (methionine, d-glutamic acid, adrenalin) closely resemble the correlates of high-UQ periods suggests that biochemical means may be found to initiate such periods, or perhaps to occasion a (smaller) permanent increase in UQ.

1. The OE is unchangeable. In *Cybernetics*, p. 146, you said that the number of cortical neurons is fixed from birth, as is probably the number of synapses. It follows that no increase in OE is possible, and that electroshock 'therapy', lobotomy, or a 'stroke' would decrease it. To say that intellect is to some degree hereditary is a truism, for otherwise we could make Einsteins of idiots or apes, given enough time; and the studies of apes raised in human families well exhibit the limitations of the ape brain.

2. The UQ is environmental, etc. It would seem that studies of identical twins raised in differing environments might provide the most reliable evidence. Identical twins would have equal OE's assuming no birth injuries. Marked differences in IQ scores could only be attributed to UQ differences. Possibly the hoped-for mathematization of the theory (and the identification of all factors assignable to UQ) could be accomplished through such studies. The greater number of near-geniuses, or almost-first-raters, in the sciences today seems to point to the greater positive effect of 1953 experimental, stimulative, individualistic educational methods on the UQ's of children, over that of authoritarian educational methods of the past, which resulted in more conforming, initiative-lacking, average, individuals, and made the few real geniuses stand out from the crowd even more than they do today.--But this is sheer speculation. That the UQ is a variable will be shown below.

3. Genius and feeble-mindedness. If Galton's conclusions have any validity whatever, then at least some genius is hereditary (but tends to diffuse in the germ plasma as geniuses marry the too often inferior daughters of men). If hereditary, then certainly physiological, and therefore dependent on a well-above-average OE. I do not know if the number of cortical neurons in genius is significantly greater, though I would suspect that a study of surface area in their brains would give the answer; perhaps the difference lies in the number of synapses. It is also possible that some instances of genius result from extremely high UQ; this possibility is considered below, and I believe that it would be feasible to identify such cases. That feeble-mindedness is largely if not wholly hereditary is a conclusion which is at least very probable if not certain. The evidence continues to pile up, and I have never heard any argument tending to show how environmental conditions (other than pathology) could produce it in an otherwise normal child, infant or foetus. If hereditary, again, it implies a below-average OE, and the small long-term improvements reported even with the most painstaking educational trouble-shooting methods point once more to the OE being mainly responsible. Cf. Pendell, Population on the Loose, pp. 177-8, chapter VI, and passim; also Sheldon, Varieties of Delinquent Youth, pp. 105, 107, 109; Cases 1 to 36 passim; Table 14 (pp. 768-771); and from p. 776 to the end of the chapter. *Hand 765*

4. Improvement via UQ increases. The abovementioned instances of alleged improvement (however slow or small) in feeble-minded children with special educational methods points to a permanent rise in the UQ, probably a small one although such an estimate can have little significance until the UQ and OE are mathematically expressible. The highly controversial claims that d-glutamic acid therapy results in similar but temporary (and more significant) increases point to the possibility that biochemistry may eventually become an important adjunct to conventional educational methods.

The performances of John Stuart Mill and W.J. Sidis among others would appear to represent the results of immense intellectual speeding-up in childhood, which could only affect the UQ. Of course, nothing is known about the capabilities of either one prior to the time when his intellectual force-feeding began. A test might be to measure IQ's before and after such speed-up techniques have been applied (without the anguished intensity involved in your case or presumably Sidis's) to half of a fairly large unselected group of infants and older children--say in an orphan asylum. I think this could be done without ill effects, though it would have to be done without any publicity being involved.

One might recall in this connection a remark of William James to the effect that people generally use no more than about 10% of their innate capacities--which is equivalent to estimating the average UQ of homo sapiens at 10%. . .

5. 'High-Usage Periods.' To a number of individuals of my acquaintance, all of them within the top decile of IQ ratings, there have from once to twenty-odd times occurred periods of apparent sharp increase in UQ. This interpretation of the periods is supported by the sudden and marked increase in rate and efficiency of learning, doubling or tripling of reading speed, etc.; a fairly typical instance is one such experience of my own, stretching over most of my final week at Johns Hopkins, in which time I had to take and pass eleven final examinations, some of them in subjects previously unfamiliar to me. These 'high-usage periods' seem invariably to be triggered by a situation of extreme or at least unusual urgency or challenge to learning ability. Their length may vary from a few hours to many days or weeks, possibly even longer. They are accompanied by remarkable psychophysiological correlates: pyrexia without malaise (99.6° to 101°, or more, often reported), enormous appetite especially involving a craving for proteins (amino acids?), very high energy output--apparently signifying a rise in BMR--often with loss of weight in spite of the high caloric intake. They usually end in exhaustion on or shortly after the completion of the tasks involved. The exhaustion is experienced as both mental and physical, and is the more severe where neurotic stresses have been involved, or where the period has been unusually prolonged. (I suspect that the exacerbation you describe on p. 115 of Ex-Prodigy was of this sort.)

On the other hand, if the physical correlates described result merely from a heavy jolt of adrenalin (as has been suggested), then toxemia from increased and piling-up catabolic wastes would explain the exhaustion.

It would seem in any case that the syndrome, involving as it does markedly decreased reaction time, physical overresponse (hypersensitivity to ^{pain} noise, presence of other people, &c.; physical defenses are too quick to mobilize, so that every minor scratch or insect bite looks like a thunderhead; all sensations are experienced far more acutely), relative insomnia, and the like,

works against viscerotonia (see Sheldon, op. cit.), and for cerebrotonia. In the latter condition, some of the above-named symptoms are always found together with an above-average BMR without intercurrent thyroid pathology, even including the pyrexia. The explanation seems to be that here the energy derived from food intake is directed mainly to the (highly elaborated and predominant) nervous system, exteroceptors, and skin, and is radiated as heat from the skin rather than stored as depot fat. Psychically, the result is hyperattentionality and overresponse. The pyrexia, so far from being pathological, and whether a result of increased BMR or higher blood adrenalin level, evidently is of some utility, inasmuch as you say that a rise in body temperature facilitates almost all neuronal processes. (Cybernetics, p. 176.) The phenomena of high-UQ periods are independent of the somatypes of the individuals involved.

The other and more purely psychological correlates to these periods include a subjectively extreme increase in rapidity of thought--one's sense of time is stretched so that a half hour seems like several ordinary hours. Logically enough, reading speed is also very greatly increased. There is also a tendency to see isolated phenomena as parts of larger Gestalten. Euphoria in some degree is the rule, together with a markedly decreased subjective sense of effort or fatigue; one's sleep requirements are for the duration of the period somewhat less than usual. In at least two instances, latent eidetic imagery has temporarily passed into a manifest stage. That the above syndrome is not illusory is proved by the unusual quantity and quality of work done during such periods.

6. Serendipity. The experience of an employee of Hoffmann-La Roche (Nutley, N.J.), reported to the Constitution Laboratory (Presbyterian Hosp., N.Y.C.) in 1951 or '52 may be related to the above. This obese individual experimented with massive doses of methionine in addition to his regular diet. Within a few months, he dropped some thirty pounds without altering his diet. He also reported euphoria, greater available energy with less fatigue, and allegedly became able to impregnate his wife for the first time in several years. Unfortunately no details are available on whether he experienced the pyrexia, stretching of time-sense or increased ease of mental activity.

It would appear that the methionine, a 'lipotropic' amino acid, converted depot fat into immediately available energy by facilitating the so-called transmethylation process. According to Stetten and Boxer (J.Biol.Chem. 155:231, 1944) fat, not glycogen, is the chief means of energy storage. Methionine and choline (catalyzed by B₁₂) act as donors of labile methyl groups, both for forming creatine (for physical activity) from glycoamine, and for forming the so-called lipotropic phospholipids. Fatty acids are made water-soluble and transportable by association with these. The effect of the methionine on this process is now obvious.

The similarity of the symptoms reported by the Hoffmann-La Roche employee to those of the high-UQ period is striking, and suggests that some such mechanism may be involved in the triggering and maintaining of these periods. Biochemistry not too far distant from the above will inevitably be found in the answer (whatever that might be) to the problem of controlling and initiating such periods at will.

The above somewhat cursory examination of physiological factors in 'intelligence' will have to be supplemented with an extensive program of experiments, designed to answer questions like these:

- Can adrenalin administration in a final-examination situation trigger a high-UQ period?
- Will methionine predictably induce such a period? Can a relatively permanent effect be expected as with the Hoffmann-La Roche party? Is the effective drug the d-, l- or racemic form?
- What of the highly controversial reported (temporary) effect of d-glutamic acid?
- What relation has blood-sugar level to UQ? Does that answer hold good with diabetics? (I am aware that hyperinsulinism tends to lower the efficacy of thought processes.)
- Can the dream of Boris Sidis and Korzybski, that of raising ordinary minds to 'genius' level, be accomplished? Can it be done without danger to their mental health?
- Can such techniques partially offset the so-called second industrial revolution--the devaluation of the ordinary intellect--?

Experiments will obviously have to involve a series of pairs of identical twins, particularly when these have been raised in different environments; and at least two samples of infants and young children (say in an orphanage), one group for controls, one for educational speeding up; and at least three groups of students (high school and college level), of both sexes and

of somatotype, economic, social, and 'IQ' distribution corresponding to fair random samples of U.S. student population. Two of these would be control groups, one receiving nothing, the other being given placebos under the pretense that they too are receiving a possible mental 'boomfood'; the third group would be tested with the methionine, glutamic acid, adrenalin,, etc., with or without educational speed-up techniques. All three groups would be subjected to the same test situations, both normal to the curriculum and otherwise. There should also be a group of superior children (such as the Hunter College demonstration school group) for similar experiments. Most of these experiments are feasible sans mathematical expression for OE and UQ, but their significance would be far greater did such expression now exist. Unfortunately, I am not at present in any position to carry on any of these experiments. My degree is only an A.B., and I am for financial reasons as yet unable to attend any graduate school or to become attached to any graduate department of biochemistry, physiology, psychology or the like--and the carrying out of such experiments may require co-operation among several such departments.

It is obvious from the above that a mathematically adequate method for measuring the OE and UQ is a necessity, but a necessity I do not know how to supply. Ideally, the scale developed should be more than a merely intensive one such as the conventional IQ score seems to be. The trouble has up to now resulted from the fact that it is almost impossible to separate the effects of the two components in any determination of IQ. Nevertheless, rule-of-thumb behavioral methods exist for separating the high-OE, low-UQ student from his opposite number (and for ascertaining that all intermediate gradations exist). Such a boy will typically slip through school with a minimum of effort and comparable interest in his studies, perhaps with just passing grades; his rationalization will be that schoolwork is easy but boring, and the brilliance will be detected in other areas--frequently too in IQ tests. The lower-OE, higher-UQ boy will typically race through his courses, devoting a good deal of time to study, though maintaining (correctly) that studying involves--for him--little subjective effort. The element of competitive superficial brilliance is often quite obvious. There will often enough be shallowness and narrowness of intellectual interest in fields outside his schoolwork. In Hopkins--I do not know about other colleges--this pattern was extremely common among the large and competitive minority of Jewish students, who sometimes seemed to regard schoolwork as a form of athletics.

With a technique for really mathematizing 'intelligence', we would be much further along the way to understanding just what it is, and to achieving some better insight into what makes feeble-mindedness and genius. With the second industrial revolution upon us, some such understanding is going to prove more and more urgent.

Would it be possible, at your convenience, for me to see you even briefly, assuming that the above working hypotheses appear at all worth following up? I do not mean to imply that the sole topic of conversation would be these hypotheses so brashly presented. Indeed, I would like to find out from you the requirements for entering your own 'hyperfield' of cybernetics (a likely niche for a Nexialist)--among many other things.

Most sincerely yours,

Walter Breen

October 13, 1953

Dear Dr. Wiener:-

Marian has read the enclosed and given me a helpful summary. My article, "Machines That Think," is pretty well blocked out, and I'm deeply grateful for your assistance. I'm giving you honorable mention, of course, in the article. The level is that for the intelligent layman, not for the technician.

I'm looking forward to seeing you on my next trip to Boston and hear at firsthand about the exciting new development you spoke of on the phone. I got some good material at Bell Laboratories following your suggestion, and I also spent a day inspecting "No. 701," the new I.B.M. computer.

With all best wishes,

Sincerely yours,

Stuart Chase

SC:LD

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October 13, 1953

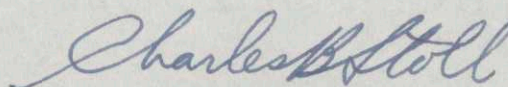
Dr. Norbert Wiener
Department of Mathematics
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

Dear Dr. Wiener:

In Mr. Stone's absence I should like to acknowledge your letter of October 8th concerning Dr. Sholl's project on THEORIES, MODELS AND BRAINS.

It was good of you to take the time to comment on this project and we are pleased to have your encouraging reaction. I think there is no doubt that we should plan to import copies of this book for the American market.

Sincerely yours,



Charles B. Stoll
Associate Editor
Engineering Sciences

CBS:bh

October 13, 1953

Mr. Francis Bello, Technology Editor
Fortune Magazine
Time and Life Building
Rockefeller Center
New York 20, New York

My dear Mr. Bello:

I wish to thank you for your courteous letter of October 9. The situation of an author who is being interviewed by a popular journal in the matter of credit is a difficult one, and I can easily see that the position of the interviewer is equally difficult.

As an author, I am fully aware that no scientific work is purely due to one man, and the proper place for the adjudication of scientific credits is in the hands of one's active colleagues. I have the highest regard for Dr. Shannon both as to his scientific accomplishment and to his personal integrity. There is no question that he has worked industriously, intelligently, and successfully in the modern metrical aspect of communication theory, and that no assessment of the field would be adequate which does not give him a very high place in these regards. Nevertheless, as a matter of history which it is easy to verify, I had done, and published, and communicated to the Services and other defense groups, work which presented a statistical point of view on communication theory several years before Dr. Shannon has published in this direction, and before I had heard that he was actively interested in this direction. Among the things which I did at that time on my own initiative was to state that noise could not be disregarded in assessing the ability of a transmission system to transmit information, and in this respect I saw that the sending of any perfectly measured quantity would transmit an infinity of information. I used the

representation of a transmittable quantity in binary digits and I pointed out that the number of digits between the size of the quantity transmitted and the size of the noise confusion allowed would measure the amount of information transmitted. This was approximately and essentially the logarithm to the base 2 of the ratio between the message-plus-noise and the noise, and could be interpreted as the logarithm of a probability. From this stage on, it was obvious to me and stated by me, as it would be by any mathematician, that I was dealing with a quantity of the nature of negative entropy.

It was after this, but I think a few months after, and certainly not more than a year or so, that I heard Dr. Shannon present a paper at a Harvard mathematical colloquium on a very similar thing. We at once got together and compared ideas. Since then, we have both of us developed our interests in the subject much further, and there has been a continual cross-play of ideas on both sides.

Here it is necessary to take into account the very different nature of the positions the two of us occupy. Dr. Shannon is an employe of the Bell Telephone Company, and is committed to a career of developing communication notions within a certain rather limited range conforming to the interests of the company. Within this range, he must work much more definitely towards immediately usable results than I do, and he has been both industrious and prolific in ideas in this work. On the other hand, I am a college professor, and I have always interpreted my position, with the consent and encouragement of my school, as that of being a free-lance. I have found the new realm of communication ideas a fertile source of new concepts not only in communication theory, but in the study of the living organism and in many other related problems. In addition to my book on cybernetics, which was a first presentation of my concept of the scope of these ideas, I am now engaged in writing a treatise on cybernetics which will be half a philosophical discussion of the structure of time and its relation to the problems of control and information, and half an implementation of these notions by means of a precise mathematics.

COPY
I believe that Dr. Shannon would fully agree with me in disapproving of an attempt to force us into a personal competition in which we have never willingly participated. I would prefer that the theory be called by the names of the two of us or objectively by the names of neither of us, but if it comes to a matter of names, I have the right by historical priority to have my name first. In any case, I greatly deplore any attempt to argue out a case of scientific credit before a popular rather than a scientific jury.

I hope I shall be able to see you again, and talk to you about various matters.

Sincerely yours,

Norbert Wiener

NW:bbc

October 13, 1953

Mr. Francis Bello, Technology Editor
Fortune Magazine
Time and Life Building
Rockefeller Center
New York 20, New York

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I hope I shall be able to see you again, and talk to you about various matters.

Sincerely yours,

Norbert Wiener

NW:bbc

October 13, 1953

Comdr. J. F. Cunniff, GEC, USN
513 Essex Circle
Naval Ordnance Test Station, Inyokern
China Lake, California

Dear Comdr. Cunniff:

I have received your letter of October 5,
and wish to inform you that Mrs. Wiener will
accompany me.

We are looking forward to our visit to
China Lake.

Sincerely yours,

Norbert Wiener

NW:bbc

October 13, 1953

Mr. John Diebold
62 Columbia Terrace
Weehawken, New Jersey

Dear Mr. Diebold:

It is my impression that I have already answered your letter of September 21. In any case, I shall not be able to talk at the American Management Association seminar in New York City. In fact, I am going completely out of lecturing except either for very special cases where I feel a personal obligation, or for adequate recompense. In the case of the American Management Association, I have already talked to them without recompense, and I consider my duty fulfilled.

Sincerely yours,

Norbert Wiener

NW:bbc

COPY

October 13, 1953

Mr. Jason Epstein
Doubleday and Company, Inc.
575 Madison Avenue
New York 22, New York

My dear Mr. Epstein:

Many thanks for your kind letter of October 7. I intend to retain the last chapter of my book, but to coordinate it much more intrinsically with the rest of the book by devoting a few pages of discussion to the problem of co-jamming and the deliberate interference with information. This is a subject which is exciting a good deal of interest at present, and is entirely relevant to propagandist techniques from both sides of the present dispute.

Sincerely yours,

Norbert Wiener

NW:bbc

[ans 10-22-53]

COPY

October 13, 1953

Dr. Iago Galdston
The New York Academy of Medicine
2 East 103 Street
New York 29, New York

Dear Dr. Galdston:

I shall be very glad if you will reserve
me a room in a hotel.

As to the title, I am quite content, and
I shall try to do a considerable amount of
work on the manuscript this week.

Sincerely yours,

Norbert Wiener

NW:bbc

COPY

October 13, 1953

Mr. Robert P. Holston, President
The New York Society for General Semantics, Inc.
New York Academy of Sciences Building
2 East 63rd Street
New York, New York

My dear Mr. Holston:

I am sorry to say that I will not be able to address the New York Society of General Semantics. Furthermore, I do not at any time wish my name to be coupled with that of Korzybski. He was a man of considerable ability which was vitiated by an unholy willingness to play the charlatan for money, and the sooner the workers in the legitimate field of semantics break away from his name the better will be the odor in which their field stands. I myself would be suspicious of such a respectable organization as the chemical society if they made Paracelsus their patron saint, or of the mathematical society if they played up the work of Cardano.

Sincerely yours,

Norbert Wiener

NW:bbc

October 13, 1953

Prof. Leonard M. Rieser, Jr.
Department of Physics
Dartmouth College
Hanover, New Hampshire

My dear Mr. Rieser:

Next week I shall be giving a series of four lectures at the University of California. From the Christmas holidays to the beginning of the second term, I shall be lecturing in India. I have already two lectures planned for November, and as I find lecturing and the travel for lecturing a very severe physical strain, I am cutting down heavily on my lectures, and as I have some new literary and scientific work underway, I am accepting no more lecture engagements for this academic year.

I hope you can understand how regretfully I am forced to turn down your kind invitation.

Sincerely yours,

Norbert Wiener

NW:bbc

October 13, 1953

Prof. Otto J. M. Smith
Division of Electrical Engineering
University of California
Berkeley, California

Dear Prof. Smith:

I must regretfully decline to accept your invitation to address the radio engineers. I cannot extend my stay in Berkeley, since I must return to my classes here at MIT as soon as possible.

Sincerely yours,

Norbert Wiener

NW:bbc

October 13, 1953

Mr. Robert John Thomas
226 Davis Street
Syracuse, New York

My dear Mrs. Thomas:

As I am not a physician, it would bring me into serious legal trouble to give any advice whatever in a medical case. Regretfully I am forced to answer you in this way.

Sincerely yours,

Norbert Wiener

NW:bbc

[ca. Oct. 1953]

72 PERRY STREET
NEW YORK CITY

Dear Harold

I've just talked to my friend
Arthur Rosenthal, of Basic Books,
59 - Fourth Ave., N.Y.C. about
your manuscript - the second part of your
autobiography. He said he would like
to see this ms and if he found it was
appropriate for his firm to publish, he
would like to take over Ex-Prodigy of
fossil + market both volumes.

This of course is still tentative but
promising so I hope you will send him
a copy of your ms. as soon as possible

If you didn't see the enclosed,
you may be interested to read it - don't
blame

Harold

Larry Frank

(1)

[and 10/5/53]

COPY

October 13, 1953

Mr. Frantisek Wolf
Department of Mathematics
University of California
Berkeley 4, California

My dear Mr. Wolf:

I shall be very glad to meet the mathematicians in Berkeley on October 22, but as a schedule of four lectures in a week, with travel, is pretty severe, I'm afraid I cannot commit myself to another lecture. If I meet you informally, I shall be glad to talk over your problems.

Sincerely yours,

Norbert Wiener

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