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CORRESPONDENCE Nov. 17–30, 1959

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Jason Epstein, EDITOR

November 17, 1959

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

Dear Norbert:

I suppose you have seen the very good review in "The Christian Science Monitor". If you haven't, copy will be on its way to you soon. It is still too soon, of course, to know how the book is doing, but the few reactions I have had are all very positive.

Your secretary sent me a letter of solicitation from Jacques Chambrun, literary agent. I must warn you very strongly to avoid him. His reputation among publishers is very low. Doubleday refuses to do business with him of any sort and Random House is most reluctant to deal with him. He has an extremely bad reputation.

With best wishes from house to house.

Sincerely yours,

Jason Epstein

Enc.

[ans 11/27/59]

November 17, 1959

Professor Norbert Wiener
53 Cedar Road
Belmont, Massachusetts

Dear Sir,

I hope to be a mathematician. I am a senior at the University of Wichita and will complete a B. A. degree in mathematics in January, 1961. I love mathematics, but do not care much for very many other subjects, mainly excepting philosophical questions concerning knowledge, truth, logic, meanings, and related subjects. These two interests I believe I can combine and satisfy best by entering the field of cybernetics professionally.

I am at present reading some general books and articles on cybernetics, including your book The Human Use of Human Beings. However, I am handicapped by not knowing what to read nor what to look for in the material I read. I would appreciate some suggestions along this line.

I have so far inferred that the main concepts of cybernetics are the ideas of a measure of information, of entropy, and of feedback. However, these ideas are hazy in my mind and I do not know how to clarify them.

I also have a chance to utilize a number of elective courses in preparation for graduate work in cybernetics, but I am not sure how this can best be done. I have studied symbolic logic and have taken a course in the use of the I. B. M. 610 digital computer. I can continue work in the use of computers and logic, and can also take courses in semantics and in statistics. These studies are on the undergraduate level. I do not know what to do for graduate work, yet. Little is offered in my line at this university.

I would appreciate a reply from you commenting on the places where I have indicated difficulty and offering suggestions for further study.

Thank you,

Ellis R. McDaniels

Ellis R. McDaniels

[ans 12/7/59]

LITTLE, BROWN & COMPANY
PUBLISHERS
34 BEACON STREET, BOSTON 6

November 19, 1959

Professor Norbert Wiener
M.I.T.
Cambridge 39, Mass.

Dear Prof. Wiener:

At the request of the author we are happy to be able to send you under separate cover an advance copy of FALSE COIN by Harvey Swados which is scheduled for publication on January 11, 1960.

FALSE COIN is not a routine novel. It is profoundly concerned with problems of cultural freedom and creative possibility not unlike those to which you have one time or another addressed yourself. We are hopeful that, having read the book, you will agree with us as to its importance and the urgency of its finding a public broader than that usually available to a novel of ideas. We therefore welcome your comments.

You will be interested in knowing that the author credits a substantial portion of FALSE COIN to inspirations received while reflecting on some of the implications of your book THE HUMAN USE OF HUMAN BEINGS.

Sincerely,

Robert H. Fetridge, Jr.

Robert H. Fetridge, Jr.
Advertising Manager

RHF:mg

THE INSTITUTE OF RADIO ENGINEERS
INCORPORATED

SECTION CORRESPONDENCE

19 November 1959

PLEASE ADDRESS
REPLY TO
Bendix Products Div.
493 East 31st Street
Chicago 16, Illinois

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

Dear Professor Wiener:

Recently I wrote to you about the possibility of your visiting Chicago to speak to a joint IRE - AIEE meeting on 4 March 1960. I enclose a carbon of that letter for your convenience. Perhaps now that the semester's routine is established, you will be able to consider this March 1960 meeting. We would very much like to have you here if you can make it. May we hear from you soon so that we may firm our plans for the meeting?

Sincerely,

Gail T. Flesher

Gail T. Flesher, Chairman
General Papers Committee

GTF:n

Enclosure

[ans 12/7/59]

Massachusetts
Institute of
Technology CAMBRIDGE 39, MASSACHUSETTS *the Libraries*

November 19, 1959

Prof. Norbert Wiener
2-276

Dear Prof. Wiener:

The recent publication of your book, "The Tempter", has been called to my attention.

It is our custom to purchase for the Institute Library at least one copy of every new book coming from the pen of an Institute author. This copy goes into the appropriate divisional library or into the General Library.

It is always our hope that the author will be willing to present an autographed copy to the Library for the "Technology Collection". In this collection we bring together books and monographs by and about the Institute, its alumni, staff or students. This collection bears a special bookplate and becomes part of the archives. Should you be in a position to present an autographed copy of the above work to the Tech Collection, I would be most grateful.

Sincerely yours,

W. N. Locke

William N. Locke
Director of Libraries

OAKWOOD SCHOOL
FOUNDED 1796
POUGHKEEPSIE, NEW YORK

20 November 1959

Dear Norbert Wiener,

As students attempting to learn about and take our place in a society we do not fully comprehend, we are vitally concerned with the nature of our education. We wish to be prepared to understand the technical aspects of modern existence. At the same time we realize that we must have an understanding of the humanities--an insight into ourselves and the nature of our society--in order to make a real contribution to our age. Somehow we must reconcile these two facets of our education; we must learn to realize that they are not separate entities but parts of a complete education.

It is then as students wishing to plan our future education wisely that we turn to you, a man concerned with modern education. We wish to extend our invitation to you to speak at our commencement exercises the afternoon of June eleven.

Sincerely,
Cathy Miller
Senior class secretary

"SCIENTIA,,
Rivista internazionale di sintesi scientifica
Revue internationale de synthèse scientifique
International Review of scientific synthesis
Internat. Zeitschrift für wissenschaftliche Synthese
Revista internacional de síntesis científica

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En cas d'insuffisance d'adresse prière de renvoyer à
"SCIENTIA,, Via Roncaglia, 4 - Asso
(Como Italie)

CARTOLINA POSTALE

PROF. NORBERT WIENER

Massachusetts Institute of Technology

Department of Mathematics

CAMBRIDGE-39

(Mass., U.S.A.)

"SCIENTIA„
Via Roncaglia, 4 - ASSO (Como)

Asso, 21 Novembre 1959

Cher Monsieur,

je vous remercie vivement de votre aimable réponse. Je regrette que vous ne puissiez vous mettre dès maintenant à la rédaction de votre article, mais laissez-moi espérer que vous ne renoncerez pas pour cela à collaborer à notre revue et que vous voudrez bien profiter des premiers moments de loisir dont vous disposerez pour rédiger cet article, si vivement désiré. Nous vous en serons vraiment et vivement reconnaissants.

Dans cet espoir, je vous renouvelle, cher Monsieur, l'expression de mes sentiments les plus distingués.

p. "SCIENTIA„

(Dott. Paolo Bonetti)

N

BROMFIELD ASSOCIATES

175 HUNTINGTON AVE.
BOSTON 15, MASS.
COPLEY 7-7161

AN ORGANIZATION FOR THE APPLICATION OF SCIENTIFIC MANAGEMENT

November 21, 1959

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

Dear Dr. Weiner,

I most enjoyed our meeting yesterday. It's not uncommon to interrelate logic and truths in a complex of words and numerals. The remarkable achievement of "The Tempter" is that you have accomplished this in a disarmingly simple, ingenuous prose form.

I'd like to summarize our discussion of your possible participation in the outlined nascent enterprise. Briefly, we would gain immense value from your unique ability to range across and correlate avenues of readily available specialized knowledge. I would reiterate my impression of your singular working understanding of the business use of patents.

Your contribution would be at the compass-bearing or, if you will, policy level, gaining the maximum from your minimal time input.

To suit your modus vivendi, you need not sit in conference with other directors and could, if you will, maintain in our contacts the informality of Thursday's meeting. As you stressed, never would you be called upon to participate in any patent court action. Your detestation of the professional witness is akin to mine.

With these rough-hewn points in mind we agree that you will give serious consideration to such a relationship that would provide on the order of magnitude of $5000 each year.

Before our next contact I will be visiting both England and the Continent to initiate action fostered by our European representative. This will probably find you between terms. I'll be in touch with Ruth Goodwin regarding your plans.

Respectfully,

BROMFIELD ASSOCIATES

Morton Bromfield

Morton Bromfield

MB:lmh

Wagner Hall, The College of Wooster
Wooster, Ohio
November 22, 1959

Dear Mr. Wiener,

Here at the College of Wooster we have a plan known as Independent Study, whereby juniors and seniors do independent research in their major field for class credit. Since I am a junior, I am now embarking on this adventure. I have become interested in the subject of Cybernetics. I have your book, "Cybernetics, or Control and Communication in the Animal and the Machine"; however, I have not had much luck at finding other suitable books and urgently need other source material.

I am a math major. I have had only four semesters of calculus and am now taking advanced calculus and differential equations. I need a text which stresses the mathematical aspects of Cybernetics, yet which remains within my understanding. I also would like a book which offers practice problems rather than straight theory.

I thought you might be able to help me by suggesting books which I might use. I would appreciate any help you can give. Thank you.

Happy Thanksgiving,

Kathryn Turner

[ans 12/14/59]

November 23, 1959

Dr. K. F. Mangold
729 Fifth Street
Yazoo City, Miss.

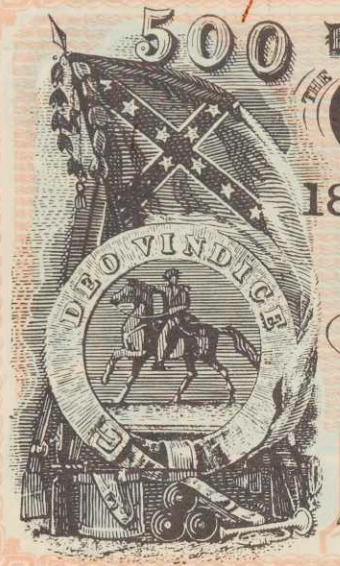
Dear Dr. Mangold:

Due to circumstances beyond our control, it has been impossible to answer your letter of November 6, but I am pleased to be able to tell you, in Mrs. Kruger's absence, that Prof. Wiener's schedule, with the exception of Dec.9, during the first two weeks of December is flexible enough to allow you to pick your own day for this interview.

I hope this note does not come too late and would appreciate it if you would let me know your plans as soon as possible.

Sincerely yours,

Eva-Maria Ritter (Mrs.)
Secretary to Prof. Wiener



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MEDICAL COLLEGE OF VIRGINIA
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RICHMOND, VIRGINIA

November 23, 1959

Dr. Norman Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Doctor Wiener:

It pleases me to inform you that the paper you are to present at the Chicago Meeting of the American Association for the Advancement of Science has been selected by the Association's Public Information Committee as one which is newsworthy and likely to be reported by the press to the general public.

Dr. Wolfle, Executive Officer of the AAAS, has this significant statement in his enclosed letter to authors of papers: "It is extremely difficult for a science writer to report your paper adequately and 100% accurately simply by listening to its presentation." For your protection from not being misquoted, I hope you will cooperate with the Association by following the procedure described on the sheets enclosed. I realize that much is being requested of you but there is no other way to be sure that the reporters concerned have before them in advance the facts to be presented in your paper.

Sincerely

Sidney S. Negus

Sidney S. Negus

American Association
for the Advancement of Science

DIRECTOR OF PUBLIC INFORMATION
SIDNEY S. NEGUS

MEDICAL COLLEGE OF VIRGINIA
RICHMOND, VIRGINIA
TEL. Milton 4-9851, Ext. 453

Nov. 23, 1959

Dear Doctor Wiener:-

TO EACH AUTHOR OF A PAPER TO BE PRESENTED AT THE CHICAGO MEETING OF THE AAAS:

Enclosed are two copies of the official public information form prepared especially for the Chicago Meeting of the AAAS, December 26 to 31, inclusive. The letter to each author from Dr. Wolfle explains why your cooperation is being solicited.

With so many papers to be presented, my office could not possibly mimeograph all the advance material requested by the science reporters expected to cover the meeting. If each author produces his own mimeographed copies, errors are reduced and a wider circulation of his report is assured.

Please note the heading of the enclosed model nontechnical abstract. Each line is of significance in my arranging for the release of your paper.

To aid further the AAAS department of public information, please send copies of the nontechnical abstract of your paper to the public relations representative at your institution with the time indicated when your paper is to be presented. I will take care of the national distribution of your paper. Its reporting by the science writers of the country will depend, of course, upon its newsworthiness as compared with other papers on the program.

The press room for the 18 Sections of the Association and the approximately 90 participating Societies will be in the Hollywood Room of the Morrison Hotel. I hope you will find time during the meeting to drop by to observe how this activity of the Association functions.

Obviously, your having a paper on the program doesn't obligate you to comply with the suggestions in this letter. AAAS Public Information is a service which authors of papers may use or not as they see fit.

Sincerely

Sidney S. Negus

Sidney S. Negus

"The Nature of Social Dangers of the Control Machines of the Future"

American Association for the Advancement of Science

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

ADMINISTRATIVE OFFICES DUpont 7-7171

TO EACH AUTHOR OF A PAPER TO BE PRESENTED AT THE CHICAGO AAAS MEETING:

It is a pleasure to welcome your participation in the 126th Meeting of the AAAS to be held in Chicago, December 26-31, 1959. These meetings provide unique opportunities for scientists of varied interests not only to discuss their specialties but to learn how much they have in common and to consider matters of concern to all science. They also help the Association to carry out one of its four objectives—to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.

Good reporting of this AAAS Meeting requires the cooperation of both the press, radio and television representatives and the scientists on the program. It is not possible for the hundred or more reporters assigned to cover the Meeting to attend more than a small fraction of the many sessions being held. Therefore, it is necessary for them to have access to the papers to be presented if all sessions are to receive adequate and intelligent coverage. Moreover, the members of the National Association of Science Writers and other accredited science writers must have *early* access to these papers. It enables them to prepare better news stories and, whenever necessary, to seek interpretation or amplification from the authors or other qualified specialists in the field. *It avoids the extreme urgency of racing to meet a deadline that may result in inadequate or inaccurate reporting of your paper.*

Since all AAAS sessions are "wide open" to the press, it is largely *for each author's protection* that this service is maintained by the Association. If an author's paper happens to be newsworthy, it is bound to be reported by the science writers covering the Meeting. It is extremely difficult for a science writer to report your paper adequately and 100% accurately simply by listening to its presentation.

Also the committee which selects the recipient of the Association's Newcomb Cleveland Prize of $1,000 must have copies of abstracts of papers (preferably complete copies) in advance of the Meeting in order to make its decision wisely.

Therefore, for the benefit of all concerned, your cooperation with Doctor Negus will be greatly appreciated.

Sincerely,
DAEL WOLFLE
Executive Officer

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PROGRAM PAGE

DO NOT REMOVE FROM THE PRESS ROOM

AAAS PUBLIC INFORMATION

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RELEASE DAY

A. M. PAPERS **P. M. PAPERS**

AUTHOR {Dr. Rev. Prof. / Mr. Mrs. Miss}: _____

TITLE OF PAPER: _____

_____

_____

To be Presented Before (Name of Section or Society): _____

Expected Date, Hour, and Place of Delivery (If Known): _____

Mail Address: _____

Convention Address (If Known): _____

Official Position and Institution: _____

Field of Specialization: _____

Nontechnical Abstract of Paper: Attach one copy to this press room form and send it with 100 additional copies to Sidney S. Negus, Medical College of Virginia, Richmond, before December 15. See model abstract.

———— • ————

WAYS IN WHICH YOU MAY ASSIST:

1. Fill out two of these press room forms. *Send one copy* with abstract attached to the secretary of the section or society on whose program you are scheduled to appear. *Send the other filled-out form* with abstract attached plus 100 copies of the abstract to me at the Medical College of Virginia, Richmond, so that they will arrive *before* December 15.

2. If it is impossible for you to complete your abstract by this date, mail all of your material to me at the Morrison Hotel, Chicago, or deliver it in person to the AAAS press room there. *I will not be in Richmond from December 15th on.* Please mail your abstracts well ahead of the 15th since the mails are much slower during the Christmas Season. The receipt of your material will be acknowledged.

3. *Quite often reporters request full copies of unusually newsworthy papers. If such requests come to me for your paper, I will enclose a letter asking you to please send me not only 100 copies of your nontechnical abstract but also 100 copies of your complete manuscript.*

4. *Please have your mimeographed sheets the size of this form.* Have extra copies made so that, in order to aid this department, you may send copies to the public relations representative at your institution, with the time indicated when your paper is to be presented. I will take care of the *national* distribution of your paper.

IMPORTANT: Copies of abstracts received on or before December 15 in Richmond will be mailed to 90 selected science writers of the country—10 copies being retained for the Chicago press room. Copies of papers received after December 15 in Chicago will not be mailed but will be made available in the press room to science writers in attendance at the Meeting. Therefore, for *wider distribution* of your paper, please try to get your abstracts to me in Richmond *before December 15.*

SIDNEY S. NEGUS
Director, AAAS Public Information

From Sidney S. Negus SAMPLE

Each line in the heading is of significance to science writers. Be sure your highest academic degree is given. Abstract preferably should be double-spaced and not over three pages. Upon receiving this abstract many reporters requested complete copies of Miss Raskin's paper which she most cooperatively supplied. It was widely reported by the press in this country and abroad. There was news in her paper which wasn't in the abstract.

--*--

ABSTRACT OF PAPER TO BE PRESENTED AT THE WASHINGTON MEETING OF THE AMERICAN ASSOCIATIO FOR THE ADVANCEMENT OF SCIENCE, 1958

Subject: American Women - Unclaimed Treasures of Science.
Author: Miss Betty Lou Raskin, M.A., Research Associate, Head of Plastics Research and Development, The Johns Hopkins University Radiation Laboratory.
Address: 1315 St. Paul Street, Baltimore 2, Maryland.
Convention:
Address: Shoreham Hotel, 2500 Calvert Street, N. W., Washington, D. C.
Time: Monday, December 29th at 8:00 p.m.
Place: Shoreham Hotel, Lower Lobby A.
Program: AAAS Section on Education

The mass media are causing America to waste its womanpower. What this country needs is a campaign to popularize the scientist. In Russia the woman scientist is literally the Red Queen. Over here, she is treated somewhat as an oddity.

If we expect to meet all of our increasing needs for top-quality technical personnel, we had better start now to make full use of the scientific capabilities and skills which many women in this country possess. Female brainpower is our most valuable untapped natural resource. The longer we fail to make use of it, the more we are hurting our chances for survival in this Space Age.

Why dig deeper for a more inferior male mind when we haven't even scratched the surface of our female brainpower supply? Only about 8% of all of the scientists and engineers in this country are women, and 85% of them are concentrated in three fields: biology, chemistry, and psychology. About one out of every 333 graduate engineers is a woman. Virtually none of these women has a Doctor of Engineering degree or Ph.D. in Engineering. The Russians, on the other hand, graduate more women engineers in one year than we have done in our entire history. Half of their engineering students and one-third of their scientists and engineers are women. Many of these women hold extremely important technical positions.

Regardless of whether or not we think that woman's place is in the home, many women are entering the nation's work force. In fact, there are about 3 million more employed women today than there were during the peak year of World War II. Today's schoolgirl can count on spending about 25 years of her life at a paid job, so she might as well prepare herself for one in which she can best serve herself, her family, and her country.

Our cultural conditioning is largely to blame for our failure to attract more young women into technical careers. Traditional "old hat" attitudes that scientific work is for men only, that it is unfeminine and abnormal for a girl

to become a geophysicist or, heaven forbid, a chemical engineer, and lack of emphasis on education for girls are largely responsible for this serious situation today. Interest in early marriage, fear that men don't like smart women, and a preference for choosing a husband in one of the more glamorous, non-scientific fields are also cited as reasons why American girls shun the physical sciences and engineering.

The mass media of communication, aided and abetted by Madison "Ad"venue, have made the mink coat, not the lab coat, our symbol of success. They've emphasized leisure time, not hard work and originality, and have praised beauty, not brains. As a result, today's schoolgirl thinks that it's far more exciting to serve tea on an airplane than to foam a new light-weight plastic in the laboratory.

Understanding comes before respect and appreciation. Most Americans still know no more about what a scientist is like as a person or how, why, and what he or she does from 8 to 5 than they do about the words to the second stanza of our national anthem.

You can't expect parents who have never had a taste of science to like it and instill an interest in it in their children. Nor can you expect them to encourage their sons and daughters to become scientists if they themselves have never even seen one. Clarity begins at home. The poor teacher can't carry 100% of the load.

Under the existing conditions, the most practical way to attract more young women into technical careers seems to be to use all of the mass media of communication to show and tell the "human side" of science, particularly from the woman's angle. A nation-wide "Meet the Scientist" campaign is proposed and explained.

If there were half as much public information about the more down-to-earth phases of science as there have been about "rocketeering" and the "missilemen" during the past year, we would have little difficulty in attracting the cream of the crop of our scientifically-talented young women into technical careers. The sooner all of the mass media help the lady in the lab coat to become part of our diction, not just our fiction, the brighter the future of this country will be.

Note: Thanks to the splendid cooperation of this particular scientist with the Association's public information department, this paper was reported so widely by the press of the world that the Johns Hopkins University received nearly 400 newspaper and magazine clippings concerning it.

SSN

-30-

AAAS
Public Information

PRELIMINARY
BACKGROUND MATERIAL
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From Sidney S. Negus
Medical College of Virginia
Richmond, Virginia

126th Meeting of the American Association for the Advancement of Science (AAAS)
Chicago, December 26 - 31, 1959, inclusive

AAAS, conceived in Boston, 1847, formally organized September 20, 1848, in Philadelphia. Organized in Sections covering all principal fields of science: A-Mathematics; B-Physics; C-Chemistry; D-Astronomy; E-Geology and Geography; F-Zoological Sciences; G-Botanical Sciences; H-Anthropology; I-Psychology; K-Social and Economic Sciences; L-History and Philosophy of Science; M-Engineering; N-Medical Sciences; Nd-Dentistry; Np-Pharmacy; O-Agriculture; P-Industrial Science; and Q-Education. (X-miscellaneous societies.) 58,000 individual members. The AAAS has affiliated with it 285 societies, such as the American Chemical Society, American Society of Zoologists, American Psychological Association, American Physical Society, American Astronomical Society, and so forth; included are 45 academies of science. Their aggregate memberships exceed two million. Thus the AAAS is by far the largest and most influential group of related scientific organizations in the world. Consequently its annual meetings attract world-wide attention.

The AAAS is a nonprofit organization with a four-fold aim: To further the work of scientists, to facilitate cooperation among scientists, to make science more effective in promoting human welfare, and to increase public understanding of science. Headquarters are at 1515 Massachusetts Avenue, N. W., Washington 5, D. C. The Executive Officer is Dr. Dael Wolfle. Dr. Raymond L. Taylor, Associate Administrative Secretary, has charge of the arrangements for the Chicago Meeting. The principal officers of the AAAS are Dr. Paul E. Klopsteg, National Science Foundation, President; Dr. Chauncey D. Leake, Medical School, Ohio State University, President-Elect; and Dr. Wallace R. Brode, U. S. Department of State, Immediate Past President and Chairman of the Board of Directors. Dr. Leake will take office on January 15, 1960. Dr. Brode will give his presidential address at the Chicago Meeting.

The last five annual meetings have been held in Berkeley, Atlanta, New York, Indianapolis, and Washington. The 1960 Meeting will be held in Philadelphia and the 1961 one in Denver. The AAAS last met in Chicago 12 years ago.

The Chicago General Program will be available early in December. The 18 Sections of the AAAS and approximately 90 of its affiliated societies will participate in this great scientific meeting. There will be some 1200 papers on the program with approximately 1500 authors reporting recent developments in all branches of science from astronomy to zoology. Registration fee will be $3.00. Scores of science writers from the United States and abroad will cover the Meeting either directly from the AAAS Press, Radio, and Television Headquarters in the Hollywood Room of Hotel Morrison or indirectly from copies of abstracts and papers mailed to them. Thus Chicago will be the world center for news about science during the last week of December.

Sidney S. Negus, Medical College of Virginia, Richmond, is in charge of public information for the Meeting. The Chicago Committee on Public Information is headed by Allen H. Center, Vice-President in Charge of Public Relations, Leo Burnett Co., Inc., Prudential Plaza (CEntral 6-5959). The director of the press room will be Thelma C. Heatwole, Armour and Company, Research Division, Chicago (YArds 7-4141, Ext. 208). Dr. Negus' associate in charge of radio and television programs is Miss Patricia Hanson, TV Station WTTW, Channel 11, 1761 East Museum Drive, Chicago (MUseum 4-3800).

AAAS Science Theatre at Chicago Meeting - a selected list of the latest foreign and domestic scientific films will be shown during the week. AAAS Annual Exposition of Science and Industry in the Morrison Hotel - a large-scale series of exhibits by industries, research laboratories (commercial and academic), publishers, instrument companies, supply houses, and government agencies.

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LOCAL COMMITTEE ON PUBLIC INFORMATION

Chicago Meeting of the American Association for the Advancement of Science
December 26 to 31, Inclusive

CHAIRMAN

Allen H. Center, Vice-President in Charge of Public Relations, Leo Burnett Company, Inc., Prudential Plaza, Chicago. (CEntral 6-5959)

****

DIRECTOR OF RADIO AND TELEVISION PROGRAMS

Miss Patricia Hanson, TV Station WTTW, 1761 Museum Drive, Chicago. (MUseum 4-3800)

****

Miss Effie Alley, Chicago American, 326 West Madison Street, Chicago.

Frederick J. Ashley, Director of Public Relations, Museum of Science and Industry, 1761 Museum Drive, Chicago.

Miss Mildred Bruder, Director of Public Relations, The Chicago Public Library, Chicago.

Daniel G. Cahill, Manager of Public Relations, Illinois Institute of Technology, Armour Research, 10 West 35th Street, Chicago.

Robert Dressler, Program Manager, Television Station WNBQ, Merchandise Mart, Chicago.

A. C. Field, Program Manager, Television Station WGN, Inc., 441 North Michigan Avenue, Chicago.

Gene Gillette, Division News Manager, United Press International, 739 Daily News Building, Chicago.

Herbert Hibnick, Ph.D., Public Relations, The Toni Company, Merchandise Mart Plaza, Chicago.

Richard D. Johnson, Program Manager, Radio Station WMAQ, Merchandise Mart, Chicago.

Jack Laugen, Director of Information Services, Northwestern University, Evanston, Illinois.

William A. Logan, Director of Bureau of Public Information, American Dental Association, 222 East Superior, Chicago.

Dominic Quinn, Program Director, WLS, 1230 Washington Boulevard, Chicago.

Arthur J. Snider, Science Editor, Chicago Daily News, 400 West Madison Street, Chicago.

****

Miss Beverly J. Smith, Leo Burnett Company, Inc., Prudential Plaza, Chicago.
Secretary of the Committee

THE ASSOCIATION'S THIRTY-SECOND NEWCOMB CLEVELAND PRIZE

The thirty-second award of the American Association for the Advancement of Science Thousand Dollar Prize will be made at the Chicago meeting to the author of a noteworthy paper presented on a regular program of the meeting and representing an outstanding contribution to science. The generous donor of this award, administered by the Association since 1923, has been the late Newcomb Cleveland of New York. A life member of the Association, he preferred to remain anonymous until his death, in 1951. With a fund of $25,000 left as his bequest, the AAAS will continue to make this award, hereafter under the name, The Newcomb Cleveland Prize.

It was always Mr. Cleveland's wish that this Prize should be awarded each year to one of the younger scientists and that, preferably, it should not be divided among two or more investigators, whether working independently or in collaboration. The Prize is awarded upon the recommendation of a special committee, appointed each year, whose judgment is final.

It is not necessary that the prize winner be a member of the Association. To be eligible a paper shall consist primarily of the presentation for the first time of the results of the author's own research. Presidential and vice presidential addresses, review papers and comparable material that deals with either the research of others or with a review of the author's own previously published research accomplishments are not eligible.

-0-

VETERANS ADMINISTRATION
HOSPITAL
Palo Alto, California

YOUR FILE REFERENCE:

IN REPLY REFER TO:

November 23, 1959

Professor Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Mass.

Dear Norbert:

Thank you very much for putting me on the list to receive The Tempter. I appreciated especially your working out of the effects of the sin on the various people. I don't know much about the world of patents, but I suppose it must be very much as you describe. Perhaps the "fatal flaw" on which your characters get caught is the premise that the man who has the basic ideas works for the sort of benefits which are the natural goal of the other people. In most cases, I think the exploiters could give the basic thinker what he would value without falsifying their own and everybody else's position.

I ran across in our old files the other day a curious case of intellectual indebtedness--a letter which I wrote to you in 1954. In that letter I outlined to you the first version of the "double bind" hypothesis on which we have been working ever since. My indebtedness consists in this--it was because I was writing to you that I could think those thoughts on that day. Life is not so simple that we can say that this man contributes this idea and that man that idea. There is also the mass of thoughts that are generated by interaction.

With best wishes and congratulations on the book.

Yours sincerely,

Gregory Bateson, M.A.
Ethnologist

GB:hp

American Society for
TECHNION-
ISRAEL INSTITUTE OF TECHNOLOGY, Inc.

NATIONAL OFFICE: 1000 FIFTH AVENUE • NEW YORK 28, NEW YORK

Telephone: TRafalgar 9-8400

November 23, 1959

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

Dear Dr. Wiener:

In behalf of the officers and members of our Technological Conference Committee, I wish to thank you for having sponsored our recently concluded "Second Annual Conference on Science and Technology in Israel and the Middle East".

I know you will be pleased to learn that the Conference was indeed successful and represented a major contribution to the peaceful development of Israel and the Middle East.

The inclusion of your name as a member of the Sponsoring Committee certainly enhanced the prestige of the program, and we are most grateful.

With best wishes,

Sincerely yours,

Leonard Drapkin

Leonard Drapkin
Conference Secretary

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1-59

Printed in U. S. A. 99

NATIONAL SCIENCE FOUNDATION
WASHINGTON 25, D. C.

November 23, 1959

Professor Norbert Wiener
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

ref.: P-6946

Dear Professor Wiener:

Your name has been suggested for review of the enclosed proposal. A rating sheet and a franked envelope for the return of the proposal and your evaluation are also enclosed.

If you find yourself unable to complete the review by the requested date, will you return the proposal promptly for our further use?

Your comments and rating of this proposal will be held confidential and will aid us in arriving at a decision concerning its possible support. Your assistance in this evaluation is greatly appreciated.

Sincerely yours,

Arthur Grad (gpm)

Arthur Grad
Program Director for
Mathematical Sciences

Enclosures (3)

FL 9B-1

GPO 872437

[ms 3/23/60]

NATIONAL SCIENCE FOUNDATION

Division of Mathematical, Physical and Engineering Sciences

Proposal P-6946. Please return to

Arthur Grad.

RATING SHEET

If possible by December 14, 1959.

Brown University

Evaluation of research proposals submitted to the National Science Foundation should be based on the following factors:

(1) the scientific competence or potential growth of the investigator;
(2) the scientific merit of the problem; and
(3) the scientific resources and/or contributing interest of the institution.

If you do not consider yourself to be sufficiently informed to express an opinion on all three factors, please comment specifically on individual factors without assigning an overall rating in the space provided below.

(Signature) Prof. Norbert Wiener

(Department)

Other reviewers suggested:

Overall rating:

- ☐ Excellent
- ☐ Very Good
- ☐ Good
- ☐ Fair
- ☐ Poor

NSF FORM JUN 1957 9B-1 REPLACES NSF FORM 833.

TO REVIEWERS OF MATHEMATICAL SCIENCES PROPOSALS:

The instructions on the Rating Sheet, having been designed for use throughout the MPE Division, are not uniformly applicable. If you find some of the factors are irrevelant, or unimportant, please rate the proposal on whatever you may consider to be a sound and reasonable basis. It has been found that a somewhat discursive review, which describes the various pros and cons that have gone into making up the final judgment, is most helpful for comparing the relative merits of proposals.

The following definitions of the rating terms are supplied for your guidance and our assistance in the uniform rating of research proposals.

Excellent: Important research problems being undertaken by qualified mathematicians who can be expected to make substantial progress; presents an opportunity for a major contribution to basic knowledge; should be supported regardless of budgetary limitations.

Very Good: Does not quite measure up to the previous category insofar as the research problem may be of somewhat lesser significance, or there may be some question concerning the ability of the investigator to carry through the complete program; should be supported.

> Note: Present fiscal limitations in general preclude the granting of support to proposals not rated at least very good.

Good: Worthwhile research being undertaken by competent mathematicians, but more routine in nature; may be supported if funds are available.

Fair: Research proposal has serious deficiency which decreases probability of successful completion; not deserving of support in present form.

Poor: Inappropriate, technically unsatisfactory, or of a purely routine nature; not deserving of support.

The Foundation will be pleased to receive comments regarding the proposed budget, but this factor should be omitted from your overall merit rating, since the budgets of all proposals are adjusted prior to the awarding of grants.

Unless the reviewer specifically requests otherwise, certain review comments may be anonymously supplied to the proposer for his guidance in the preparation of a more satisfactory proposal in the case of declination, or for his assistance in the work in the case of grant.

APPLICATION FOR

NATIONAL SCIENCE FOUNDATION RESEARCH GRANT

1. Institution

Brown University, Providence 12, Rhode Island

2. Title

Some analytical and stochastic problems suggested by communication theory

3. Personnel

P. R. Masani

4. Period for which support in Research is Requested

June 10 - September 10, 1960, 1961 (two summers)

5. Description of proposed research

a. The prediction theory of q-variate stochastic processes is encumbered by questions of non-commutativity and of rank. The full-rank case has been dealt with by Wiener and the writer [5,6] among others: we have obtained relations between the prediction error matrix and the matricial spectral distribution function. Some headway has been made by us in the degenerate rank case [10,11,13,15]. This work would be continued. In particular, we would seek generalizations for arbitrary q of certain necessary and sufficient conditions obtained in [13,15] for q = 2 (bivariate processes).

b. The work just described ties up with other contemporary work in analysis. In [12] it is shown that our results in [5] compliment Potapov's extension of the Nevanlinna theory to J-contractive matrix-valued functions (Math. Reviews, 1956, p. 958). In [2*,3*] (unpublished), far reaching connections have been found between the bivariate degenerate theory and Nevanlinna's work on beschranktartige functions and Beurling's on spectral synthesis. This relationship between prediction theory and the work of Nevanlinna-Beurling and of Potapov, which is not yet clear, would be further investigated, as also its bearing on the Riemann monodromy problem for linear differential systems considered by G. D. Birkhoff and others.

c. Keeping the root-mean-square error criterion, the best predictor is non-linear, viz. the conditional expectation. An important problem is to find a suitable method for its computation. A direct method, rather crude, has been found by us [14]. But in some unpublished work Wiener and Kallianpur have indicated the first few steps of a much deeper approach. This is based on a non-linear "Wold Theorem", involving independent innovations, (the validity of which remains to be settled). Presumably, an analysis of the characteristic functional will replace the spectral analysis of the linear case.

Very little is yet known, but there are strong indications that the work will tie up with that of Wiener, Cameron and Martin on non-linear functionals, and that of Kakutani on Brownian polynomials, and may shed light on the coding problems of information theory. Another interesting possibility is that of getting the non-linear predictor for a scalar process by carrying out a linear prediction of a suitably defined infinite-dimensional process. These questions would be studied.

d. For continuous time, the Wiener Kolmogorov theory is incomplete even for ordinary scalar processes. The moving average in Wold's Theorem is here expressed by a stochastic integral with respect to a process of orthogonal increments. The writer would like to try to derive the latter process from the translation group and infinitesimal generator of the original, and so to clarify a very ingenious construction due to Hanner.

The writer is aware that he cannot make substantial headway on all the proposed topics in the course of two summers. He would, however, like to be free to deal with one or more of them, depending on his inclination and the opportunities available.

6. List of Publications

1. Multiplicative Riemann integration in normed rings, Trans. Amer. Math. Soc., 61 (1957), 147-192.

2. (With T. Vijayaraghavan). The analogue of Laurent's Theorem for a simply connected region, J. Indian Math. Soc. 16 (1952), 25-30.

3. The rational approximation of operator-valued functions, Proc. London Math. Soc., 6 (1956), pp. 43-58.

4. The Laurent factorization of operator-valued functions, Proc. London Math. Soc., 6 (1956), 59-69.

5. (With N. Wiener). The prediction theory of multivariate stochastic processes, Part I: the regularity condition, Acta Math. 98 (1957), 111-150.

6. (With N. Wiener). The prediction theory of multivariate stochastic processes, Part II: the linear predictor, Acta Math. 99 (1958), 93-137.

7. (With N. Wiener). Sur la prévision linéaire des processus stochastiques vectoriels à densité spectrale bornée, C. R., Acad. Sci., Paris 246 (1958), 1492-1495; 1655-1656.

8. Sur les processus vectoriels minimaux de rang maximal, C. R., Acad. Sci., Paris 246 (1958), 2215-2217.

9. Sur la prévision linéaire d'un processus vectoriel à densité spectrale non bornée, C. R., Acad. Sci., Paris 246 (1958), 2337-2339.

10. Sur la fonction génératrice d'un processus Stochastique vectoriel, C. R., Acad. Sci., Paris 249 (1959), 360-362.

11. Isomorphie entre les domaines temporel et spectral d'un processus vectoriel, regulier, C. R., Acad. Sci., Paris 249 (1959), 496-498.

12. Sur les fonctions matricielles de la classe de Hardy H_2, C. R., Acad. Sci., Paris 249 (1959), 873-875; 906-907.

13. (With N. Wiener). On bivariate stationary processes and the factorization of matrix-valued functions, Theory of Probability and its Applications, (Moscow) IV (1959, 322-331.

14. (With N. Wiener). Non-linear prediction, (to appear in "Survey and Contributions to Probability and Statistics"--a publication in honor of H. Cramer).

15. Cramer's Theorem on monotone matrix-valued functions and the Wold Decomposition, (to appear in "Survey and Contributions to Probability and Statistics."

Papers under preparation

1*. The prediction theory of multivariate stochastic processes, Part III: unbounded spectral densities.

2*. Bivariate stationary processes and beschranktartige functions.

3*. Prediction theory and the closure and extinction problems of Beurling.

7. Previous career

Born in Bombay, India, 1919. B.Sc. from the University of Bombay, 1940; A.M., Ph.D. from Harvard University in 1942, 1946, respectively.

Fellow, Royal Institute of Science, Bombay, 1940-41. Teaching Fellow and Tutor in Mathematics, Harvard University, 1943-45. Member, Institute for Advanced Study, Princeton, 1946-48, and for some time Assistant to Professor Marston Morse. Part-time Instructor in Mathematics, Princeton University, 1946-47. Senior Research Fellow, Tata Institute of Fundamental Research, Bombay, 1948-49. Professor of Mathematics, and Head of the Mathematics Department, The Institute of Science, Bombay, December, 1949 - August, 1959. Visited the Indian Statistical Institute, Calcutta, in 1945-46, in order to collaborate with Professor N. Wiener of M. I. T. Visiting Lecturer in Mathematics, Harvard University and Massachusetts Institute of Technology, 1957-58. Have visited and work at the Universities of Chicago, California (Los Angeles), Cambridge (England), and Paris (Sorbonne). Have been a member of the Boards of Studies in Mathematics of the Universities of Bombay, Baroda, and Karnatak.

Budget

In carrying out the proposed research, it would help substantially if the writer could travel and meet other workers in his and related fields. He would like to spend the summer of 1960 at Berkeley, California, in order to meet a number of workers in that area and also to attend the Fourth Berkeley Symposium on Mathematical Statistics and Probability. He would also like to travel during the summer of 1961, but would like to leave the destination open till later. The figure of $275 for traveling given below exceeds the round trip plane fare ($256) between Providence, Rhode Island, and San Francisco by a small amount to cover incidental travel expenses.

2/9 of academic salary ($7,500.00)		$1,666.66
Secretarial help		50.00
Travel		275.00
Social Security (3% of $1,666)		49.98
	Subtotal	$2,041.64
Overhead (15% of subtotal)		306.24
	Total (for 1 year)	$2,347.88
	Total (for 2 years)	$4,695.76

Respectfully submitted,

P. R. Masani

With the approval of

C. R. Adams, Chairman
Department of Mathematics

Z. R. Bliss
Provost of the University

Brown University
Providence 12, Rhode Island
November 5, 1959

OAKWOOD SCHOOL
FOUNDED 1796
POUGHKEEPSIE, NEW YORK

CHARLES W. HUTTON, PRINCIPAL

November 23, 1959

Mr. Norbert Wiener
53 Cedar Road
Belmont, Mass.

Dear Mr. Wiener:

On behalf of the Oakwood faculty and student body I would like to extend to you an invitation to be our Commencement speaker on Saturday afternoon, June 11. You would be interested to know that the graduating class helps in making this decision. They are particularly interested in you and your work in the field of mathematics. I am sure that we all feel the need to have a deeper appreciation in this particular field of academic experience.

Our Commencement exercises take place in the afternoon at two o'clock and will last for about an hour and a half. The speaker usually is given approximately one-half hour.

You may not be well acquainted with the background of Oakwood School, and,with this in mind, I am enclosing a reprint from the Bunting Handbook of Private Independent Schools.

It is the policy of the school to pay traveling expenses in addition to our usual honorarium for such service.

I am enclosing a personal letter of invitation from the secretary of the Senior Class.

Sincerely,

Charles Hutton

Charles W. Hutton
Principal

CWH:bw

[ans 11/30/59]

THE UNIVERSITY OF CHICAGO
CHICAGO 37 • ILLINOIS
DEPARTMENT OF MATHEMATICS

Nov. 23, 1955

Dear Wiener,

Thank you very much for your recent letter and the offer to supply reprints as available.

I don't suppose you have any copies left of nos. 73, 74, & 107, but as you might imagine I would have a particular interest in these articles. Among the more recent and I imagine more probably available items, I'd like especially to have nos. 191, 184-5, 180, 171, 169, 162, 156,

149, 142, 132, 125, 123, and 121. Actually, I have virtually no reprints of yours dated later than 1943 and would be interested in having copies of all of this work to the extent that it may be available.

As a quite debatable element in the deduction of a quid pro quo, I'm enclosing a reprint that mainly merely discusses work about axiomatic quantum field theory which is reported more technically in reprints you should already have.

Irving Segal

1834 N. Hartford Street
Arlington 1, Virginia
24 November 1959

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

Dear Professor Wiener:

The Applied Mathematics Committee of the American Mathematical Society has under consideration for its 1961 Spring Symposium on applied mathematics the title "Mathematical Problems in Biological Sciences." Many of the problems suggested by this title are not generally known by professional mathematicians. Indeed, many such problems have not been suitably formulated. Furthermore, the conceptual bases of biological theories appear to be undergoing rapid changes as a result of recent experimental discoveries. Mathematically a symposium of this general topic might include problems which belong to hydrodynamics, information theory, combinatorial analysis, probability theory, and the like. However, such a program would be rather meaningless and even perhaps futile unless a considerable proportion of the program was concerned primarily with biological and medical problems and many of the speakers were to be selected from professional biologists and medical men.

A number of the Committee feel that the time is now ripe for mathematicians to become better acquainted with the challenging problems presented by the biological and medical fields, something beyond the realm of strict statistics.

No doubt you have many ideas along these lines. I am wondering if you would care to offer any suggestions with regard to such a symposium, its organization, individuals who might help a symposium committee, speakers, and any other thoughts you might care to express?

Yours sincerely,

Richard S. Burington

Richard S. Burington, Chairman
Applied Mathematics Committee,
American Mathematical Society

[ans 12/14/59]

November 24, 1959

Jack Kotik
2 Spruce Park
Syosset, L.I., N.Y.

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

Dear Professor Weiner:

You may remember me as a graduate student at M.I.T. (1948 - 1952), or perhaps as a friend of Teddy Shedlovsky. In any case a problem regarding Fourier transforms has arisen and I can think of no one more suitable to submit it to. The question is this: let $f(x)$ and $g(w)$ be ordinary Fourier transforms of each other. Is it possible for f and g each to vanish inside some interval? This question came up in my work on the theory of ships having minimum wave resistance.

Best regards,

Jack Kotik

Jack Kotik

$0 - 2\pi$

[ans 1/8/60]

AGENCJA ROBOTNICZA
REDAKCJA
Warszawa, Pl. Starynkiewicza 7

Warsaw, Poland,
~~Warszawa,~~ November 24th, 59.

Dear Sir,

The Editors of the "Science and Technics" press bulletin of the Worker's Agency /ARPRESS/ take the liberty of addressing you with the kind invitation to take part in our New Year's Questionnaire.

Similiar invitations will be directed to all prominent scientists in the world.

We request you for a prompt, popularly worded answer /preferably with your photograph and autograph included/.

In expectation of your valuable answer, we remain

yours faithfully

Hanna Samsonowska
Warszawa Wisła
Director of the "Science and Technics" Bulletin W.A.
/ARPRESS/

[Jens 12-7-59]

1. Which was recently the subject of your studies - did the year 1959 bring any interesting results of your personal scientific research ?

2. Which achievment in your branch of knowledge do you consider to be in the year 1959 of the utmost world-importance ?

3. What steps should be taken in your opinion for the sake of maximally accelerating the world-scale development of that particular discipline of science, which you are representing.

OFFICE OF
THE EDITOR

ENCYCLOPÆDIA BRITANNICA
425 N. MICHIGAN AVENUE • CHICAGO 11, ILLINOIS

November
25
1959

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

Dear Professor Wiener:

Kindly refer to our recent letter inviting you to prepare the article ROBOT for the Encyclopaedia Britannica.

We are anxious to make this assignment and shall appreciate hearing from you as soon as possible.

Sincerely yours,

John V. Dodge

John V. Dodge
Managing Editor

JVD:ag

UNIVERSITY of PENNSYLVANIA

PHILADELPHIA 4

The College

THE PSYCHOLOGICAL LABORATORY AND CLINIC

November 25, 1959

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

Dear Dr. Wiener:

I am writing to ask permission to use a selection from your book:

The Human Use of Human Beings, 1954, pp. 26-27

The quotation will appear in a book entitled Plans and the Structure of Behavior by George Miller, Eugene Galanter, and Karl Pribram. The volume will be published by Henry Holt & Company in 1960.

Full credit will, of course, be given.

Thank you very much.

Yours truly,

Eugene Galanter

Eugene Galanter (jw)

EG/jw

[ans 1/8/60]

Mr. F. F. Johnson
c/o NDA
5 New Street
White Plains, New York

25 November 1959

Professor Norbert Wiener
Massachusetts Institute of Technology
Cambridge 39
Massachusetts

Dear Sir:

I have been trying to understand Arthur Eddington's ideas as expressed in his "Fundamental Theory". He tells a beautiful story, but I am not sure the tale is as straightforward as he wants me to believe. I would very much like to have your thoughts on the program that Eddington attempted.

I would like to identify myself to an extent that will help you address me. I am a competent physicist, MIT class of '50, and am familiar with the main results of relativity and quantum mechanics. My favorite philosophy book is Herman Weyl's. I have read Dingle on Eddington (Dingle is a fool) and looked at a recent British book purporting to clarify Eddington (complete failure). I lack the competence to either discard Eddington or delight in his achievement, and shall appreciate your thoughts on his work.

Very truly yours,

Frank F. Johnson

FFJ:egf

Frank F. Johnson

November 25, 1959

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

Dear Dr. Weiner:

Enclosed is a check for $48.26 to cover the transportation expense incurred by you on your recent trip to Princeton.

Please permit me to speak for the entire Princeton Section in thanking you for a most interesting and stimulating evening.

Very truly yours,

R. D. Lohman

R. D. Lohman
Secretary-Treasurer
Princeton Section - IRE

RDL:bec

Encl.(Check #280)

D. STANLEY-JONES, F.R.C.S.

Buckshead,
Townshend,
Hayle, Cornwall.

'PHONE: LEEDSTOWN 223.

25th November 1959

Dear Dr. Wiener,

I have heard from the Pergamon Press that you have kindly consented to write a Foreword to my book on Kybernetics of Natural Systems. I am indeed grateful for this further expression of your good will.

I got hold of your Nonlinear Promblems in Random Theory. Many things in it I found most attractive. I have taken the liberty of quoting your paragraph on frequency modulation, and its advantage over amplitude modulation; this seems to me pertinent to the incoming sensory impulses of the body, as a necessary consequence of the all-or-none law. I have also corrected my ambiguity in regard to the value of Statistical methods - I meant to say that for many properties of neural activity, only a statistical (as distinct from individual) treatment had hitherto seemed possible. I am writing essentially for biologists, physiologists, and medical men in general, rather than for trained mathematicians; and so I have kept my treatment almost entirely free of mathematics.

With again my many thanks,
Cordially yours,

D. Stanley-Jones

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

[ans 12/21/59]

Stanford Law School
Stanford, California
November 26, 1959

Prof. Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Mr. Wiener:

I have recently finished reading your The Human Use of Human Beings and am interested in the application of the philosophy therein to the legal profession.

The law is certainly a field which lags far behind in effecient solution of the problems of communication and information. I believe the first step toward efficiency is the development of a notation which will permit actual cases to be set in logical relation with one another and which will conceivably allow the body of case law to be subjected to computer analysis. If such can be done without introducing too much "noise" into the analysis, it should be a short step to a mechanized process which will efficiently discover all the rational solutions to a given legal problem, as well as the relevant cases and statutes.

Every law professor makes use of the embryo of such a notation in connection with his teaching, but there is little standardization and few of them appear useful for more than description. I would like to hear whether you know of anyone who has developed such a notation or who is working on a project such as I have described. I would also appreciate any mathematical suggestions which you might make as a basis for such a notation. I am a third year law student with little mathematical background and little knowledge of the notational requirements of computers, so I would also appreciate some indication of the most useful treatises and other works in these areas.

Thank you for anything you can do along these lines.

Sincerely,

Stephen C. Birdlebough

[ans 12/7/59]

Mining department,
The university,
Nottingham
U. K.

27.11.59.

Dear Mr. Wiener,

I was very much impressed by your book called 'I am a Mathematician'. It is rather late for me to ~~to~~ read this book. As you have indicated in your book it is never late for scientific interest and its investigation.

The interest of mathematic has been growing in me for a long time and consequently I love mathematics very much as for it can be applied to physical phenomena At present, I am working on Turbulence the topic you come across in beginning of your career when you meet G.I. Taylor in Cambridge.

I want some advice on this problem. Can you tell me how this topic can be full explained by Mathematical priciple? What type of Mathematic should I master

to cope with this problem. what is the way to master this mathematical topic? As every body in this field know that Turbulence is a random function of space and time considered on molar scale. A lot of characteristic of this phenomenon are available ~~in~~, but unfortunately none of them completely explain this Turbulence. Many people in this country and also in your own country have tried to give satisfactory explaination of the understanding of Turbulence but I think their explainations do not satisfy.

For this reason, I am writing this letter to have some kind advice from a man who has truely devoted his life in seeking truth from nature. I have plucked courage to write this letter to know the ~~truth~~ right way.

And I hope you would not disappoint me. Thanks you very much for the same.

Yours sincerely,

R. S. Azad

[ans 12/7/59]

Note :- The instruments, I am using by the way are electronic one (Hot-wire anemometer).

My ADDRESS.

R. S. Azad,
Mining depatment.
The university ~~Nottin~~
NOTTINGHAM.
U. K.

Room 2-276

November 27, 1959

Mr. Jacques Chambrun
Jacques Chambrun, Inc.
745 Fifth Avenue
New York 22, N.Y.

Dear Mr. Chambrun:

I am afraid that I find myself unable to offer you the agency for my writings.

Regretfully yours,

Norbert Wiener

NW/emr

Room 2-276

November 27, 1959

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

Dear Jason:

Many thanks for your warning concerning the person who solicits an agency for my writings. You may rest assured that I shall have nothing to do with him. Other people are soliciting a similar agency and I am adopting an extremely cautious attitude.

The book seems to be going like hotcakes. All the book stores I know around Boston have reordered it -- some of them twice. It is attracting a good deal of attention locally and I think we'll do well in the Christmas trade. Outside of Boston I don't know, but your last note reassures me greatly. Two further comments: I have been assured by V. Bush that my understanding of the heavy side pupine I feel is fully correct, and he has given me chapter and verse. Moreover, a young man (I don't know whether graduate student or instructor) in engineering administration has told me that he likes my book very much but can't understand what cause Gregory James had to repent. This interests me deeply on several accounts. 1) it goes to prove that I have not misinterpreted the code of ethics (which engineering administrators live), 2) it has confirmed my feeling for the necessity of writing the book, 3) it represents an important comment on the psychology behind Mr. Van Doren and the general attitude to his actions.

Mr. Van Doren has made a public appearance at exactly the time that is most conducive to the sales of my book. In view of his activities, if there were any way in which this matter can be but rigged, I should be inclined to suspect not merely him but myself. As, however, my writing of the book has months or years of clear priority, I can sleep easily.

I thank you again for your cooperation and what has proven to be a successful enterprise for both of us. With best wishes from house to house

Sincerely yours

NW/emr

Norbert Wiener

[ans 11/30/59]

Room 2-276

November 27, 1959

Herrn
Prof. Dr. O. Heckmann
Hamburger Sternwarte
Hamburg-Bergedorf
Gojenbergsweg 112
Deutschland

Sehr geehrter Herr Kollege:

Ich habe den Eindruck, dass ich Ihnen meine Annahme zu Ihrer Einladung schon geschickt habe, auch habe ich Ihnen bereits ein Telegramm geschickt, worin ich diese Annahme wiederhole.

Es ist mir eine grosse Freude und Ehre, Ihnen etwas über die Grundlagen der Kybernetik mitzuteilen. Im September werde ich mit meiner Frau in Hannover sein. Ich nehme Ihr Anerbieten, meine Reise zu bezahlen, an, während ich persönlich die Kosten der Reise meiner Frau besorge.

Mit vorzüglicher Hochachtung

Ihr sehr ergebener

Norbert Wiener

NW/emr

[aus 2/6/60]

2614 Lane Avenue
Anderson, South Carolina
November 28th, 1959

Dr, Norbert Weiner
Massachusetts Institute
of Technology
Boston, Massachusetts

Dear Dr. Weiner;

For many years I've been seeking a solution to the famous unsolved problem of angular trisection with straight edge and compass. Now I think I've found the key to the solution of the problem. While the solution equation for an infinite number of angles is a curvilinear line that can't be drawn with a compass and straight edge, nevertheless, for any single angle I'm certain that a point on that curvilinear line can be determined that will result in trisection of that angle within the allowance of the stated problem.

If my solution to this "unsolved" problem should be correct, is there any academic recognition, earned or honorary, that I might be able to earn through M.I.T.?

I'm sorry I wasn't able to get in touch with you by telephone recently when I was in Boston, so I thought I would write you now regarding the matter.

This problem of angular trisection has been immensely interesting to me through the years and I would not only greatly appreciate your comments but also a suggestion as to the type of proof you would require for this problem.

Respectfully,

Robert Z. Schreffler

Robert Z. Schreffler

[ans 12/7/59]

November 29, 1959

Dr. Norbert Weiner
Prof. of Mathematics,
The Massachusetts Institute
of Technology, Cambridge, Mass.

Dear Dr. Weiner:-

I am not a mathematician. But I like to grasp an ever firmer hold of that immensity of reality of which I & and all of earthly life are but barest trifles. So at age of 55 as I have done most of my life, I recently lifted a book off a library shelf that seemed to hold promise of intellectual adventure.

There is a few-years-old, modernistic one-story stone brick, picture-glass windows, branch of the Chicago Public Library (in Uptown section of our "Windy City") that I obtain books from. And there on a special shelf in the center of the aisle, I spied your "I Am a Mathematician". The name of the author "rang a bell" as I had occasionally in recent years chanced across it, usually in connection with a mysterious word "Cybernetics." This, together with the fact that in my high school days (alas, I never was fortunate enough — which I regret, at times, to this day — to go to college) I always obtained the highest marks in mathematics (apparently abstract reasoning combined with poor mechanical ability being an inherent characteristic of my mental equipment), for these reasons I decided to read the volume. And I am very glad that

(over)

I did.

What one goes through in a lifetime! Inheritence and circumstance wind us up and each of us goes through innumerable experiences that in retrospect, through memory, is viewed as a screen picture of long duration; sometimes we wonder who is that guy that resembles ourself!

As I read your autobiography, both as a mathematician (a man of science) and as a fellow human, I was struck not only by the difficulties, griefs, etc (which are the common lot of all of us in one fashion or another) but also by your exceptional intellectual inheritence, the higher sensitivity, stronger ethical impulses, and how fortunate you were (in spite of certain forgiveable shortcomings) of having a dad of principles and great intellectual integrety.

And it is clear with your gifts of mind and heart you made your life one of interest, pride to your family and a great contribution to your fellowmen. Man, the animal, multiplying greatly (in spite of his periodic outbursts of barbaric violence in wars), needs knowledge desperately to master nature ever more so as to provide him with the things so necessary for existence, needs knowledge to master his own evolved emotions; those who through the hardest kind of effort contribute, as you did so splendidly, to science have made a great gift to the race. Mathematician and biologist, physicist and psychiatrist, astronomer and chemist, etc — all scientists, each defending upon

his ability, training and the opportunities he finds around him, make contributions, of various degrees, all adding up to greater security, comfort, health and happiness for our species; to man's understanding of the universe.

None of us asked to exist. We come forth because of a chain of causes and effects. We come into the world, eventually open our eyes wide, bewildered by so many puzzling phenomena. The true scientist seemingly never loses that bewilderment, or rather the true scholar. He searches. He want to know. He takes nothing for granted. He uses the tools of the past but tries to invent new, better ones. Whether he fills pages (or blackboard) with strange symbols, or peers through a microscope at a world of mininess or studies the rocky earth or looks up into infinity or reads endless volumes of history, philosophy, etc, he is searching, tirelessly accumulating grain by grain, sometimes a handful of grains, if fortunate! — one one discovery — understanding of a greater area about him and within him.

Man wants to know, desperately needs to know pertinent facts so that in the struggle for existance of all of life, he can hold his own and prosper.

Man has come a long, long way since he came forth from tree dwelling cousins. He has traveled far (from the days he huddled in caves) in many parts of the world. But in control of his evolved anti-social instincts (irrationality, superstition, undue hate, fear, jealousy, suspicion, greed, domineering use of violence, etc), he has not gone far enough to more than so as

(over)

match his technical proficiency.

In spite of all that is written and said in defense of optimism (mere whistling of a little boy passing the cemetary), it doesn't look too well for the future of humanity. We must never put out yes, our tiny ember of hope; desperately we must blow to start try to rekindle a larger brighter fire that will truly warm the human race huddled in bewilderment on this pebble planet that spins and orbits and rushes through the chasm of eternity; a mystery of mysteries, apparently ever beyond our comprehension.

yet, ever larger wars of many nations (and in between, innumerable smaller ones) and now the endless threat of a greater war yet that will wipe out our species, all because of man's immaturity, his too slow evolution in control over his ferocious nature, does not justify much optimism. In a few years nuclear bombs will be considered somewhat "innocent firecrackers" compared to the far, far vaster destructive powers of newer gadgets and processes, and all lands will have them!

How to control man's wildness (especially when in power over nations) and how to quickly unite every nation into a country of the world with a central government disarmament, and conquest of poverty, disease, ignorance (especially of our evolution and instincts), should be the urgent tasks if man cares to exist, and not join the long group of extinct creatures such as dodo and dinasaur.

I was greatly pleased to read your fine awareness of this problem, the problem that remaining unsolved will make everything else meaningless, for man will be gone.

In the saner, far more civilized, not so jungle-like, world of tomorrow (if man is granted a prolonged tomorrow) not the most egotistic grasping, violent members of our race will be in power but the most modest, ethical, wise, kindly ones. The scholar will then truly come into his own. History books, statues, honors ~~will~~ press, radio-T.V, movies, will glorify such finer examples of humanity until like a snowball rolling down a hill accumulates more snow and assumes larger dimensions, so will ever more people cling to the ideals of science and learning, to the principles of reason and peace.

I want to thank you warmly for a rewarding book by a person full of the search of knowledge, love of teaching, and the best of human impulses.

Sincerely yours,

S. G. Herman

847 Sunnyside Ave
Chicago 40, Ill.

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Jason Epstein, EDITOR

November 30, 1959

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

Dear Norbert:

Many thanks for your note. I am delighted that the book is going well in Boston. As far as I can tell, it is going well heretoo and we all look forward to a long and steady sale.

I am as much interested as you by the reaction of the young student who wondered why Gregory James repented. Similarly I wondered about the undergraduates at Columbia who petitioned for Van Doren's reinstatement, but I am against a blank wall. I simply can't understand the state of mind in which such questions are possible. You say that this is the code of ethics by which engineering administrators live and I am willing to believe it, but only by means of a suspension of disbelief.

With best wishes from house to house.

Yours,

Jason Epstein

[ans 12/4/59]

JOHN J. IAGO
302 FIDELITY BUILDING
BALTIMORE 1, MD.

November 30, 1959

Mrs. Margaret M. Kruger
Secretary to Professor Wiener
Massachusetts Institute of Technology
Cambridge 39, Mass.

Dear Mrs. Kruger:

Presumably in response to a letter addressed to you under date of October 9, there arrived here, during an extended absence on my part, a copy of a magazine containing the text of an interview with Professor Wiener - presumably the one you referred to in your letter of September 28.

I greatly appreciate having this available for reading and for possible future reference. Please accept my thanks for your kindness. I appreciate the trouble to which you put yourself in your effort to satisfy my curiosity.

I hope that if an opportunity for reciprocity should ever present itself, I shall have the pleasure of availing myself of it.

With thanks again, I am

Sincerely yours,

John J Iago

JJI:MTH

Room 2-276

November 30, 1959

Mr. Charles W. Hutton
Principal
Oakwood School
Poughkeepsie, N.Y.

Dear Mr. Hutton:

I regret that I shall be unable to accept the kind invitation of Miss Miller and yourself to lecture at Commencement. As things appear to me at present, I will probably be on my way abroad at the time. I regret very much that I will not have the opportunity to meet you, your colleagues and your students.

Sincerely yours,

Norbert Wiener

NW/emr