CORRESPONDENCE April, 1957



My dear Prof Wiener: your word about "child Prodigies" has gone for, as you will See by the melozed. I belonged at the other end of the line; and was 20 a few weeks after 9 entered B. U. as a freshman. I wonder of

Joing Hua is still running! Hwong up, join the emerities crowd, and come to California. I you think this you are mistaken for once! Cordially Robert E. Bruce

I 10, 1957 Former Child Prodigy Speaks With Authority

United Press Staff Correspondent licity could be permanently dam master's degree at 17 and doctor-said. CAMBRIDGE, Mass. (UP) — aging. It certainly is harmful.? ate at 18. Norbert Wiener, one of the few child prodigies ever to become Dr. Wiener, who once wrote a The child prodigy, Dr. Wiener Wiener to become Dr. Wiener, who once wrote a the child prodigy, Dr. Wiener the prodigy. It's certainoutstandingly successful as an book on prodigies, was certainly says, should be allowed to develop by no time to put him in a goldadult, says television quiz shows an egghead in embryo himself. He freely and be treated with sym-fish bowl." create a set of false values for spoke both English and French at pathy, intelligence and forebearbright youngsters. 3. At 8 he was reading Darwin's ance.

achuetts Institute of Technology, Now a roly poly extrovert sport, the post-atomic bomb world," he state crime laboratory turn thinks the "moral environment" ing a gray chin beard, Dr. Weiner said. "He has to face problems at murder victim over to surrounding a young quiz whizz has authored such profound tomes time when he is not emotionally thropologists Tuesday could hurt his chances of becom- as "The Fourier Integral and Cer. prepared." ing a useful citizen.

ut hes

"The arbitrariness and ease monic Analysis in Complex Do prodigy, he added, is that he told them they' which money is dished out," he main." He rates 27 lines in "Who's doesn't belong on either stage, court with the said, "appears to me to be an Who in America." insult to people who have to His father, a Harvard professor complete child's." work for a living, who could speak 40 languages "The prodigy is by no means America"

"The guiz show is not the sort kept his son from the public rare, but environmental conditions was ki of environment that a child prodi-lgaze. Young Wiener entered callaver only about one-tenth of child-1200

By JAMES S. GEGGIS Igy should be exposed to. The public lege diticity at age 11. He had histren who are potentially gifted." he

Wiener, now 62 and a professor of advanced mathematics at Mass-"Natural History." The really intelligent child uckly learns of the instability of MADISON, Wis. (UP) — University of Wiscon tain of its Applications" and "Har The biggest difficulty for the William Laughlin,

was identif



THE ELECTRIC PRODUCTS COMPANY

1725 CLARKSTONE ROAD CLEVELAND 12, OHIO

April 1, 1957

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

Dear Dr. Wiener:

. .

I have just heard with great interest that you will address a luncheon meeting here in Cleveland on April 18. I am especially interested in hearing you address the coming conference on " Human Values in an Age of Automation " since I am very much interested in the subject.

I cannot forego this opportunity to enclose a copy of my little piece which bears on the subject because its writing was largely motivated by a careful reading of your book " The Human Use of Human Beings."

I hope to have the pleasure of hearing you in Cleveland.

Cordially yours,

Rosultal

Lou Rosenthal

OFFICIAL PUBLICATION OF

OBSERVER

THE FOREMEN'S CLUB OF GREATER CLEVELAND

"DEDICATED TO THE GROWTH AND DEVELOPMENT OF ITS MEMBERS"

Vol. X No. 25

Editor - Lou Rosenthal

January, 1956

NATIONAL SOCIATION OF

Editorial

A FOREMAN LOOKS AT AUTOMATION

" The Serenity to Accept"

The headlines are becoming quite monotonous: Automation revolution spreads to new horizons ... Pay envelopes bulge ... More mass-production ... Machines without men ... The first automation strike.

The great force of automation, with its promise of sweeping changes, brings with it some important problems for the industrial supervisor. The biggest of these is the question of how automation will affect the pattern of supervision.

It may seem obvious that the introduction of automation will produce a general reduction of the need for supervision. But persistent effort to think the problem through shows that this belief is the result of a logical fallacy, of stressing one affect of the assumed change and leaving out others.

To the modern foreman, there is nothing mysterious about production. It results from material, men and machinery; natural resources, human energy and tools. Our chances for adjusting the three factors of production to their new loads are far from hopeless.

Many of us, who read an article or attend a lecture on automation, often return to our jobs with a feeling that our own company has not kept pace with the march of progress. A new, magic world has been unfolded before our eyes, but we seem powerless to become a part of it because our companies have been slow in taking on the "New Look."

Before a good look can be had at the factors involved in automation, it is necessary to clear away misunderstandings which we believe to be some narrow thinking on this subject by many people. It is this writer's belief that a lavish accumulation of expensive machinery will not of itself increase the productive efficiency of a plant. The glamour of such equipment and the claims made for it often presents a tempting proposition, but it only pays dividends when the size of the plant is sufficient to warrant the purchase and insure its continuous use. We further believe that a small producer has many advantages which over-mechanization tends to destroy.

We must admit that mass-production has done much to wear away the "professional status" of the foreman. Nor has management's attitude always helped his status. However, we also believe that if we were to remove the challenges and the demands for efficiency and excellence that competition presents to all of us, we would become placid and eventually be faced with much greater problems.

What can I as a foreman do to keep pace with an industrial world that is changing at an ever-increasing pace? Few questions are as challenging as this one, and here is our attempt at an answer.

Fortunately for the cause of management, it is only as an individual that you or I can do anything at all. And that is where you as an individual can respond with imagination and efficiency. Clearly the foundation for the long pull ahead into a successful future in the "automation era" must be laid on the broad base of professional competence. The belief that we can hope to succeed through some measure of specialization and narrow concentration is simply not true. The problem of staying with our jobs, and trying to anticipate the penetration of automation to some extent, is basically a problem of competition. The constructive course is to welcome the expanding opportunities now being provided and be sure that we are prepared to take advantage of the situation as it affects our own companies. Perhaps the best way to meet competition is to be the maker of it. If, instead of watching the other fellow for the first move, you can be the one being watched.

If we were to leave one guiding thought, it would be that you take full advantage of your NAF membership. Come what may, the National Association of Foremen is certain to remain a dominant factor in the industrial life of the nation. For supervision is grounded in the nature of the modern industrial system. There is as yet no way to buy an automation machine because no such machine can exist except in relation to a mechanical problem. The industrial supervisor will continue to be the dynamic, life-giving element of every business.

"Lord grant me the serenity to accept the things I cannot change, the courage to change the things I can, and the wisdom to know the difference."

We would not like to see Niebuhr's prayer carried too far into industry. Nevertheless, we will admit that there are some things that need changing that can't be changed.

" NOMINATION NIGHT " Sponsored by THE JACK AND HEINTZ MANAGEMENT TEAM

YOU CAN'T AFFORD TO MISS THIS FIVE-STAR PROGRAM A New Dimension in Monthly Meetings

HIGHLIGHTS: Dinner at 6:30 .. Carl F. Herbold and George Kenning, Jack and Heintz executives will discuss "The New Look for '56" ... Give-and-take question and answer period ... Nomination of officers... The famed Jack and Heintz Employees' Choral Group ... Co-chairman, Bud Maeder.

"In a balanced organization, working towards a common objective, there is success"

ABOUT JACK AND HEINTZ, INC.

The management personnel pinch that's giving many companies bad headaches shows up nowhere less than in the present Jack and Heintz organization. The company and its dynamic, forsighted president, Frank R. Kohnstamm, laid a solid foundation for its management development in 1952.

During the war, Jack and Heintz, had ballooned largely on its hurry-up design and production of aircraft starters. But when the shooting stopped, so did the contracts. The company faced one of the country's biggest peacetime conversion problems.

It did not take President Khonstamm long to perceive his company's need for an organized manager development program. The search was on for qualified people who would guide or promote a successful management team.

Carl F. Herbold, with 21 years experience with the Westinghouse Electric Corp., was added to the staff in 1952 as director of industrial relations. Mr. Herbold teamed with Mrs. Myrene N. Ewing, industrial relations counselor at Fenn College, to initiate the first program. They organized, developed and conducted the foremen's workshop.

George Kenning, formerly affiliated with the General Motors Institute, was added to the staff about a year ago. Mr. Kenning's responsibilities are in the area of coordinating and integrating the various levels of management. He spearheads the expanded program.

Management development is paying off at Jack and Heintz. After several years of systematic planning, organizing and working together, the J. and H. management team is able to launch a program that will have far-reaching effects on many of the problems of the company.

Members who attended the J. and H. meeting a year ago returned to their jobs with a general awareness that the company will continue to make an indelible impression on the growing aircraft and electrical equipment market. Now, we are privileged to have a close look at the present and future impact of an enlightened and progressive management development program on a rapidly expanding field while the greatest of technoligical achievements is still a-borning.

MEMBERS FROLIC AT CHRISTMAS PARTY

Several hundred members and their wives had a wonderful time at the Club's annual Christmas party on December 21. Top-flight performers from Gene Carroll Studios provided a versatile and exciting floor show. Music for the show and dancing was provided by the ENVOYS. Special thanks to Russell Dadd and his committee for a most enjoyable evening.

HARRIS SEYBOLD VETERAN RETIRES

Forty-six years with the Harris organization. That's the service record of Walter Melville, topnotch employee, who retired as 1955 drew to an end ... Walter was honored recently by his associates at the company's plant. John Kohler, president of the Harris Seybold Foremen's group, presented him with a beautiful mahogany case, suitably engraved and containing 46 silver dollars, symbolic of his many years of loyal service to the Harris organization ... Happy fishing, Walter.

William C. Bell passed away December 20. The Kroger Company of Cleveland loses a talented executive and the club loses a loyal friend and supporter. The Club extends its deepest sympathies to Mr. Bell's family.

FIELD TRIP: Harry Clabaugh reports that his committee has arranged an interesting OBSERVATION TOUR through the Cleveland Graphite Bronze plant for February 6. Watch for announcements of full details.

JOE FRONIEK WINS GOODACRE AWARD

Joe Froniek, crack foreman at the Jack and Heintz plant, also proved to be crack student at the Club's Management Development course. Dr. Daniel M. Goodacre, class instructor, cooked up the clever Cleveland Foremen's Club "Oscar " as a surprise feature of the final session of the classes which have been meeting at Hotel Carter for the past eight weeks ... We understand that Joe's genuine, lively interest in the discussion periods contributed much to the success of the classes.

NEXT MONTH: The OBSERVER will publish the names of NEW MEMBERS.



DOUBLEDAY & COMPANY, INC., 575 MADISON AVENUE, NEW YORK 22 MURRAY HILL 8-5300

April 2, 1957

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

Dear Professor Weiner:

The A. & A. Distributors of 3 Brewster Terrace, Brookline 46, Mass., who sell Anchor books to a number of accounts in Boston and Cambridge, have asked us whether you would be good enough to autograph copies of THE HUMAN USE OF HUMAN BEINGS in one of its accounts near M. I. T. According to them you are a regular customer in the account in question.

This letter is simply to tell you that we shall advise the A. & A. Distributors to get directly in touch with you. I hope that you will find their proposal congenial.

With best wishes to you and Mrs. Weiner.

Sincerely yours,

Jason Epstein

JE jdm

TAMAGAWA GAKUEN

MACHIDA • MACHI, TOKYO, JAPAN.

DATE April 2, 1957

Prof Norbert Wiener Massachusetts Institute of Technology Cambridge 39, Mass., U.S.A.

Dear Prof. Wiener:

I have learned your name through the books of which we are making study of "The Education of Karl Witte, 1913," English Translation and others in Japanese language Translation, and the latter book is written by you under the title of "Ex-Prodigy, My Childhood and Youth". Will you kindly give us your answer to the following points.

- 1. Your frank opinion on early or prodigy education since you are the recipient of such education successfully.
- 2. Some memories of your father on education and in education.
- 3. If you happened to know whereabouts of. Mr. Adof Berle to be looked up Miss. Lina Berle Miss. Winifred Sackville Stoner 10
- 4. Have your brothers and sisters also were the recipients of the same education as you were? And any material you think indispensable for furthering the study please furnish them to us.

We are trying to make as completely as possibly of your father's education as possible and introduce the theory and method to the education of Japan so the study can be as one of the guiding principles in education here in Japan.

I am now arranging with Goodspeed's Book Shop to get a micro-film copy of original German publication. We only have English translation of the book titled "The Education of Karl Witte, 1913" now.

Mr. Haynes wrote us your present location which we are deeply appreciating his kind assistance.

Thanking you in advance and looking forward of hearing from you, sir.

With cordial greetings and high esteem, I am,

Sincerely yours

Kuniyoshi Obara

Kuniyoshi Obara President of Tamagawa University.

TAMAGAWA GAKUEN PRESIDENT ROOM

> Machida - Machi, Tokyo, Japan.

DATE April 2, 1957

P.S. Further, we are following the "Whobeman Education" for the past forty years and made several education inspection trips abroad. For the cause of education we published many classic books on education of both East and West. As for our works I shall send you by separate mail a copy of little pamphlet for your inspection.

K. Obarce

Kuniyoshi Obara President of Tamagawa University.

UNIVERSITY EXTENSION DIVISION SUMMER SESSIONS LATE AFTERNOON, EVENING, AND SATURDAY CLASSES

April 3, 1957

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

Dear Dr. Wiener:

OFFICE OF THE DIRECTOR

I am pleased to know that you are planning to attend the Inauguration of Chancellor Edward H. Litchfield May 9-11, 1957. I hope the enclosed instruction booklet will be of some assistance to you in making your plans.

If you will need housing accommodations for the period of the Inauguration, will you please fill out the enclosed form and return it to Dr. T. W. Biddle at your earliest convenience.

I hope you will write me if you have any questions about the Inauguration that are not covered in the booklet.

Sincerely yours,

Desse Witchning

Viers W. Adams, Chairman Inauguration Coordinating Committee

[ans 5/7/57]

WWA/rmr Enclosures

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE 39, MASS.

DEPARTMENT OF MATHEMATICS

1

April 4, 1957

Memorandum to:

Professor Norbert Wiener Room 2-276 MIT

Thank you for showing me Dr. P. Masani's letter concerning the possibility of his coming here next year on a Rockefeller Foundation Grant. The scientific work which you and Dr. Masani have been doing and which you plan for the future fits perfectly in the general plan of research which we have been hoping to do next year. Dr. Masani's presence here would add a great deal to our scientific life and I very much hope that he can be here.

If Dr. Masani can obtain the Rockefeller Foundation Grant, we would invite him to be a Visiting Fellow in Mathematics and would make our facilities such as library, seminars, lectures, etc. available to him. If there is any way which I can help in this matter, please let me know.

W.T. Martin

5 aux 4/9/577

maf

April 4, 1957

Dear Peggy,

I had a delightful time at the Sharer Co. and I am very proud of you, your work and the high opinion they have of you there. As to your telephone call to New York, I have the following things to say:

1) We should be delighted, if somebody of the Sharer Co. could work here for a while and learn the mathematics and instrumentation of our brain-wave work. He would have the full co-operation of everybody here.

2) The sum you mentioned as the daily fee is about right. The absolute minimum for any consultation whatever is 1% per day of our salaries. This is M.I.T. policy. The amount that you mentioned is about $1^{-1}/3\%$ which I think is justified in new work like this which is not otherwise available.

3) Two things have come to my attention recently which may interest the Sharer people.

One is that we have obtained a correlogram of a brain-wave record which was certified by the clinical people as containing beta-rhythm. On examination of their methods it appears that the beta-rhythm is so broad-bandethat it is not appreciably periodic at all, whereas the alpha-rhythm shows strong periodicity. This is a striking confirmation of what I had already grounds for believing and what I had stated explicitly. In other words, the alpha-rhythm is a true rhythm, whereas the beta-rhythm is nothing but a random ripple of no appreciable phase-consistency.

Mother saw in the paper recently that an idea, which I had formulated some years ago, is now in practical, medical use. This idea is based on the fact that, in cases of paralysis, a muscle, which has no longer the strength to accomplish its task mechanically, may still have an action-potential sufficient to be taken up by an electrical apparatus and to be amplified to the level at which it could accomplish useful control of a mechanical apparatus. The application which I suggested and which is now being employed, is that this principle may be used to give patients in the iron-lung voluntary control of their artificial breathing. I shall get mother to tell me where this work is being done, but in any case it is a valid principle which has now its usefulness. I realize that this is off beat of the interests of your employers, but I don't think it is so far off that they may not be glad to hear about it.

Hoping that everything is going well with you and awaiting your visit in Boston,

April 4, 1957

Mr. Joseph M. Murphy Metropolitan Transit Authority 701 Park Sq. Bldg. Boston

Dear Mr. Murphy,

In reply to your letter of March 29th, (file no. 57-66-1), I would like to give you the following information:

Names of witnesses: none.
Names of occupants: none, except the driver, Norbert Wiener.
Place where vehicle may be examined: 53, Cedar Rd. Belmont, Mass.
Name of owner: Norbert Wiener.
Registration number of vehicle: Massachusetts 272682
Date of accident: March 7th, 1957.
Time of accident: 8.15 A.M.
Place of accident: Belmont Street, Watertown.
Number of M.T.A. vehicle: 3214
Number of operator: 3116
My phone number: IV 4-0021

Sincerely yours,

Norbert Wiener.

NW/18

To-day, March 7th, 1957, I was driving along Belmont Street on the border of Belmont and Watertown in the direction of Cambridge about one block before reaching the Cambridge line. I had passed a streetcar going in my direction when I suddenly felt a slight collision on my left side. The car immediately veered to the left and there was a second collision. I pulled off to the right and parked at the first free parking space. I then stopped the streetcar and made myself known to the operator. The operator's name was Paul D. McPhail of 305 Rindge Ave., Cambridge. His operator's number was 3116 and the number of the car was 3214. Mr. McPhail claimed that I had been passing the streetcar and that I went into him. This does not accord with my recollection which is that the accident occurred while the streetcar was behind me and that the first collision was one in which the streetcar run into me. As to the second collision, I may well have been speeding up a little bit to get control of my car after it first veered. There was damage to the body of my car at the level of the rear left door and the steering apparatus did not seem to work as well as it usually does. I could observe no damage whatever to the streetcar, nor did the operator complain of such damage. My speed at the time was moderate. Although I did not observe it, I believe it was less than 30 miles an hour. Road conditions were normal and traffic was not excessive. As far as I could tell, the original collision was one in which the streetcar run into me, rather than one in which I run into the streetcar. In any case, no part of the streetcar was in advance of me just before the collision, nor did I see anything to warn me.

April 8, 1957

Dear Herbert,

Margaret has talked to me about your going down to Florida to look for a suitable position after retirement. I have no absolutely definite advice to give you, but I want to make a few suggestions that may be worth while in looking for such a job.

In the first place I get the impression that the number of engineering firms settled in Florida is far smaller than that of those settled in California. There is certainly an enormous demand for engineers in California for the various electronic and airplane companies. It is true that this demand is mostly not in the field of work in which you have been practicing, but it must have numerous secondary consequences in draining dry the supply of engineers in other fields of work. I therefore suspect that the employment atmosphere in California may be better than that in Florida.

I am also interested in the problem of the sort of firm with which you could most advantageously apply for work and the sort of work for which you should look. I know and appreciate your preference for research work, but the atmosphere of new research work has changed so rapidly that I think that you would do best to look for work in internal combustion

engineering and particularly in your own field of piston engineering. Most new work in the aviation industry is in jets, turbines and rockets, and I doubt if any firm in this field will be willing to put much money into piston engines. I therefore feel definitely that you should stick to the automotive region where your past experience is of greatest value. Here I suspect that the biggest demand which you will find in places suitable for your retirement will be in fields connected with maintenance and replacement. These may not seem like research directions, but I think that an ingenious engineer like you could still find much research to be done. On the whole, I think that the bounds of really new invention in engineering have passed out of the reach of the individual to big companies and that even a young man coming up now will perhaps not be sufficiently adapted to the new needs to fulfill them as well as will the generation coming up in a few years.

These are only suggestions and you will take them or reject them as you like. Margaret and I send Mildred and yourself all love and best wishes.

April 9, 1957

Professor P. Masani Mathematics Department The Institute of Science Bombay 1 India

Dear Masani,

I talked your letter over with Ted Martin, and we shall certainly do everything we can to help your application for a Rockefeller Foundation Grant next year. You will be most welcome here. We suggest one thing, however. With prices as they are now, the 5000 S are not enough, and you should either increase the amount of your request to cover transportation or you should approach some organization for funds for transportation.

Let us know how to handle this, and we shall do all we can to second your application either in India or at this end.

With best regards,

sincerely yours,

Norbert Wiener.

NW/ls enclosure

April 0, 1967

Professor John A. Wheeler Mr. Hugh Everett Palmer Physical Laboratory Princeton N. J.

Gentlemen,

I have received the two papers you have sent me and intend to give you a more detailed report on them by May 1st. In the meantime I want to give you my first impressions. These are that the inclusion of the observer as an intrinsic part of the observed system is absolutely sound, Namely, I see no way of bringing into quantum theory the concept that something particular actually happens without introducing an observer as part of the quantum-theoretical system. Matter of fact quantum theory as a partly probabilistic theory without actual occurrence does not seem to me to make sense. Perhaps I may say as you do: the probability in quantum theory must have the properties of true Lebesgue measures. Nevertheless, the particular things that happen in the universe are mostly not directly accessible to us, and the individual occurrences of probability, where directly observed, must be those in a subsystem which we call the observer. In my opinion it is essential for a usable theory that this

observer must represent a very thin selection of the larger universe which he is observing, so that under certain circumstances we are justified in treating the observation which he makes, which may theoretically not be fully independent, as if it had a full property of independence. Roughly speaking, the observer must be something like a human retina which over one very short interval of time only receives impressions of a relatively small part of the universe. Eventually the small parts and their memories add up to a very good representation of the universe.

In other words, I am sympathetic of yourpoint of view, while I think that your discussion of it meets one essential difficulty which I believe is removable. It is this that the whole basis of your quantum theory is Hilbert space, and in Hilbert space, as it is universally understood, there is no true Lebesque measure. It is just because of this that I have been forced to introduce the notion of differential space into quantum theory. (A New Form for the Statistical Postulate of Quantum Mechanics, N. Wiener and A. Siegel, Phys. Rev., Vol. 91, No. 6, September 15, 1953, p. 1551. -The Differential-Space Theory of Quantum Systems, N. Wiener and A. Siegel, No. 4 del Supplemento al Vol. 2, Ser. X. del Nuovo Cimento, pp. 982-1003, 1955. - Fourier Transforms in the Complex Domain, R. E. A. C. Paley and N. Wiener, American Mathematical Society, New York, 1934. Chap. 9. -N. Wiener, Acta Math. 55, 117-258, 1930, Sec. 13. -N. Wiener, J. Math. and Phys. 2, 131, 1923)

This is a space in which there is a true volume and which therefore is clearly distinct from Hilbert space, but is so related to Hilbert space that every unitary transformation of Hilbert space generates a measure-preserving point transformation with the associated differential-space.

Another point where your theory needs amplification (although I imagine that you are fully aware of that, since your theory is a meta-theory; as such, amplification is necessary) is that I do not find an adequate discussion of what it means to say that a certain fact or a certain group of facts is actually realized. Dr. Siegel and I have been working in this field as you will see by the articles. However, as you proceed at your work, I am convinced that you yourself will have to attack this problem.

In short, I think you have made a real contribution to a possible future quantum theory, particularly in your insisting that the observer be an intrinsic part of the quantum system. However, you will have to go much further before you have rendered this suggestion into something concrete and usable. If I may be allowed to coin a word: I do not think that you have even yet formulated a meta-theory, but simply a set of prolegomena to a future metatheory.

I hope that you will go on with your work, and I wish you all success. I certainly think that your

paper should be published, but more as comments on the present intellectual situation than as a definitive result.

Sincerely yours,

Norbert Wiener.

NW/ls Enclosure: 1 reprint

April 10, 1957

Dr. Vannevar Bush Room 7-201 M.I.T.

Dear Dr. Bush,

This is to confirm our conversation of March 27th. I have talked with Dr. Rosenblith about the letter from Karl Beyer. As you know, I have received overtures from an other company but have so far no commitment to them. We would be very glad to discuss our eletro-encephalogram work with Dr. Vernier and with whomever else he wishes to bring along. Of course, this discussion may be restricted by other commitments which I may have at that time, but it is not my intention to the myself to any one group so tightly that I will be unable to discuss my ideas with any interested scientist.

Sincerely yours,

Norbert Wiener

NW/18

April 10, 1957

Mr. Joseph Olah Engineering Library Grumman Aircraft Engineering Corporation Bethpage Long Island N. Y.

Dear Mr. Olah,

I give you my permission to reproduce 100 copies of pages 48-49 of my book THE HUMAN USE OF HUMAN BEINGS, conditional on the agreement of the Houghton Mifflin Co. and the Doubleday Co..

Sincerely yours,

Norbert Wiener

NW/1s

The New York Times

TIMES SQUARE NEW YORK 36 NY LACKAWANNA 4-1000 12 April 1957

Dr. Norbert Wiener Massachusetts Institute of Technology Cambridge, Massachusette

Dear Dr. Wiener:

As I told you on the telephone we would be delighted if you would consider doing a piece for the Times Magazine on child prodigies. The news peg of course would be the Strom youngster who's done so well on the quiz shows recently.

The piece, which would run about 2000 words, might break down as set up below. I have no intention of cementing you into this format; it is simply one possible approach.

1. What is a child prodigy and how may he or she be distinguished from youngsters who are simply unusually trained or gifted with long memories? Are there different kinds of child prodigies?

2. How does such a child feel -- drawing here on your own experiences? What would one suggest to the parents of such a child?

3. What is the prognosis? Here we might like the Canard about all prodigies winding up as obscure shipping clerks. It seems to me at least, that this notion still has a great deal of public acceptance.

I would imagine item #1 would take up most of your wordage. You say you are rather busy at the moment but if you can tell me when you might be able to deliver such a story, I'll do my best to have our requirements modified to meet your schedule.

Very truly yours,

Pierce G. Fredericks Sunday Department

sedent

[ans. 4-25-57]

PGF:elc

CANTERBURY Trinity Church Coplen Square

April 15, 1957

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

Dear Dr. Wiener:

Just a note to tell you how pleasant it was to see you again Friday morning, and how much I enjoyed our conversation.

The suggestions you made about the subject for your talk for Sunday evening, April 28, to the college student group at Trinity Church were fine.

The details of the evening are as follows: We would like very much to have you come to supper at 5:45 p.m. and to bring your wife and anyone else whom you wish along with you. Your talk will be from 6:30 until 7:15, with as much time for questions before 7:15 as you wish. At 7:30 we have Evening Prayer in the Church for an hour. If you feel you can spare the time, we would like very much to have you come to the service with us and then at 8:30 to take part in further discussion with interested students for about half to three-quarters of an hour. We will guite understand. however, if this is too much to ask. In any case, we close up shop for the night at 9:30 p.m.

Once more let me thank you for your willingness to come. I personally am looking forward to it very much, and I think all of us will have a very stimulating and good time. If by any chance you have any questions, do not hesitate to write me or give me a ring at the Church.

Sincerely, John Crochen Jr.

JC/mtf

P.S. Please do bring your wife with you if she can possibly come. I have never met her but have enjoyed talking with her over the telephone.

Ears 4/25/57]

April 17, 1957

Professor Shikao Ikehara Tokyo Institute of Technology Oh-okayama, Meguroku Tokyo Japan

Dear Professor Ikehara,

In reply to your letter of March 28th, Professor Wiener asked me to inform you that you are right in your interpretation of the lines on page 78 of <u>Cybernetics</u>. He sends you his best regards.

Sincerely yours,

Lucie H. Schaub Secretary to Professor Wiener.

ls

Uppsala, April 18, 1957.

Professor Nobert Wiener Department of Mathematics MIT Cambridge 39, Mass. U.S.A.

Dear Professor Wiener,

I am very pleased to inform you that the joint papers by you and Dr. Masani have been accepted for publication in Acta Mathematica. At least the first part will appear in the next volume of the journal.

Yours sincerely,

[see 4/23/57]

TO OPEN CUT HERE / OUVRIR ICI







Professor Nobert Wiener Department of Mathematics M I T <u>Cambridge 39</u>, Mass. U.S.A.

Tjänsteförs. Uppsala Universitets Matematiska Institution



SENDER / EXPÉDITEUR :

Prof.L.Carleson Matematiska Inst. Uppsala Universitet Sweden <u>Uppsala</u>

> ELYGBEFORDRAS OVER HELA VÄRLDEN UTAN TILLÄGGSAVGIFT. BEFORDRAS ICKE SOM AEROGRAM, OM NÅGOT LÄGGES INUTI

> > GODKANT AV KUNGL GENERALPOSTSTYRELSEN



TIME & LIFE BUILDING ROCKEFELLER CENTER NEW YORK 20

April 19, 1957

Professor Norbert Wiener Massachusetts Institute of Technology Cambridge 29, Massachusetts

Dear Professor Wiener:

This photostat is a projected page in a prestige series which we at TIME call "the KNOW campaign" or "the Publisher's campaign" which began in February and appears in ten of the nation's major newspapers.

We found this highly appealing picture of you by Alfred Eisenstadt in LIFE's files; to us it was irresistible in our preparation of possible layouts, and that is how we have used it thus far.

But now we are eager to go further and run it as an actual advertisement. For this, of course, we would need your permission--and to help persuade you to give it to us, I'm enclosing two ads for which we did have permission from Sir William Haley, editor of the London Times, and from Professor Wilbur Ufford of the University of Pennsylvania. For a fuller view of the series thus far, I'm also sending several other ads as well.

I hope this "exhibit" will persuade you to allow us to use the picture of you later on this year, with this or similar headline and text.

Sincerely,

ichold Sell

Nicholas Samstag Promotion Director

Eaux 4/25/57]

NS/ald

enc.

Mathematics Department Institute of Science Bombay 1. Abril 22, 1257

Dear Murs. Wiener:

I write this in confidence that you will do all you can to help in the valles trapic can which has avisen.

An undergroducte, Robit Parikh, in whom I have bod great bopes (and still have), attempted suicide about a week book, and is none in a newtol bospitol, yo Dr. Gtaham G. Blaine 9 the Hassend Hygiene Peft. The only news we have chart this is a letter pour Dr. Blaine to Robit's motor letter pour Dr. Blaine to Robit's motor doted the 15th, although Robit bad been evilving to bee about his love affair and resulting emotional wiss.

His moltes would to fig over on about , the 27th. I don't know whether this is quite advisable, but she seems to be determined. I will be ever to groteful & for anything you can do in the mean time, and for any can do in the mean time, and for any can do in the moltes during her stay in cambridge, than. Of course, Project barbehoff knows Robit grite well, and I suppore the Harvard people are helping. But I felt that you would be able to help also. "I turn over.

The news came as a complete supprise to me. About a month back he reported on his A grades at Harvard and his hopes of getting a portgraduate feleonship, but about a week back he wrote about receiving attractive offers from Harvard, Princeton & Columbia. with very kind vegards, hicerely yours Peri masane 4/29/57 First fold here -IO ENCLOSURE **ERDICRA** Sender's name and address :--P. R. Masam Mathematics Department Selvion Institute of Science Bombay 1. India Cedar Vorbert Road Mars Wiener POSTAC Second fold have

April 23,1957

Professor Norbert Wiener M.I.T., Cambridge 39, Mass., U.S.A.

Dear Norbert:

With much thanks I received your letter of April 17, which answered my question. The translation of CYBERNETICS is expected to be published in June. It has taken a long time for its completion, but it will prove invaluable and basic source for many important ideas to prevail in this century.

Last night the MIT Club welcomed Professor William R. MacLaurin of the Economics Department at the Chinzanso, where you and Margaret were entertained by a group of physiologists and later by mathematicians and physicists last year.

Asako and myself will be very glad to hear about yourself and Margaret. As for our family every one seems occupied in each sphere of activities. The eldest son, Masao entered a private college in Tokyo instead of the Sophia University as he had planned. Until the second son takes the college exams, we shall be free from one type of family worries.

Before long I shall return a corrected copy of your book used for the translation.

With hearty thanks for your cooperation,

Sincerely yours,

Shikao Ikehara

Shikao Ikehara Tokyo Institute of Tech. Oh-okayama, Meguroku Tokyo, Japan



Professor Norbert Wiener ^Room 2-276 Massachusetts Institute of Tech. Cambridge 39, Mass.

U. S. A.

PAR AVION 航 空

TEEEEEEEE

この郵便物には何物も封入又は添附できません Nothing may be contained in or attached to this letter. 文文

志

BRANDEIS UNIVERSITY WALTHAM 54, MASSACHUSETTS

April 23, 1957

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

Dear Professor Wiener:

As you may know, Brandeis University is inaugurating a Summer Institute in Theoretical Physics this year. In connection with this Institute, we are holding a conference on July 15 and 16 on modern methods of quantization.

We are wondering whether you will be in town at that time and, if so, whether you would be willing to deliver a lecture on the mathematical theory of Wiener integrals and their relevance to physics.

In order that we may complete the arrangements for the conference, we would appreciate hearing from you concerning this matter at your earliest convenience.

Sincerely yours, Selvan Schweber

SILVAN S. SCHWEBER Associate Professor Department of Physics

SSS:0

[ms 4/25/57]



1957

BRANDEIS UNIVERSITY SUMMER SCHOOL

INSTITUTE IN

June 24 - August 2

The Summer Institute will be run as graduate and research seminars in an informal and congenial atmosphere. The many-body problem, as it arises in the various branches of Physics, will be one of the topics discussed in each seminar.

TOPICS IN GENERAL RELATIVITY

The foundations of general relativity. Theory of field equations. Quantization.

Peter G. Bergmann Professor of Physics, Syracuse University

• THEORY OF PHOTONS AND ELECTRONS

The theory of photons and electrons. Scattering and bound state problems.

J. M. Jauch Professor of Physics, Iowa State University

• ELEMENTARY PARTICLE THEORY

Current ideas about elementary particles and their interactions. High energy phenomena.

Robert Karplus Professor of Physics, University of California

MANY-BODY PROBLEM

Current formulations of the many-body problem. Liquid helium, super-conductivity.

Silvan S. Schweber Associate Professor of Physics, Brandeis University

• THEORY OF NUCLEAR STRUCTURE

Nuclear structure and nuclear reactions.

Victor F. Weisskopf

Professor of Physics, Massachusetts Institute of Technology

There will be a conference from July 15-17 on modern quantization methods.

Coeducational. The Institute is open to qualified graduate students and non-degree applicants. Each six hour course carries three full credits for degree candidates. A limited number of fellowships are available. In addition, the University invites as guests any interested persons having a Ph.D. degree. The Institute is supported in part by the Raytheon Manufacturing Company of Waltham, Massachusetts. Inquiries should be addressed to:

BRANDEIS UNIVERSITY SUMMER SCHOOL

Program in Theoretical Physics Waltham 54, Massachusetts

BRANDEIS UNIVERSITY SUMMER SCHOOL WALTHAM 54, MASSACHUSETTS

NON-PROFIT ORG. U. S. POSTAGE **P A I D** Boston, Massachusetts Permit No. 15731

....

ТЕХНИКА-Молодежи

Ежемесячный популярный производственнотехнический и научный журнал ЦК ВЛКСМ

Адрес редакции: Москва, Новая пл., 6/8. Тел. К 0-27-00, доб. 4-87, 5-87.

No..... 23 " anperel 195 7 r.

Prof. N. Wiener Massachusetts Institute of Technology Cambridge, Mass. USA

Dear Sir,

As you may know, the VIth World Festival will be held in Moscow in July - August and attended by 30,000 young people from more than 100 countries. It will last for two weeks and its aim will be to strengthen the ties of friendship among the youth of the world through **discu**ssion on science and its future, technology, culture, art and many other subjects.

Our magazine "Tekhnika Molodezhi" is published in Moscow and has a monthly circulation of over half a million and enjoys great popularity among the readers.

The subjects covered range from the work and progress of science today, to interplanetary travel; news of the work of well-known scientists, engineers and inventors from all over the world; developments in physics, electronics, medicine and many other subjects covered in a popular way.

In fact, our aim is to popularise, as widely as possible among young people, questions of science, technology and production, in order to encourage them to develop their own work in this field for the benefit of all peoples.

As the July issue of our magazine will be devoted to the VIth World Youth Festival, we have decided to ask world-famous scientists, explorers and inventors to make contributions to it.

We would be pleased and interested to receive from you a letter, an address or a statement for our readers which would deal generally with your work now, and future prospects.

The reader, we feel sure, would also be interested to see your photograph, published alongside your material, at work in a laboratory, giving a lecture - or even in the middle of a heated argument.

We are very keen indeed to publish the above material and introduce you to our readers; if it is possible, therefore, such material should be sent to us not later than May so that we can ensure that we give you sufficient space in our columns.

We wish you every success in your work, as this inevitably benefits mankind as a whole. Your contribution to our magazine will indeed brighten its pages, in addition to encouraging the spirit of adventure and science in those that read it.

We eagerly await your reply, and thank you in anticipation for your help in this matter.

Yours sincerely,

Bac. Scheely

Vasili Zakharchenko CHIEF EDITOR

"Tekhnika Molodezhi"

[ans. 5-3-57]

April 23, 1957

Professor P. Masani Mathematics Department The Institute of Science Bombay 1 India

Dear Professor Masani,

Professor Wiener asked me to send you the enclosed copy of a letter he has just received from the Acta Mathematica.

Sincerely yours,

Lucie H. Schaub Secretary to Professor Wiener.

ls Enclosure.

[see 4/18/57]

TECHNISCHE AKADEMIE

BERGISCH LAND E. V.

Professor Dr. Wheener Mass.Inst. of Technology <u>Massachusets</u> U.S.A.

WUPPERTAL-ELBERFELD Hubertusallee 18 (Am Zoo)

Tag

Ihre Zeichen

Ihre Nachricht vom

Unsere Zeichen (Bei Antwort bitte angeben) April 24, 1957

ViA Air Mail !

Dear Colleague,

las in

Would you kindly let me know whether you are going to attend the XI Congress of CIOS in Paris to be held from June 24 to 28. Being there myself as Rapporteur Général of subject No. 1 I should welcome the opportunity to meet you there and to ask you to be my guest in Germany after the Paris Congress.

In case you are going to make that continental trip I should try as head of the Wuppertal Engineering Academy to interest you in a short seminar which I intend to start under the topic "Kybernetik und Informationstechnik".

The matter being somewhat urgent I should appreciate an air mail answer whether you will be taking part in the Paris meeting and whether you would accept my offer to be the lecturer for the intended course in the Technische Akademie Wuppertal.

Very sincerely yours,

JEF. Umer

(H. F. Schwenkhagen)

Appestil - JElberfeld Efficience Akademie His bestinsallee H, Jemain

Faux 5/3/57

Fernsprecher 35294; Zahlungsverkehr; Konto Nr. 1660 bei der Städtischen Sparkasse Wuppertal-Vohwinkel Postscheckkonto der Technischen Akademie Nr. 15213 Essen

HARRISVILLE, N.Y. Methodist Parsonage April 25, 1957

Dear Dr. Wiener:

Interesting is your statement in your confession of faith in the "This I Believe"series that you were brought up by your father from childhood in the basic importance of scholarship but not of religious faith. This neglect in your life of something more important than scholarship is a misfortune for you, so far as achieving a first rate eminence in your field is concerned, for you have not fulfiled your promises as a child prodigy. On the other hand Albert Einstein, who was not at all a child prodigy, achieved a universal eminence in your same field, I venture to say, just because he was profoundly religious as a Jew and Christian(in spirit) in his outlook and understanding of life in the universe.

> Sincerely yours, Rev. Howard Gabriel

SCHERING

SCHERING CORPORATION

BLOOMFIELD, NEW JERSEY

April 25, 1957

Dr. Norbert Wiener Massachusetts Institute of Technology Cambridge, Massachusetts

Dear Dr. Wiener:

We certainly enjoyed your visit to Schering and you have stimulated us to the point where we would like to try autocorrelation ourselves. Our electronic engineer, Julius Knapp, has some ideas about a comparitively simple device which might have some of the features of your autocorrelator. He and I would like to come up and see your instrument sometime and talk with you about Knapp's ideas. I was wondering if there would be any time in May that would be convenient for you. If so please let us know.

Cordially,

h 2 good coy.

Charles D. Hendley

Ears 5/1/577

Charles D. Hendley Pharmacologist

CDH: jw

DREW UNIVERSITY

MADISON, NEW JERSEY

THE GRADUATE SCHOOL OFFICE OF THE DEAN

April 25, 1957

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

Dear Dr. Wiener:

Enclosed is a check for \$100.00 to cover your expenses (\$25.00) and the honorarium for your participation in the Graduate School Colloquium. Dean Hopper has asked me to express our deep appreciation for your contribution to the Graduate Program.

Sincerely,

(Mus.) Come Wilson

Secretary to Dean Hopper

Dear Dr. Wiener: Trankenby multiple gastenel for consents, suggestimes you tray have concensing the 1959 Distoyeus the Festival lean. With Kindeet regards-ANNOUNCEMENT Jaseph Polonest by

PRESS RELEASE

FOR RELEASE AM THURSDAY 25 APRIL 1957

ANNOUNCING THE FORMATION OF:

THE UNITED STATES COMMITTEE FOR THE CELEBRATION

OF

THE 1959 DOSTOYEVSKY FESTIVAL YEAR

TO COMMEMORATE THE LOOTH ANNIVERSARY OF THE LIBERATION OF FYODOR DOSTOYEVSKY FROM SENTENCE OF DEATH, IMPRISONMENT AND EXILE IN SIBERIA; HIS RETURN TO EUROPEAN RUSSIA IN 1859, AND HIS REBIRTH FROM HUMILIATION AND BONDAGE INTO GREATNESS AND FREEDOM OF SPIRIT.

EXECUTIVE SECRETARY:

JOSEPH POLOWSKY 4118 SHERIDAN ROAD CHICAGO 13, ILLINOIS

GRACELAND 2-6682

4118 Sheridan Road Chicago 13, Illinois

April 25, 1957

STATEMENT BY MR. JOSEPH POLOWSKY, MEMBER OF THE FIRST UNITED STATES ARMY PATROL TO MEET THE SOVIET ARMY AT THE CLOSE OF THE SECOND WORLD WAR IN EUROPE, ON THE OCCASION OF THE 12th ANNIVERSARY OF THE SWEARING OF THE OATH AT THE ELBE RIVER BY THE AMERICAN AND RUSSIAN SOLDIERS.

... they were strolling slowly along the path and suddenly Smurov exclaimed: "There's Ilusha's stone, under which they wanted to bury him."

They all stood still by the big stone. Alyosha looked and the whole picture of what Snegiryov had described to him that day, how Ilusha, weeping and hugging his father, had cried, "Father, father, how he insulted you," rose at once before his imagination. A sudden impulse seemed to come into his soul. With a serious and earnest expression he looked from one to another of the bright, pleasant faces of Ilusha's school-fellows, and suddenly said to them:

"Boys, I should like to say one word to you, here at this place." The boys stood round him and at once bent attentive and expectant eyes upon him.

"Boys, we shall soon part. I shall be for some time with my two brothers, of whom one is going to Siberia and the other is lying at death's door. But soon I shall leave this town, perhaps for a long time, so we shall part. Let us make a compact here, at Ilusha's stone that we will never forget Ilusha and one another. And whatever happens to us later in life, if we don't meet for twenty years afterwards, let us always remember how we buried the poor boy at whom we once threw stones, do you remember, by the bridge? and afterwards we all grew so fond of him. He was a fine boy, a kind-hearted, brave boy, he felt for his father's honour and resented the cruel insult to him and stood up for him. And so in the first place, we will remember him, boys, all our lives. And even if we are occupied with most important things, if we attain to honour or fall into great misfortunestill let us remember how good it was once here, when we were all together, united by a good and kind feeling which made us, for the time we were loving that poor boy, better perhaps than we are. My little doves-let me call you so, for you are very like them, those pretty blue birds, at this minute as I look at your good dear faces. My dear children, perhaps you won't understand what I am saying to you, because I often speak very unintelligibly, but you'll remember it all the same and will agree with my words sometimes. You must know that there is nothing higher and stronger and more wholesome and good for life in the future than some good memory, especially a memory of childhood, of home. People talk to you a great deal about your education, but some good, sacred memory, preserved from childhood, is perhaps the best education. If a man carries many such memories with him into life, he is safe to the end of his days, and if one has only one good memory left in one's heart, even that may sometime be the means of saving us. Perhaps we may even grow wicked later on, may be unable to refrain from a bad action, may laugh at men's tears and at those people who say as Kolya did just now, 'I want to suffer for all men, ' and may even jeer spitefully at such people. But however bad we may become which God forbid-yet, when we recall how we buried Ilusha, how we loved him in his last days, and how we have been talking like friends all together, at this stone, the cruellest and most mocking of us-if we do become so-will not dare to laugh inwardly at having been kind and good at this moment! What's more, perhaps, that one memory may keep him from great evil and he will reflect and say, 'Yes, I was good and brave and honest then !! Let him laugh to himself, that's no matter, a man often laughs at what's good and kind. That's only from thoughtlessness. But I assure you, boys, that as he laughs he will say at once in his heart, 'No, I do wrong to laugh, for that's not a thing to laugh at.""

"That will be so, I understand you, Karamazov!" cried Kolya, with flashing eyes.

The boys were excited and they, too, wanted to say something, but they restrained themselves, looking with intentness and emotion at the speaker.

"I say this in case we become bad," Alyosha went on, "but there's no reason why we should become bad, is there, boys? Let us be, first and above all, kind, then honest and then let us never forget each other! I say that again. I give you my word for my part that I'll never forget one of you. Every face looking at me now I shall remember even for thirty years. Just now Kolya said to Kartashov that we did not care to know whether he exists or not. But I cannot forget that Kartashov exists and that he is not blushing now as he did when he discovered the founders of Troy, but is looking at me with his jolly, kind dear little eyes. Boys, my dear boys, let us all be generous and brave like Ilusha, clever, brave and generous like Kolya (though he will be ever so much cleverer when he is grown up), and let us all be as modest, as clever and sweet as Kartashov. But why am I talking about those two! You are all dear to me, boys, from this day forth, I have a place in my heart for you all, and I beg you to keep a place in your hearts for me! Well, and who has united us in this kind, good feeling which we shall remember and intend to remember all our lives? Who, if not Ilusha, the good boy, the dear boy, precious to us for ever! Let us never forget him. May his memory live for ever in our hearts from this time forth!"

"Yes, yes, for ever, for ever!" the boys cried in their ringing voices, with softened faces.

"Let us remember his face and his clothes and his poor little boots, his coffin and his unhappy, sinful father, and how boldly he stood up for him alone against the whole school."

"We will remember, we will remember," cried the boys. "He was brave, he was good!"

"Ah, how I loved him!" exclaimed Kolya.

"Ah, children, ah, dear friends, don't be afraid of life! How good life is when one does something good and just!"

"Yes, yes," the boys repeated enthusiastically.

"Karamazov, we love you!" a voice, probably Kartashov's, cried

impulsively.

feeling.

"We love you, we love you!" they all caught it up. There were tears in the eyes of many of them.

"Hurrah for Karamazov!" Kolya shouted ecstatically.

"And may the dear boy's memory live for ever!" Alyosha added again with

"For ever!" the boys chimed in again.

"Karamazov," cried Kolya, "can it be true what's taught us in religion, that we shall all rise again from the dead and shall live and see each other again, all, Ilusha too?"

"Certainly we shall all rise again, certainly we shall see each other and shall tell each other with joy and gladness all that has happened!" Alyosha answered, half laughing, half enthusiastic.

"Ah, how splendid it will be!" broke from Kolya.

"Well, now we will finish talking and go to his funeral dinner. Don't be put out at our eating pancakes—it's a very old custom and there's something nice in that!" laughed Alyosha. "Well, let us go! And now we go hand in hand."

"And always so, all our lives hand in hand! Hurrah for Karamazov!" Kolya cried once more rapturously and once more the boys took up his exclamation: "Hurrah for Karamazov!"

> The Speech at the Stone Epilogue, The Brothers Karamazov Fyodor Dostoyevsky Moscow, 1880

The Rev. John Crocker, Jr. Trinity Church Copley Square Boston

Dear Mr. Crocker,

This is to confirm my talk on Sunday evening, April 28th. I shall be glad to come to supper with my wife. I intend to discuss the topic which I recently discussed at a meeting in Cleveland: " Developments in automatization and their moral consequences".

Sincerely yours,

Norbert Wiener.

NW/1s

[and 4/29/57]

Mr. Pierce G. Fredericks Sunday Department THE NEW YORK TIMES Times Square New York 36 N. Y.

Dear Mr. Fredericks,

I shall be delighted to write the article which you requested concerning child prodigies. Please give me a few more days to send it in, because I just finished a very busy week and have a good deal on my hands this week.

By the way, Parade Magazine called me up with a request for a similar article or at any rate an interview on the same subject. Of course, I turned down the request for the article in view of your priority, and as to the interview I told them that they would have to speak with you first. I will be very glad to follow whatever course seems best to you.

Sincerely yours,

Norbert Wiener.

Tano 4-26-577

NW/1s

Mr. Nicholas Samstag TIME Time and Life Building Rockefeller Center New York 20 N. Y.

My dear Mr. Samstag,

Many thanks for your letter of April 19th. I wish to say here unqualifiedly that I do not give my consent to the use of my name or of any picture of me in any advertising campaign whatever.

Sincerely yours,

Norbert Wiener.

NW/1s

1 1

Professor Silvan S. Schweber Department of Physics Brandeis University Waltham 54 Mass.

Dear Professor Schweber,

Professor Wiener asked me to write to you in reply to your letter of April 23rd. Although he will be staying in New Hampshire at the time of the conference, he thinks that he will be able to come to Boston for two days. Therefore he accepts your invitation with pleasure.

Sincerely yours,

Lucie H. Schaub Secretary to Professor Wiener.

18

Rosalyn S. Cohen

SCHUYLER 4-9067

P

313 WEST 74TH ST, NEW YORK 23. N. Y.

KINGSBRIDGE 7-6557

April 26, 1957

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

Dear Professor Wiener:-

I wonder if I might trouble you to give me some information I have been searching for for about two weeks in the various library files.

I am trying to find out the name and date of the French journal in which you had an article entitled "Some Maxims for Biologists and Psychologists."

I have searched through the various indeces in back of all of your works and there is no reference to this particular article. Any information you might have on hand would be very greatly appreciated. I am trying to obtain this information for Dr. Irving Biber who is writing an article on "A Critique of the Libido Theory," in which he refers to your article.

Thank you for your assistance in this matter.

Very truly yours, Rosalynt Ohen

[aws 4/29/57]

Rosalyn S. Cohen

The New York Times

. . .

TIMES SQUARE NEW YORK 36 N Y LACKAWANNA 4-1000 26 April 1957

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

Dear Dr. Wiener:

Delighted that you are doing the piece and looking forward to getting it. As for Parade, I'd like to publish your piece with us before they do their interview. We will, of course, publish it as quickly as possible after receiving it.

Yours very truly,

durcles deci

[ano 5-2-57]

Pierce G. Fredericks Sunday Department

PGF:elc

April 28, 1957 New Dellu: Sear Professor Wiener, My stay in India is now coming to its end . In two weeks I leave for Europe and then for U.S. I have enjoyed the last per months immensely and it is hard to believe that I must soon say good bye to my many prierds here. During the last two months I have been giving a course of lectures at the National Thysical Saloratory on "Statistical Symmunications" the lectures were open to N.P.L. stay and the staff of outside revearch organizations. There were about twenty steady members in the class. These man were eager to learny this subject and my enthusias increased as they began to can very good questions and to demand even more material than originally scheduled in the course. Selhi is a most pleasant city. Many Indians say they do not like it Gecause it does not have the character that other cities like Calcutta and Madras have That is probably true of any capital city but I feel that there are many compensating factors Living with a family here in Delhi, has given me a wonderful opportunity to view a portion of Indian life from the inside rather than from the touriest point of view. The head of the family with which I reside is a serier government official. Consequently he has a large circle of finds and receives many visitors

ener Dept. of Methomatics M. I.T. Combridge 39 U.S.A. Rolessor Norbert il in . AAIGNT New Delli Curson Kd 21 **BY AIR MAII** To open % U.S. Educational Foundation IO ENCLOSURES cut A.G. Bose Sender's name and address :-and invitations to parties and social events. Restreats me as one of the family and taken me to all his engagements. Haually law, the only "forgigner" present. Because I my name and background find that am fortunately not treated as a foreigner. On May 13 Sepect to lave for Rome where I shall remain until May 18th and they proceed on a six week tour of Europe, visiting my fiends and seeing some new places, . you had mentioned that you would like me to visit some I your friends when I return through Europe Sepect to visit many cities from Bone & Stockholmy so there is anyone whom you wish me to visit I shall be very happy & do so . You can reach me by mail Is American Express, Rome before May 18 this you desire . with best wishes to you and your wife , In ie . [ans sisisis]

CANTERBURY Trinity Church Copley Square

April 29, 1957

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

Dear Dr. Wiener:

I am writing to thank you again for being with us last Sunday evening. We enjoyed meeting your wife, and your talk and the discussion that followed it was extremely interesting and stimulating. It was exactly what I had hoped it would be: informative to those who know next to nothing about automation; provocative to those who do know something about it and also take Christianity seriously. There wasn't a soul there who did not learn something, and who also did not have questions raised which needed to be raised. I am continually trying to help students question and think through their religious convictions. Last night you stirred more thought in a short time than I have been able to in a long time, and for this I am grateful.

Thank you again for your willingness to come and for your clear and stimulating talk. I will be seeing you soon again, I hope,

All the best to you and Mrs. Wiener in the meantime.

Sincerely,

John Ceochen Jr.

Zans 5/1/57]

JC/mtf



Подготовительная комиссия Preparatory Commission

籌備委員會 Commission Préparatoire Comisión Preparatoria

МЕЖДУНАРОДНЫЙ СЕМИНАР СТУДЕНТОВ, ИЗУЧАЮЩИХ ФИЛОСОФИЮ INTERNATIONAL SEMINAR FOR STUDENTS OF PHILOSOPHY

國際哲學系學生討論會

SÉMINAIRE INTERNATIONAL DES ÉTUDIANTS EN PHILOSOPHIE SEMINARIO INTERNACIONAL PARA LOS ESTUDIANTES DE FILOSOFIA

Адрес: Москва, К-9, Моховая ул., 11, МГУ, философский факультет

No. 277

"29 « апресия 1957. г.

Mr. N. Wiener, Massachusetts Institute of Technology, Cambridge 39, Mass., <u>U S A</u>

Dear Sir,

As you may know, the VIth World Festival of Youth and Students will be held in Moscow this summer. The International Preparatory Committee has included in the Festival programme an International seminar for students of philosophy. It will be held from August 6 to 8th.

To prepare and organise this seminar a preparatory commission has been set up including students, post-graduates, teachers and professors of the Moscow University. The theme of the seminar as suggested by student organisations in different countries will be: "Is It Possible to Foresee the Ways of Development of Human Society."

At the seminar it is planned to hear reports on the above mentioned subject given by prominent scientists and also to hold a free and lively exchange of opinions on this important scientific problem.

We think that the participation of students and scientists from different countries in the seminar will make it more fruitful and interesting and promote better understanding among young philosophers.

The Preparatory Commission of the International seminar for students of philosophy invites you to attend the seminar and make a report or give information on the subject of interest to you.

We shall appreciate it very much, if you could kindly let us know whether it is possible for you to come to Moscow. We look forward to your reply and thank you in advance.

Yours sincerely, MAlpulus I. NARSKY

For the Preparatory Commission

Jans. 5-14-57]

Our address: Preparatory Commission of the International seminar for students of philosophy, Faculty of Philosophy, Moscow University, Mokhovaya 11, Moscow K-9, USSR.

April 29, 1957

Miss Rosalyn S. Cohen 313 West 74th Street New York 23 N. Y.

Dear Miss Cohen,

I have received your letter of April 26th. "Some Maxims for Biologists and Psychologists" appeared in the Swiss journal <u>Dialectica</u>, Vol. 4, 3, Zuerich, Sept. 1950.

Sincerely yours,

Lucie H. Schaub Secretary to Professor Wiener.

18

April 29, 1957

Dr. Farmsworth Medical Department Harvard University Cambridge Mass.

Dear Dr. Farmsworth,

Professor Wiener asked me to send you the enclosed copy in connection with his recent telephone call.

Sincerely yours,

Lucie H. Schaub Secretary to Professor Wiener.

[see 4/22/57] Eaus 5/3/57]

18

Mathematics Department The Institute of Science Bombay 1, India

April 30, 1957

Dear Professor Wiener :

Thank you for your letter of the 9th and the note from Professor Martin.

Herewith a copy of my application to Rockefellers. Would you kindly write to Dr. Anderson now? Perhaps Professor Martin could write also.

I have been asked to write to Dr. Anderson by the Delhi office of the Foundation. He is in charge of Biological research. Perhaps Dr. Warren Weaver is still with them, in which case I hope you and Professor Martin will write to him also, and I trust they will pass my application on to him.

With kind regards,

Sincerely yours

P. marani

P. Masani

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

Mathematics Department The Institute of Science Bombay 1, India

April 30, 1957

Dr. Richmond K. Anderson Assistant Director for Biological and Medical Research The Rockefeller Foundation 49 West 49th Street New York 20, N.Y. U. S. A.

Dear Dr. Anderson :

I beg to apply for a grant from your Foundation to enable me to work for a year under Professor Norbert Wiener at M. I. T., starting from sometime this Fall.

I worked with Professor Wiener on prediction theory in 1955-56 when he was a visiting professor at the Indian Statistical Institute, Calcutta. We were able to make headway in multiple prediction, and our results will soon be appearing in two rather long papers on "The prediction theory of multivariate stochastic processes" in the Acta Mathematica. But much remains to be done.

Broadly speaking, my project of work at M.I.T. would be to deal with multiple prediction in case the spectral density is unbounded; to extend this theory to infinitedimensional processes; and to use this to derive the best non-linear prediction for simple processes. These problems may have some practical importance in meteorology and communication engineering, apart from their intinsic mathematical interest.

A letter on my behalf will be sent to you directly by Professor Wiener. I might add that I did my doctorate at Harvard in 1946, and was a member of the Institute for Advanced Studyer during 1946-48. At present I am the head of this department, and a member of the Boards of Studies in Mathematics of the Universities of Bombay, Baroda and Karnatak. I am 37 years old. I will gladly supply any other particulars you may need. I leave it to your Foundation to decide what would be an adequate grant to cover the cost of my stay at M. I. T., and if possible also my travelling expenses. I can only expect leave without pay from my present position.

At Calcutta Professor Wiener and I had met Mr. Roger F. Evans, Assistant Director for the Social Sciences. He may be able to shed some light on this application.

Sincerely yours

P. m.

P. Masani Professor of Mathematics. 5506 N. Wayne Ave. Chicago 40, Ill.

Dear Wiener:

Wm. M. Wise, the publisher of PRACTICAL MATHEMATICS recently wrote me that he planned to publish a new and revised edition of the book.

I should very much appreciate receiving a line from you telling me whether you plan any revisions of your article on calculus.

You may be interested in the enclosed reprints.

Cordially,

Katpierger

[Ca April 30, 1857]

N Manger

[and 5/8/57]

CONTINUE with 38 new pages of tables
CONTINUE with 38 new pages of tables
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$$\{\cdot, din, and (ast, of Hundrethist Deques), applied in the THIRD EDITION OF
TABLES OF INTEGRALS AND OTHER
MATHEMATICAL DATA
by H.B. DWIGHT, PROFESSOR ENERITUS, MASSACHUS ETTS
(INSTITUTE OF TECHNOLOGY)
PROBABILITY INTEGRALS
585. Normal probability integral = $\frac{1}{\sqrt{(2\pi)}} \int_{-x}^{x} e^{-t^{2}/2} dt$
= $\operatorname{erf} \frac{x}{\sqrt{2}}$ [see 590]
= $x \left(\frac{2}{\pi}\right)^{1/2} \left[1 - \frac{x^{2}}{2 \cdot 1!3} + \frac{x^{4}}{2^{2} \cdot 2!5} - \frac{x^{6}}{2^{3} \cdot 3!7} + \cdots\right]$$$

 $[x^2 < \infty].$ [See Table 1045.]

586. For large values of x, the following asymptotic series may be used:

$$\frac{1}{\sqrt{(2\pi)}} \int_{-x}^{x} e^{-t^{2}/2} dt$$

$$\approx 1 - \left(\frac{2}{\pi}\right)^{1/2} \frac{e^{-x^{2}/2}}{x} \left[1 - \frac{1}{x^{2}} + \frac{1 \cdot 3}{x^{4}} - \frac{1 \cdot 3 \cdot 5}{x^{6}} + \frac{1 \cdot 3 \cdot 5 \cdot 7}{x^{8}} - \cdots\right],$$

where \approx denotes approximate equality. The error is less than the last term used.

590. Error function = erf
$$x = \frac{2}{\sqrt{\pi}} \int_{0}^{x} e^{-t^{2}} dt$$

$$= \frac{2x}{\sqrt{\pi}} \left[1 - \frac{x^{2}}{1!3} + \frac{x^{4}}{2!5} - \frac{x^{6}}{3!7} + \cdots \right] \quad [x^{2} < \infty].$$
591. Erf $x \approx 1 - \frac{e^{-x^{2}}}{x\sqrt{\pi}} \left[1 - \frac{1}{2x^{2}} + \frac{1 \cdot 3}{2^{2}x^{4}} - \frac{1 \cdot 3 \cdot 5}{2^{3}x^{6}} + \cdots \right].$

592. Alternative form of the same series:

Erf
$$x \approx 1 - \frac{e^{-x^2}}{x\sqrt{\pi}} \left[1 - \frac{2!}{1!(2x)^2} + \frac{4!}{2!(2x)^4} - \frac{6!}{3!(2x)^6} + \cdots \right]$$

The error is less than the last term used. [Ref. 9, p. 390.]

For tables of numerical values see Ref. 55e, Vols. I and II; Ref. 5. pp. 116-120; and Ref. 45, pp. 210-213.

LOGARITHMIC FUNCTIONS

In these algebraic expressions, log represents natural or Napierian logarithms. Other notations for natural logarithms are logn, ln and log. $\log_{a} a = 2.3026 \log_{10} a$. 600.1. $\log_{10} a = 0.43429 \log_{e} a$. 600. $\log (1 + x) = x - \frac{x^2}{2} + \frac{x^3}{2} - \frac{x^4}{4} + \frac{x^5}{5} - \cdots,$ 601. $\lceil x^2 < 1 \text{ and } x = 1 \rceil$. For x = 1, this gives a famous series: **601.01.** $\log 2 = 1 - \frac{1}{2} + \frac{1}{2} - \frac{1}{4} + \frac{1}{5} - \cdots$ **601.1.** $\log(1-x) = -\left[x + \frac{x^2}{2} + \frac{x^3}{3} + \frac{x^4}{4} + \frac{x^5}{5} + \cdots\right],$ $[x^2 < 1 \text{ and } x = -1].$ **601.2.** $\log\left(\frac{1+x}{1-x}\right) = 2\left[x + \frac{x^3}{3} + \frac{x^5}{5} + \frac{x^7}{7} + \cdots\right],$ $= 2 \tanh^{-1} x$ $[x^2 < 1]$. [See 708.] 601.3. $\log\left(\frac{x+1}{x-1}\right) = 2\left[\frac{1}{x} + \frac{1}{3x^3} + \frac{1}{5x^5} + \frac{1}{7x^7} + \cdots\right],$ $[x^2 > 1]$. [See 709.] $= 2 \operatorname{ctnh}^{-1} x.$ **601.4.** $\log\left(\frac{x+1}{x}\right) = 2\left[\frac{1}{2x+1} + \frac{1}{3(2x+1)^3}\right]$ $+\frac{1}{5(2x+1)^5}+\cdots$, $\lceil (2x+1)^2 > 1 \rceil$. [Ref. 29, p. 6.] **601.41.** $\log (x + a) = \log x + 2 \left[\frac{a}{2x + a} + \frac{a^3}{3(2x + a)^3} \right]$ $+\frac{a^5}{5(2x+a)^5}+\cdots$, $[a^2<(2x+a)^2].$ **601.5.** $\log x = (x-1) - \frac{(x-1)^2}{2} + \frac{(x-1)^3}{2}$ $-\frac{(x-1)^4}{4} + \cdots, \quad [0 < x \le 2].$

601.6.
$$\log x = \frac{x-1}{x} + \frac{(x-1)^2}{2x^2} + \frac{(x-1)^3}{3x^3} + \cdots, \quad [x > \frac{1}{2}].$$

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