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CORRESPONDENCE

Jan 1-15, 1960

N. WIENER · MC 22

[Ca. Jan, 1960]

MRS. G. A. CAMPBELL
10927 - 148 STREET
EDMONTON, ALBERTA

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

Dear Sir:

Your article that appeared in many of the large daily newspapers was very interesting to us, and if you would do us the favor of elaborating on the subject, it would be much appreciated.

There are several of us here who have discussed the matter of calculating machines playing chess, checkers and bridge. One University graduate believes that the machine can beat anyone at chess, and another believes that the machine can only do what a chess expert has fed into it and if a better player came along he

MRS. G. A. CAMPBELL
10927 - 148 STREET
EDMONTON, ALBERTA

could beat the machine
but of course the machine
would be much faster

Will you please be good
enough to give us your
opinions regarding these
games?

Thanking you sincerely,
Muriel Campbell

[ans 1/11/60]

Dr. Moritz Hofstatter
804 South 15th Avenue
Maywood, Illinois

Maywood, January 2nd, 1960

Dr. Norbert Wiener
53 Cedar Road
Belmont, Massachusetts

Dear Professor Wiener :

I take the liberty to send you a manuscript of a political nature which I consider of utmost importance in the present situation of our country and I would like to ask you for the favor to read it and to give me your opinion .

I recommend in this book a new system of government for the American people since I am convinced that most of our economical, social and political ills , in the domestic as well as in the field of our foreign policy stem from the fact that in a parliamentary, that is in a representative system the people themselves really have no true voice in government . I am suggesting direct democracy since I feel that at least in this country with its advanced technology it is today possible to get an accurate polling of what every citizen thinks, wishes or suggests.

Since you are an expert in these matters I am appealing to you to get your opinion whether a government not only of and for, but also by the people is actually possible and could be run directly by the people themselves and by a special branch of mere administration with the help of cybernetics thus eliminating so called representatives who are more inclined to represent their own interests, power-cliques and pressure-groups than the will of the people . Your endorsement of such a system of "soul probing" of people's mind and will would, of course, encourage me greatly .

You have repeatedly pointed out to the dangers which result from the increased domination of the electronic brain over the human brain . That is the ambiguity involved in any technological progress and these dangers can only be met if men put emphasis on the specific human and humane characteristics which no machine ever possesses, namely their moral and social attitudes; if their common sense and wisdom will outweigh their mere practical intelligence and cleverness; if they will be able to change today's politics of the eternal fight for power, property and privileges into politics with the purpose of taking care of the public interest by planning and cooperation . Yet all these good purposes , in order not to be only empty preachings, as were the preachings of the churches during millenia, have to be put into action and action concerning the masses, that is political action, is based on organization which is essentially an achievement of modern time. The modern trend of politics and modern organization, referring to the masses therefore naturally aims towards democracy and an improved democracy is the key to

to any progress. But I prove in my book that the parliamentary representative system, once the cradle of a primitive democracy becomes in time its straitjacket and is bound to become finally its ~~casket~~. For me it is evident that the representative system is today absolutely inadequate and belongs to the time of the horse and buggy and that for the development of a better truer up-to-date-democracy which must be based on the political activity of an entire population, all the means of modern technology, of traffic and communication, of modern organization and exact polling have to be used in order to determine conscientiously in a democratic way the direction in which people want politics carried on.

If anybody can, you ought to be able to evaluate the importance of modern technology and modern organization for the further development from today's pseudo-democracy to a so to speak scientifically approved modern democracy. Direct democracy is in my opinion an absolute necessity in the atomic age as its only adequate political system, as the better democracy and the long expected third force destined to eliminate the capitalistic-communistic antagonism which in spite of the different emphasis on its polar ends still whirls around the same axis of an excessive materialism and the same eternal fighting competition because of the same materialism.

While I only recognize the deficiencies of the representative system and the necessity of supplanting it by direct democracy I expect and hope that you as an expert, so much better equipped in the field of scientific study of the public opinion, that you will be able to make the practical and thus decisive contributions towards the establishment of direct democracy and you might become the obstetrician of a new and better world.

I am looking forward with much anticipation to your answer.

Respectfully yours

S. Monty Hefter

P.S Pages referring specifically to the problem of direct democracy are from 28 till 45.

For your convenience I enclose a self-addressed and stamped envelope.

(INTER-DEPARTMENTAL)

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CAMBRIDGE 39, MASSACHUSETTS

OFFICE OF

H. B. Brainerd DSR staff

W6-307

January 4, 1960

Dear Professor Wiener —

I have noted your concern with the place of human beings in the technological world. This has been a subject of increasing concern to me as well. With this common interest in mind I thought you might like to see an essay I have written, so am enclosing it.

Sincerely,
Henry Brainerd.

[ans 1/8/60]

ONE MAN'S OPINION

Where is Our Way of Life Heading?

What are Our Educational Needs?

by

Henry Bowen Brainerd

I. The Lessons of Recent History

The trend to a rising value of human labor along with greater productivity through increasing mechanization or automation has been evident for more than a century. There is every reason today to expect the trend to accelerate and to spread to more fields. The cotton gin, the power loom, and the spinning frame over a century ago, the automobile assembly line half a century ago, and the rapid growth of dial telephones within the past quarter century are well-known examples. Today the electronic computer bids fair to take over all routine clerical work.

This rising value of labor has priced many jobs out of existence. The housemaid, the odd-jobs man, the delivery boy, and the dressmaker have substantially disappeared. Self service is universal in food stores and is making heavy inroads in other types of retailing. Vending machines are becoming more elaborate and can be expected to take over many smaller localized retail outlets.

Products which take large amounts of labor are likewise giving way to products of mechanization, just as the village band concert and the vauderville act have given way first to the movies and now to television. And there is every evidence that this trend to increased value of labor and increased mechanization will continue.

Within the foreseeable future we may well see high-labor protein foods such as milk, meat, and some vegetables priced out of reach, and low-labor protein foods such as soya beans, algae, and yeasts become our mainstay. We have already seen a revolution in architecture with bricks on the decline and ornamentation eliminated because of labor cost.

The jobs that are being abolished are largely those that use the lower grades of labor or narrowly specialized skill. It is logical to predict that within a few decades all jobs will demand a level of ability, versatility, and training that is now associated with management, professional, or at least highly technical jobs. Along with this we will have more time that is leisure in the sense that it is not part of earning our living, but we will have to use at least part of it to do for ourselves much that we now pay to have done, particularly in the way of housekeeping and home repairs. Doubtless this will lead to radical changes in the mechanics of our way of life.

II. The Immediate Need

We were faced recently by a "recession" for which many remedies were proposed. I offer one more remedy that I have not seen anybody else suggest: upgrade our labor force.

While my information is from isolated instances rather than all-inclusive statistics, I believe it is extensive enough to be valid. I heard a school official bemoan the lack of qualified teachers. An auto dealer could not find skilled mechanics. A metallurgical company had to make a major effort to locate and employ technicians able to carry out experiments without detailed supervision. At the same time there was an alarming amount of unemployment among the unskilled and among those whose skills are effectively obsolete, as for example textile operatives where mills have closed.

Our labor force contains many individuals who are capable of a much higher type of job than they now fill. Some of these are fully trained for the higher job but have established seniority and security where they are; more are capable of absorbing advanced training but have not obtained it. I call to mind a graduate chemist working as a railroad car inspector, a lawyer working as a postal clerk, a trolley starter who has completed a

professional course in public relations. In the second group I know a man of obviously very high intelligence who quit school at fourteen to support his younger brothers and sisters after his father died. He has been successively a tannery worker, a janitor, and a stock clerk. Also, a subway motorman who has demonstrated his real aptitude for writing and editing in a club paper.

The remedy, as I see it, is first to encourage everybody to take training for whatever upgrading is within his ability, or refresher courses on past training. Also encourage retraining for those whose skills have become obsolete. Then encourage every qualified person to move up to a better job and protect his seniority and security in his old job for a long enough time that he can be sure he has made good in his new one, say three to five years. This will help relieve present shortages of skilled personnel and will at the same time create openings at the lower levels to absorb many unemployed.

This can be accomplished by revising labor and civil service laws to protect seniority for the three-to-five-year period, and by offering Federal loans for upgrading training. Also, a strong publicity campaign for upgrading will be essential. Another urgent step is to make educational expenses for oneself or for a member of one's immediate family fully deductible on income tax.

III. The Long Term Need

Today we are much concerned at the Russian threat and our need to educate more engineers and scientists. This is obviously a transient situation. The long term need is to educate people for our future way of life.

Basically, everybody should receive as high a level of education as he or she is capable of absorbing. This education will have to prepare for employment that will utilize the highest level of each person's mental and physical ability, with enough breadth to ensure continued usefulness through technological developments that render specific skills obsolete. It will have to cover self-performance of a wide variety of tasks in leisure

hours. And it will have to provide a basis for cultural enjoyment of leisure. This education must be available to all. Lack of money must never be an insuperable obstacle.

The form that future education will take, and the names that will be used for different types and levels of instruction, will doubtless change considerably from present practice. But to assess the future in present-day terms, it seems safe to predict that a considerable majority of the population, with I. Q. from 85 or 90 up, should complete junior college, those with I. Q. from 110 up should complete college, and those with I. Q. from 120 up should continue into graduate school.

This will require a tremendous expansion of institutions of higher learning. I am inclined to believe that we should set up a system of tax-supported junior colleges on a local or regional basis. The present colleges, which could well be called senior colleges, could then admit students at what is now the junior year. The independence of private endowed colleges and the highest scholastic standards of all colleges should be protected and strengthened wherever possible.

The curriculum of the future will doubtless carry on the trend already found in today's engineering, teaching a fundamental understanding of the physical world and a versatility of approach to new problems, rather than specialized knowledge that has a high risk of obsolescence. The average student will doubtless get much more science and mathematics than now. At the same time the present sharp distinction between "technical" and "cultural" subjects will largely disappear, and all subjects will be treated as conveying both technical and cultural values. The distinction between academic and extracurricular activities may also be erased.

Another change may well be to cover many subjects at an earlier age. Introductory calculus and second year chemistry are being brought into the last year of high school, and we may well see the day when the average graduate of a junior college will have a practical working knowledge of Einstein.

INTERNATIONAL COOPERATION ADMINISTRATION
UNITED STATES OPERATIONS MISSION TO PAKISTAN

USOM/K APO271
New York, NY



American Embassy
Karachi, Pakistan

January 4, 1960

Doctor Norbert Weiner
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Dr. Weiner:

Enclosed is a paper that I have prepared on fundamental relationships which might be of some interest to you. Prof. Abdus Salam FRS was very kind in his comments so I thought that it might be worth your consideration.

Incidentally, I have long found your works to be a source of interest, information and inspiration. One reason I am taking the liberty of sending you a copy of my paper is that I have found that our views seem to coincide in so many respects. You have a facility for expressing your views that is outstanding and which I admire greatly.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "W. T. Ellis, Jr.", written in dark ink.

Weldon T. Ellis, Jr.

WTE/am

[ans 1/11/60]

FUNDAMENTAL INTERRELATIONSHIPS

and

Their Impact Upon Higher Mathematics

by

Weldon T. Ellis Jr.

Principal Atomic Energy Advisor
USOM/Pakistan

This paper is presented with the belief that the time is rapidly approaching when a fuller and more exact understanding of the fundamental interrelationship of the forces of nature will require a more precise statement of the concepts underlying the higher mathematics in use throughout the world today. It is hoped that a statement of those interrelationships and some of the impacts upon the concepts underlying mathematics will help hasten the development of the type of mathematics necessary to express a fuller understanding of the forces of nature.

Before describing the fundamental interrelationships among the forces of nature, it is necessary to state the parameters within which the interrelationships, as described below, have been developed. As in any system one can, by changing the parameters, change the interrelationships. In brief those parameters, as pertaining to the universe in which we are now living, are:

This universe is finite in space and infinite in time, and
This universe is finite in matter and infinite in energy.

There follows a brief description of the theory involving those interrelationships considered as fundamental to the universe and all that occurs within it.

Theory in Essence

The universe consists of a unified spectrum. All forces of nature are but different aspects of that spectrum. Through an understanding of and control over one aspect all aspects can be controlled. In other words, the forces of nature can be so directed as to interplay and modify one another to a degree hitherto unpractised by man.

Maintaining Focus

In order to keep the theory in sharp focus, it is absolutely essential to keep the following thought in mind at all times. The basic com-

ponents or facets of nature ... space, energy, matter, time and reactivity are inseparable. Only for purposes of discussion can they be considered separately.

For the purpose of this paper those facets are defined as follows:

1. Space - - Space is composed of a basic substance that can be called ylem. The relative degree of concentration of ylem determines the relative amount of space. At one extreme there is a minimum concentration of ylem. This represents a state of maximum expansion of space. At the other extreme there is a maximum concentration of ylem and a minimum amount of space. Between the two extremes there are varying degrees of concentration of ylem and thus of space. The degree of expansion or of relatively free ylem determines the relative amount of space. Space can thus be visualized as one facet of a continuum ranging from maximum expansion through all the intermediate stages to maximum concentration.
2. Energy - - There is an energy facet of the continuum paralleling the space facet. The spectrum of energy ranges from the pattern of motion of the smallest unit-of the basic substance ylem-through the patterns of motion of all the components of the universe to include the pattern of motion of the universe itself. Implicit in the concept is the fact that energy is motion and that everything is always in motion. Only relatively speaking is anything ever at rest. Also involved is the hypothesis that all motion is waveform or pulsing in nature. Since there cannot be motion without space in which to move, space and energy must be considered as inseparable. Likewise, there cannot be motion without something to set in motion so it follows that space, energy and matter are inseparable.
3. Matter - - Matter can be considered as the antithesis of space in that it is the result of the concentrating action of energy upon space. The action of the various wave patterns of energy flowing through space produces zones of compression and rarefaction. Within those zones there are further interactions of the waves that create endless complexes of vortexes, nodes and shells. The result is a multiplicity of concentrations of ylem. We call those complex concentrations matter. These we recognize in the form of atoms and molecules. At a lower level we recognize them as sub-atomic particles. Actually they are all nothing more than a segment of the matter facet of the continuum. This facet starts with the smallest unit, ylem, and continues up through all the different combinations and sized units of matter to embrace the largest unit of all, the universe in its entirety.

4. Time - - The passage of time is dependent upon and relative to the rate of energy flow. The faster the rate of energy flow the faster the passage of time. To state it differently, the greater the amount of energy the greater the potential amount of time. In terms of ageing, the greater the degree of concentration of energy or density of matter the longer its potential life. Also, the greater its density the better it can resist the dissipating effect of the energy flow and the longer it will be able to survive. Conversely, where there is less energy involved there is less time. These interrelationships mean that there is a time facet of the continuum paralleling the space-energy-matter facets. The time spectrum ranges from the pulse rate of the smallest unit, ylem, up through those of all the components to the pulse rate of the universe itself.

5. Reactivity - - Reactivity is the fifth and final facet to the continuum. It is the facet that binds together and gives direction to the other four. The ability to react to changes in pressure, temperature and other environmental forces determines the ability to survive. The extent to which that ability is organized and given direction determines the ability both to survive and to control environment. The forces of environment range from the energy patterns that form the sub-atomic particles, up through the complex forces of nature, to include the radiations that emanate from and act upon all components of the universe. At the lower level reactivity can be viewed as purely mechanical. As it progresses up through the more highly organized and better integrated units it can be called life. As life itself becomes more purposeful it becomes more intelligent. Intelligence helps give control over environment. Intelligence is the highest form of reactivity. Reactivity parallels and is an integral part of the entire space-energy-matter-time continuum. It is the facet that pervades and gives guidance and purpose to nature and all that it includes.

Mathematical Implications

Perhaps the primary change in the system of mathematics needed to express accurately the above concepts lies in the definitions of finite and infinite. The above calls for a definition of finite as being one or unity. In turn, the open-end concept of infinite will have to be replaced by that of the closed or completed cycle. These will be more in accord with both quantum and wave theory than present day definitions. In addition, the concept of equality will have to be modified since pure equality is non-existent within the present universe. For example, it will no longer suffice to say that for every action there is an equal and opposite reaction. It must be restated as- for every action there is an almost equal and almost opposite reaction. To state otherwise is

to postulate a perfectly balanced and thus a perfectly static universe. That we know is not true.

The concept of zero will have to be eliminated from the new system. Such a concept is sufficiently exact when dealing with the daily needs of, say, an economic system but it is not admissible when expressing universal interrelationships. The use of zero postulates the existence of nothing; a contradiction on the face of it. In the place of zero the concept of spatial displacement will have to be adopted. Taking away two apples from a pile of two does not leave zero apples. It merely displaces them; otherwise a segment of the universe will have been destroyed and with it the parameters within which this paper was developed.

Derivative Definitions

When viewed in terms of the above hypothesis, a number of formerly hazy concepts can be defined precisely and in quantitative terms. Such definitions can then be expressed mathematically. Two cases in point are entropy and chaos.

Entropy

The entropy, or stage of degradation of any system, at any given point in time, is directly proportional to the mean wave-length of energy of the system.

Chaos

The potential for chaos in any system, at any given point in time, is inversely proportional to the stage of development of the re-activity of the system.

From the above it can be seen that the potential for chaos of any system is inversely proportional to the entropy of the system.

The ability to express mathematically both entropy and chaos and to relate one to the other would provide a formidable mathematical tool that could be used to analyze the status and thus to predict the behaviour of all types of systems. A mathematical system capable of such breadth of application would fulfill the fondest dreams of the mathematicians down through the ages.

The author feels it is particularly fitting that this paper should first be presented in Pakistan. Pakistan is, like the concepts involved in this paper, a very new nation. Yet Pakistan is, again like the paper, an expression of a culture that is based in the very beginnings of civilization upon earth.

It is also fitting that the challenge presented to the mathematicians of the world should first be made to descendants of those amazing intellectuals who developed the first concepts of higher mathematics without which the western civilization would never have been able to escape from the dark ages. It will be interesting indeed to see how today's descendants arise to meet the challenge so presented.

In closing it might be added that the fundamental interrelationships among space, energy, matter and time, as modified by reactivity, can be expressed as follows:

$$\frac{m}{s} \approx \left(\frac{e}{t}\right)^r \quad \text{or} \quad m.t \approx (e.s)^r$$

It will be noted that there is no constant involved, rather, there is a series of inter-related variables to which a constant value or values can be assigned where desired or necessary. Further, it is the author's belief that the inclusion of reactivity represents the first time that the potential of intelligence has been introduced as a factor to be considered in mathematical computations.



**MICHIGAN
STATE HIGHWAY DEPARTMENT
JOHN C. MACKIE, COMMISSIONER
LANSING**

ADMINISTRATIVE SERVICES DIVISION

R. S. D'AMELIO, DIRECTOR

B. J. ROCKSTAD, ASS'T. DIRECTOR

January 4, 1960

Doctor Nerbert Wiener
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

Dear Doctor Wiener:

The Detroit Free Press ran quite an article in its' December 28, 1959, edition on your talk "The Nature of Social Dangers of the Control Machine's of the Future" at the 126th annual meeting of the American Association for the Advancement of Science in Chicago. However, it is apparent that they did not reprint your complete speech, and we wonder if it would be possible to obtain a copy.

This Division of the Michigan State Highway Department in cooperation with the Training Division of the Civil Service Commission is in the process of forming its fourth annual training program for supervisory employees. Among subjects recommended by the Civil Service Commission was one entitled "Applying Improved Work Methods to Mechanical Equipment and Machine Operations".

This subject is giving us considerable trouble insofar as pertinent reference material is concerned and we thought that from the brief quotes in the Detroit Free Press your speech would provide excellent subject points.

We believe that if you go far enough in applying improved work methods to machine operations that it may be possible to reach a point where the machine will dominate every moment of the employees work day. Machines should assist the human race, not dominate them. We further believe that management, particularly in government, has some responsibility in this field since we do not have the incentives of industry, such as overtime and premium pay. Should we provide training on other jobs? How else can management determine who should be promoted? Capable employees do not in most cases gravitate to the attention of management unless management does some searching of its' own.

We will be glad to remit the cost of a copy of your address, and will greatly appreciate your permission to use pertinent points in our subject presentation.

Very truly yours,

A handwritten signature in cursive script that reads "B. J. Rockstad".

B. J. Rockstad
Assistant Director

[ans 1/7/60]

parade

JACK ANDERSON
FRED BLUMENTHAL
WASHINGTON CORRESPONDENTS
WYATT BUILDING, ROOM 1224
777 14th STREET, N. W.
WASHINGTON, D. C.

January 6, 1960

Dr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Dr. Wiener:

PARADE Magazine, which has a Sunday circulation of eleven million, would appreciate your help in examining the intriguing mystery of life after death. Would you be generous enough to give us your answers to two questions:


1. Do you believe in life after death?
2. What scientific reasoning or theories can you offer to support your belief?

We would like to quote you as one of the nation's leading scientists on this fascinating subject. If you prefer not to be identified, however, we will still appreciate your views. Let us know whether we can attribute your reply to you in our article.

A stamped, addressed envelope is enclosed for your convenience. If you could get your reply into the mail by January 21st, it will help us meet our deadline.

Thank you sincerely.

Cordially,


Jack Anderson

[ans 1/7/60]

CLASS OF SERVICE

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

WESTERN UNION TELEGRAM

W. P. MARSHALL, PRESIDENT

1201

SYMBOLS

DL=Day Letter

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1960 JAN 6 1 AM 6 17

B LLV055 (SY FIA108) PD AR=FI NEW YORK NY 5 253PME=

DR NORBERT WEINER=

53 CEDAR RD BELMONT MASS(CA)=

SATURDAY REVIEW IS INTERESTED IN YOUR DECEMBER 27 TALK ON ELECTRONIC BRAINS BEFORE THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. MAY WE SEE A COPY OF IT. WITH A VIEW TO POSSIBLE PUBLICATION?=
JAMES F FEATURE EDITOR=.

JAMES F FEATURE EDITOR=.

*No - paper bespoke
talked over phone*

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THE UNIVERSITY OF ROCHESTER

RIVER CAMPUS STATION
ROCHESTER 20, NEW YORK

COMPUTING CENTER
TAYLOR HALL

January 6, 1960

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

Dear Professor Wiener:

The University of Rochester School of Liberal and Applied Studies, through the assistance of the Social Science Research Council, wishes to invite you to be among a series of speakers to visit the University this year. The theme of the series is on computer utilization which is not strictly computational. Other speakers are Hiller (on Music), Ledley (on Medical Diagnosis), Simon (on Simulation of Thought), Perlis (on Compilers), Gorn (on Formal Languages), and Giuliano (on Language Translation).

We would like you to plan on being in Rochester for two days. You are asked to speak at a colloquium for the faculty and student body on the afternoon of the first day and to present a popular exposition of your subject for the student body and members of the community that evening. It is appreciated that this is rather late for you to schedule a February date. If you are unable to visit us on February 18 and 19, can you suggest other dates that month or early in March or April when you could come?

Upon your acceptance of the invitation, we would ask that you provide titles for both the seminar and the popular lecture in the subject area of "Communication between Man and Machine".

Since we feel that appreciation and discussion of your topic will be aided by advance information that you may be able to provide, we would request that you send a photograph, a short autobiography for publicity purposes, and a reprint (or reprint of a paper in this subject area).

We hope that you will welcome the opportunity to talk about your work to an interested and research-oriented audience. As partial recompense for your time and travel expense, we offer a total stipend of \$200.

Sincerely,

Thomas A. Keenan /lp

Thomas A. Keenan,
Vincent Nowlis, Coordinators

TAK:llp

[ans 1/15/60]

C O P Y

P.O. Box 607

Healdsburg, California
January 6, 1960

The President
Washington, D.C.

Dear Sir:

Congratulations on the success of your tour. If only you could have included Peking in your itinerary!

As a major item for the Summit conference may I suggest that you announce to the world that the U.S. is proceeding to act on Mr. Khrushchev's world disarmament proposal; that we will ask him to appoint agents to select say 2% of our bombers under which they will light a huge fire; to supervise the sinking of 2% of our hydrogen bombs, warheads and submarines in the deepest part of the Atlantic Ocean; to be present at the disbanding of 2% of our army, etc.

You would of course invite him to do likewise, as well as Mr. Macmillan. Each time Mr. Khrushchev followed suit we would again lead, aiming at completing the job in four or five years allowing time to arrange the many other details necessary.

Would not such an act by the U.S. head off also the beginning of an atomic threat by France, and perhaps a dozen other nations? How could the U.S. possibly be hurt by such a cautious procedure -- provided of course we have an honest desire for disarming?

Even though there were an element of danger in thus taking the initiative, is the danger as great as the ever increasing one we are incurring in the cold war and arms race?-- in which even though we "win", we lose. By pressing for disarmament have we really anything to lose but our chance of eventual destruction?

This great bonfire would be an earnest of our strong determination and realization that war must be abolished; a token of a new era in man's upward climb; a beacon of hope to the world victims of war, hunger and poverty; an inspiration to the American people to exchange their negativism for real world leadership toward a new Renaissance.

What an opener for a new decade!

Yours truly,

IRVING F. LAUCKS

UNIVERSITY OF CALIFORNIA

DEPARTMENT OF
ORIENTAL LANGUAGES
BERKELEY 4, CALIFORNIA

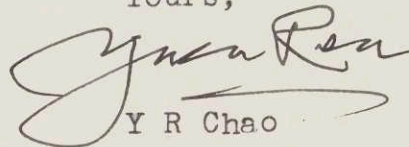
[1960]
January 7 1959

Dear Wei No:

I remember your remark once that there was no statement anywhere about the way mathematical formulae are to be pronounced in various languages. Is it still the situation now? If so I suppose I will just have to ask around how it's done if I am interested in the question. If there has been ~~some~~ account given of such things that have come into your notice I should appreciate a reference or two to it.

How are you all nowadays? We spent a spring semester and summer in Taiwan and Kyoto and had a good time, too much of a good time, in fact. Many relatives and friends were in Taiwan who we didn't know were there. An 86-year-old aunt of mine looked me over and said: "I can't say that I remember you, but I was at the ^{house} in Tientsin when you were born!"

Yours,


Y R Chao

[ans 1/18/65]

Budapest, le 7 janvier 1960.

Monsieur et Cher Collègue,

Le Comité de rédaction des Annales Universitatis Scientiarum Budapestinensis de Rolando Eötvös Nominatae, Sectio Mathematica a décidé de consacrer le volume suivant des Annales a la mémoire de Léopold Fejér, décédé le 15 octobre 1959.

Le Comité de rédaction se ferait un plaisir d'accepter de vous un manuscrit destiné au volume en préparation/à paraître vers la fin de l'année 1960/.

Si vous êtes prêts à satisfaire à cette invitation, nous vous prions d'envoyer le manuscrit jusqu'au 15 avril 1960 à l'adresse suivante:

impossible

Annales Universitatis Scientiarum Budapestinensis de Rolando Eötvös Nominatae

Budapest, VIII. Muzeum körut 6-8. Matematikai Intézet
Hongrie

En vous assurant de ce que votre collaboration nous ferait un grand honneur, veuillez agréer, Monsieur, l'expression de notre considération distinguée.

A. Császár

/A. Császár/

secrétaire de Comité de
rédaction

With hearty greetings

Paul Tivan

From

*Inst. Math. of
the Hung. Acad. of Sciences
Budapest, Hungary*

V. Realtanada n. 13-15

[ans 2-29-60]

To be sent till the 15th March 1960

2nd Hungarian Mathematical Congress

Budapest, August 24th—31st 1960

APPLICATION FORM

(Please fill in this form in typescript or in block letters)

Name

Profession

Place of employment

Exact address (to which further correspondence should be sent)...

.....

Do you intend to give a lecture? If so, in which Section?.....

.....

.....

Name of associate members, who will accompany you:.....

.....

.....

.....

Category of accomodation you will request from IBUSZ

Category for persons

Excursions of Group C. you (or your associates) wish to participate

in :

C.1..... persons C.2 persons C.3 persons

C.4 persons C.5 persons

Any further wishes :

.....

.....

Date :

Signature :

MTA Matematikai Kutató Intézete
Kongresszusi Szervező Iroda

HUNGARY

B U D A P E S T

V., Reáltanoda u. 13—15.

**2nd HUNGARIAN
MATHEMATICAL CONGRESS**

Budapest, 24th — 31st August 1960.

FIRST COMMUNICATION

1. GENERAL INFORMATION

1.1. *Date and place*

The 2nd Hungarian Mathematical Congress will be organized jointly by the Hungarian Academy of Sciences and the János Bolyai Mathematical Society, from August 24th to 31st 1960, in Budapest. The opening session of the Congress will commemorate János Bolyai, one of the discoverers of noneuclidian geometry, at the occasion of the centenary of his death.

The opening and closing sessions of the Congress will take place in the Ceremonial Hall of the Hungarian Academy of Sciences (Budapest, V., Roosevelt tér 9). The scientific meetings will be held in the buildings of the Mathematical Institute of the Hungarian Academy of Sciences (Budapest, V., Reáltanoda u 13-15.), the Faculty for Natural Sciences of the Loránd Eötvös University (Budapest, VIII., Múzeum krt. 6-8.), the Electrotechnical Faculty of the Technical University (Budapest, V., Szerb u. 23.) and the House of Technics (Budapest, V., Szabadság tér 17.).

1.2. *Correspondence*

The address of the Congress Bureau is the following :

MTA Matematikai Kutató Intézete

(Mathematical Institute of the
Hungarian Academy of Sciences),

Budapest, V., Reáltanoda u. 13-15. (Hungary)

Telephone : 182-875 or 187-330.

Telegraphic address : MATEMATIKA, BUDAPEST.

Every correspondence relating to the Congress should be sent to the above address, in Hungarian, English, Russian, French or German language.

1.3. *Registration*

All participants of the Congress are requested to apply for registration in the Congress Bureau at their earliest convenience. The Congress Bureau will be open from August 23th to September 1st 8-12 a. m. and 3-6 p. m.

2. MEMBERSHIP

The Organizing Committee of the Congress would be glad if many foreign mathematicians participated in the Congress, which could thus contribute to the international scientific cooperation in the field of mathematics.

Everybody may participate in the Congress as ordinary member, who pays the membership fees. Those accompanying ordinary members may participate in the Congress as associate members. The membership fees are for ordinary members \$6, for associate members also \$6.

Applications for membership are to be sent on the enclosed application form to the Congress Bureau, till the 15th of March 1960.

The membership fees have to be transferred through any bank in any country to the account IBUSZ (II. Magyar Matematikai Kongresszus) of the Hungarian National Bank, Budapest.

The members may take part in the scientific meetings and other programmes of the Congress (excursions, banquet, etc.). They may deliver lectures at the Congress and they receive all printed documents (detailed programme, abstracts of lectures, etc.). The associate members may participate in the social arrangements and in the special programmes organized for them, they receive the list of these arrangements.

The Congress Bureau is at the disposal of all members in any problems concerning their stay in Hungary (hotel reservation, travelling problems, exchange of foreign currency, etc.).

3. SCIENTIFIC PROGRAMME

3.1. *Sections*

The lectures at the Congress will be held in the following Sections :

1. Algebra and number theory
2. Geometry and topology
3. Analysis

4. Probability theory and mathematical statistics
5. Foundations of mathematics and theory of mathematical machines

6. Applications of mathematics

7. History of mathematics and mathematical education.

Depending on the number of presented lectures, some Sections may be divided into subsections.

3.2. *Lectures*

Lectures should be given preferably in Hungarian, English, Russian, French or German.

The length of each lecture is at most 20 minutes ; after each lecture 10 minutes are at disposal for discussion.

The Organizing Committee of the Congress has limited the length of the lectures in order to avoid overcrowding of the programme and to ensure enough time for informal discussions. At the same time the lecturers are requested to send in longer abstracts than usual. The abstracts may consist of at most 1000 words, and it is desirable that they should exceed 300 words. The abstracts should be written in English, Russian, French or German.

The final date of sending in the abstracts is March 31st 1960.

Please observe this date as otherwise the mimeographing of the abstracts cannot be ensured. We request to note on the abstract, in which section the lecture should be presented. The Organizing Committee will endeavour to fit in every lecture into the programme.

Every section will have in general 5 meetings with fixed programme and two informal meetings. On the informal section-meetings no announced lectures will be delivered, but there will be opportunity to raise unsolved problems. The Organizing Committee would approve of pointing out unsolved problems connected with the subject of the lecture in the abstracts too. The experiences of several Congresses show namely that in connection with unsolved problems usually fruitful discussions take place. The Organizing Committee of the Congress is ready to accept also such lectures which deal entirely with raising unsolved problems. In such cases the length of the lecture will be 10 minutes, and that of the discussion 20 minutes.

3.3. *Publication of papers*

No special volume containing the papers delivered at the Congress will appear. There is however ample possibility of publish-

ing the papers delivered at the Congress, which have not yet been published or are not in print elsewhere, according to the wish of the author, in one of the mathematical periodicals appearing in Hungary in foreign languages :

Acta Mathematica Academiae Scientiarum Hungaricae,

Acta Scientiarum Mathematicarum (Szeged),

Publicationes Mathematicae (Debrecen),

Publications of the Mathematical Institute of the Hungarian Academy of Sciences,

Annales Universitatis Budapestiensis de Rolando Eötvös Nominatae, Sectio Mathematica.

We ask for presenting the manuscripts destined for publication till September 1st 1960 to the Congress Bureau. The articles submitted in due time will appear presumably in the course of 1961.

4. EXCURSIONS AND OTHER PROGRAMMES

There will be organized several excursions and other entertainments for the members of the Congress in order to make possible for the participants of the Congress to see the most beautiful parts of Hungary and other sights of the country. These are listed below. Group A. includes those excursions and entertainments, in which all members (ordinary and associate) may participate free of charge ; Group B. contains entertainments for the associate members, who do not wish to participate in the scientific meetings; in the excursions etc. of Group C. members and associates may participate against supplementary charges. Group A.

- | | |
|-------------------------|--|
| A.1.Aug.24th p.m. | Excursion by ship. Sight-seeing of the picturesque landscape and historical relics of the Danube Loop. On the way back dance on board. |
| A.2.Aug.28th a.m. | Sight-seeing of Budapest by bus. |
| A.3.Aug.29th
evening | Closing banquet in the Grand Hotel on Margaret Island. |
| Group B. | |
| B.1.Aug.25th | Excursion to the mountains of Buda or visit of the Roman ruins of Aquincum. |
| B.2.Aug.26th | Visit to the National Gallery or to an open air bath in Budapest. |
| B.3.Aug.27th | Visit to the Museum of Fine Arts. |

B.4.Aug.29th.

Fashion show.

B.5.Aug.30th.

Visit to Palatinus-Baths or to the Zoological Garden and to the Park of Amusements.

Group C.

C.1.Aug.26th

Full-day excursion to Balaton, participation fee \$ 7. (detailed programme will be given later)

C.2.Aug.28th
evening

Open-air opera performance on the Margaret Island or concert.

C.3.Aug.30th
evening

Open-air opera performance on the Margaret Island or concert.

C.4.Aug.31st

Excursion to Szeged by bus (if there will be a sufficient number of participants). Sight-seeing of the town and visit to the University. (Participation fee \$ 7, detailed programme will be given later.)

C.5.Aug.31st.

Excursion to Debrecen by bus (if there will be a sufficient number of participants). Sight-seeing of the town and visit to the University. (Participation fee \$ 10, detailed programme will be given later).

5. ACCOMODATION

For the participants of the Congress accomodation (in a Hotel or in a College) and full board will be arranged by the IBUSZ Touring, Travelling, Transport and Purchase Co. Ltd. Address : IBUSZ (II. Magyar Matematikai Kongresszus) Budapest, V., Felszabadulási tér 5. Telegraphic address: IBUSZDION (Matematika) Budapest.

The Organizing Committee of the Congress will inform the IBUSZ immediately after receipt of the application form, and the IBUSZ will despatch the necessary prospects and booking forms relating to accomodation and board.

We wish to inform you that the IBUSZ can provide accomodation only with full board (breakfast, lunch, dinner) for the following prices :

Category P. hotel room, with breakfast, lunch and dinner
\$ 9 daily ;

” Q. hotel room, with breakfast, lunch and dinner,
\$ 8.20 daily ;

- Category R. hotel room, with breakfast, lunch and dinner,
\$ 7.30 daily ;
" S. hotel room, with breakfast, lunch and dinner,
\$ 6.20 daily ;
,, T. hotel room, with breakfast, lunch and dinner,
\$ 5,80 daily.

The meals can be taken according to wish in the dining-room of the hotel or in one of the restaurants, listed in the prospects of the IBUSZ.

There is a possibility of accomodation for a restricted number of participants in college rooms, without board. The Congress Bureau gives information at request on this question.

The costs of accomodation and board, and the supplementary charges for excursions of Group C. may be transferred through any bank till the date given in the prospects of the IBUSZ to the following account : Hungarian National Bank, IBUSZ (II. Magyar Matematikai Kongresszus), Budapest.

6. VISA, TRAVELLING PROBLEMS

If desired, the IBUSZ will arrange any problem in connection with the visit to Hungary (railway-, sleeping-car and aeroplane-tickets, etc.).

The application forms for the Hungarian visa will be despatched by the IBUSZ to the applicants and the IBUSZ will procure the Hungarian visa too.

Budapest, December 1959.

*Organizing Committee
of the
2nd Hungarian Mathematical Congress*

Conover-Mast Publications

INCORPORATED



205 EAST 42ND STREET: NEW YORK 17, N. Y.

TEL. MURRAY HILL 9-3250

Dr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

January 7, 1960

Dear Dr. Wiener:

Since our telephone conversation earlier today I have read over your summary of the article on learning machines. I have also given a great deal of thought to my letter to you, dated 30 Dec 1959, and read this over. I would very much like to be able to "unwrite" this letter, because I have obviously offended you. Unfortunately words - written or spoken - cannot be undone, and I can only assure you that it is the furthest thing from my mind to suggest anything like ghostwriting to Dr. Norbert Wiener.

Preparing the reader of our magazine for an article such as you outlined in your summary can be done in many ways. We can run a series of articles - all this can be done without presuming to encroach upon your time. I have only one request - before you completely reverse your consent to contribute an article to ELECTRICAL MANUFACTURING, please allow me to have one more (very short) visit with you. I do not ask this selfishly either for myself or even for our magazine, but only because of the vital importance of communicating to as many people as possible what the potential of learning machines really is. You - more than anyone - are aware of the "disastrous consequence of the use of the machine." I know how discouraging it is to meet nothing but indifference and total lack of understanding, but there are always a few who can learn to understand the implications, and those few are our only hope. A few months ago, for example, the staff of ELECTRICAL MANUFACTURING neither knew nor cared. Today, the publisher and several other members of the staff are beginning to see and are beginning to feel concern. This is a technical magazine, and probably the only one that is not only interested, but anxious, to publish what you have to say about the implications of learning machines. And, please believe me, Dr. Wiener, ELECTRICAL MANUFACTURING is not trying to "buy" your name - we have too much respect for you as a scientist and as a person.

If you will permit me to do so, I shall be in Cambridge on Monday, January 11, and I shall appreciate whatever time you are willing to give me. I shall telephone your secretary for an appointment on Monday (or on any other day you specify).

Sincerely,

Alice Mary Hilton
Alice Mary Hilton

Edgar Willemssen
1334/40 E. Hyde Park Blvd.,
Chicago 15, Illinois.

Chicago, Ill., January 7, 1960

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

Dear Sir:

I owe your name and the address I am writing you at, to the U.S. News & World Report's latest issue, wherein you are referred to, and quoted as, a world-famous Mathematician in the article "People of the Week" under the topic "Scientist's Warning" Now Machines can Think.-

It was with great interest, and respect, that I noted in that article that you were privileged to graduate from College at age 14, and got a Ph.D. from Harvard at age 18.

In view of this great achievement on your part at such an early age, as also for the fact that you have been a Professor at the M.I.T. since 1932, I take the liberty to bring before you, for consultation and advice, the case of my son George, now 14 years old.

For this purpose, I wish to give

you a resume of his advancement thus far, as well as of his ambitions with regard to the vast field of Mathematics.

While in 4th grade grammar school, having become bored with the simplicity of Arithmetic, he undertook by himself such studies as Algebra I, Algebra II, Trigonometry, Analytical Geometry, and Slide Rule. To date, he is, still by himself, in Chapter 20 of the Differential & Integral Calculus by Ph.D's. Clyde E. Love and Earl D. Rainville.

At present he is a High-School Freshman. However, 3 days after school started, he asked for, and was given, a final examination in Algebra I. Having passed it satisfactorily, he was advanced to Geometry. He is reviewing Algebra II on his own with the intention of getting a high grading in his final examination, and thus completing 3 credits in Mathematics at the end of his freshman year.

His greatest ambition of long, continues to be to complete High-School in 3 years instead of in 4 to be able to attend precisely the world-famous Massachusetts Institute of Technology and nothing less, for studies leading him to a Doctorate in Physics.

Mathematics is his own chosen field. No one has ever directed him to it. He has, however, received all possible encouragement and means.

The only one thing he has never received, and which I believe he needs most is some expert advice and guidance as

to a systematic program of studies to follow towards his goal. Unfortunately, to date he has not received any guidance in this direction, and, although he has the ability and desire, he really does not know if the order in which he is conducting his studies is proper and adequate, or what order should he follow and just what should he study.

Kindly excuse me for taking the liberty to address this letter to you Dr. Wiener, but my son needs the assistance and guidance that I am sure only somebody as you can give him in this matter. Therefore, I request it. Of course, I am willing to cover any expense that might be involved.

Respectfully,

Edgar Willemssen
Edgar Willemssen.

[ans 1/11/65]

January 7, 1960

Mr. Jack Anderson
Parade
Wyatt Building, Room 1224
777 14th Street, N.W.
Washington, D. C.

Dear Mr. Anderson:

I have a strong feeling against questionnaires. They force one to accept somebody else's formulation of a question, and they too often resemble the old problem of the man who asked, "Have you left off beating your wife?". Therefore, without any intended discourtesy, I leave your questions unanswered.

Sincerely yours,

Norbert Wiener

NW/emr

January 7, 1960

Miss Alice M. Hilton
Electrical Manufacturing
205 East 42nd Street
New York 17, N.Y.

Dear Miss Hilton:

Thank you for your kind letter of Dec. 30. I am very much complimented by the nice things you said about me, but not withstanding them, I am afraid that I will have to tell you that I am compelled to give up my intent to write an article for ELECTRICAL MANUFACTURING. The reasons which have led me to make this decision, not withstanding your friendliness or the regard I have for you, are the following: In the first place, 25,000 words represents more effort than I am willing to put into a popular article. In the second place, the proposition you make that I hand over to you about 5,000 words of material and that you write the remainder is not acceptable to me. Whatever it may be called technically, it would be, in fact, ghost-writing. I consider that this term covers even those articles written under the by-line "as told to so-and-so" and regard ghost-writing as most undesirable.

If you wish to write an article on the matter we have discussed together, that is your entire privilege, but this article must represent your statement and your responsibility effectively, otherwise I find myself in the indefensible position of selling my name rather than my services, and this only differs in degree from the sort of thing that Charles van Doren has done.

This is not the first time that I have had to give up otherwise profitable undertakings for similar grounds. It is part of the disadvantages which go with having a name that one cannot enter into joint undertakings for which one does not take the full responsibility. I hope you will understand my position, and I regret any inconveniences to which this may have brought you.

Sincerely yours,

Norbert Wiener

NW/emr

P.S. Following our phone conversation, I am sending you the above as reference.

January 7, 1960

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

Dear Prof. Holland:

Many thanks for your kind invitation to lecture during one week of your Summer Conference Course on "Programming Concepts, Automata, and Adaptive Systems".

However, according to my present plans, by the time you mentioned my wife and I shall be on a trip abroad so that, unfortunately, I am forced to decline. With the best of wishes for the success of your conference, I remain

Sincerely yours,

Norbert Wiener

NW/emr

January 7, 1960

The Miller Institute for Basic
Research in Science
University of California
Berkeley 4, California

Gentlemen:

Mr. Edward W. Barankin of the Statistical Laboratory of the Department of Statistics of your University has given my name as a reference in his application for a Research Professorship in the Miller Institute for Basic Research in Science.

He is working in a most fruitful field where he is showing great ability and depth of understanding. The fact that his original work did not lead conclusively to the goal but needs to be overhauled for rigor does not in my mind turn seriously against it. The field in which he is working is in the very forefront of modern cybernetic research and is attracting a great deal of attention both among university researchers and in industry. Mr. Barankin's proposal comes at a critical time of the subject, and I cannot think of a better man to carry it out.

Sincerely yours,

Norbert Wiener

NW/emr

January 7, 1960

Mrs. Courtney E. Peterson
43 Grove Street
Boston 14, Mass.

Dear Mrs. Peterson:

I am terribly afraid that my lecture schedule is filled for this spring. I am finding it a real problem to keep up my research work and those articles to the writing of which I am committed in the present lecture engagements.

Therefore, with sincere regret but all good wishes to you and your group, I am afraid I must beg off.

Sincerely yours,

Norbert Wiener

NW/emr

January 7, 1960

Mr. B. J. Rockstad
Assistant Director
Michigan State Highway Dept.
Lansing, Michigan

Dear Mr. Rockstad:

Many thanks for your letter of January 4.

You can obtain a copy of my speech at the AAAS meeting in Chicago as far as the preliminary material is concerned by writing to Prof. Barry Commoner, Committee on Molecular Biology, Adolphus Busch III Lab., Washington University, St. Louis 30, Missouri. My speeches are never delivered precisely as written, because I prefer to improvise to what is for me the very difficult task of looking on and off a fixed manuscript. If you want to use my material as it stands in the preliminary version, you are welcome, but I cannot take any further effort in this direction in view of the backlog of unfinished writings and research which awaits me.

Sincerely yours,

Norbert Wiener

NW/emr

January 7, 1960

Mr. Carl H. Rush
Eastern Psychological Association
P. O. Box 252
Glenbrook, Connecticut

Dear Mr. Rush:

Thank you for your kind invitation to address the Eastern Psychological Association at its annual meeting this spring.

I have already accepted all the invitations for lectures this year which I can physically take and to which I can do justice. Therefore, I am afraid that I shall be unable to accept. I hope you will understand.

Sincerely yours,

Norbert Wiener

NW/emr

January 7, 1960

Mr. H. J. Verner
President
M.I.T. Club of Baltimore
P.O. Box 1975
Baltimore 3, Md.

Dear Mr. Verner:

Thank you for your letter of December 21 and your invitation to the Baltimore M.I.T. Club.

I have taken on just about all that I can manage as far as my lecture engagements this spring are concerned. Therefore, while I hate to turn down an invitation of an M.I.T. club, I see no other course open to me. I hope you will forgive me.

Sincerely yours,

Norbert Wiener

NW/emr



SPACE TECHNOLOGY LABORATORIES, INC.
FLIGHT TEST OPERATIONS · PHONE COCOA BEACH 2231
POST OFFICE BOX 4277 · PATRICK AIR FORCE BASE, FLORIDA

8 January 1960

Professor Norbert Weiner
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Professor Weiner:

During the several months that have elapsed since your visit to Cape Canaveral, I have given considerable thought to the problem of utilization of the residual years of the brilliant men who are annually retired from the colleges and universities of the United States.

I account for the fact that no one has previously done anything about this flagrant waste as follows:

- (1) When a professor is young, aggressive and unretired, he is not apt to worry about the problem, and
- (2) When a professor is retired and somewhat tired, he is in no position to actively do very much about it.

I am interested in doing something about it.

I have described my plan to various college professors encountered in my recent travels, and I am encouraged to go on with it.

The basic plan is as follows:

Objective:

Provide a retirement life for retired professors which will be characterized by (1) enjoyment of good climate, sun and surf bathing, fishing, boating; (2) opportunity for stimulating conversation; and (3) opportunity to work a few hours a day without the usual strain of administrative and classroom pressure.

Implementation:

- (1) Select a place in the United States which is characterized by a favorable retirement climate -- Florida is a possibility.

8 January 1960

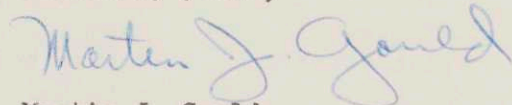
- (2) Establish a Retired Professors Institute of Advanced Study (or a more appropriate name) to be housed in a building in the favorable place selected.
- (3) Erect housing suitable for retired professors.
- (4) Staff the Institute with young personnel interested in pursuing research programs under direction of the retired professors.
- (5) Erect housing suitable for these young personnel.
- (6) Contact all the universities in the U. S. soliciting support for the Institute in two forms --
 - (a) Financial support.
 - (b) Designate suitable outstanding professors to join the Institute.
- (7) Organize an Administrative Staff (young people) and institute a program.
- (8) Organize an Advisory Board (selected retired professors).
- (9) Obtain financing.
- (10) Publicize the effort.

I can't help but believe that many a professor, while still somewhat removed from retirement, would be willing to help the effort during his vacation period. I have no doubt that graduate students would flock to the opportunity to work under such a collection of brilliance.

Many problems must be solved before such a plan could become reality. However, they are not for a retired professor to worry about. I would, however, appreciate whatever ideas you may have along these lines, and unless you would be willing to serve as a member of the Advisory Board, I will carry the idea no further.

Warm personal regards to you and Mrs. Weiner.

Sincerely yours,



Martin J. Gould

MJG:rl

P.S. In my spare time I am teaching courses in transform calculus and random noise theory at Brevard Engineering College, our local citadel of learning (Student Body: 300; Faculty: personnel of academic background now attached in some way to the Atlantic Missile Range).

[and 1/18/60]

January 8, 1960

Prof. Donald H. Andrews
Dept. of Chemistry
The Johns Hopkins University
Baltimore, Md.

Dear Prof. Andrews:

Thank you for your kind invitation to join in the seminars you have scheduled for this winter and spring on the relation between science, philosophy and the arts. However, I am so heavily loaded up with lectures, scientific articles and my duty to my own research work that I find it impossible to participate. As you will realize, there comes a time when a man must choose sharply between being overwhelmed by conferences and lectures and continuing to function as a scholar. This time has come in my case, and I have made my choice. All good wishes for your seminars.

Sincerely yours,

Norbert Wiener

NW/emr

January 8, 1960

Mr. E. W. Barankin
Statistical Laboratory
Dept. of Statistics
University of California
Berkeley 4, Calif.

Dear Barankin:

Thanks for your good wishes and the enclosed Description of Research Program. Of course I am supporting your application -- as a matter of fact, it is going out with the same mail.

I am glad to hear that there is a prospect that you will be on this work for which you are so well suited. If you ever turn up in Boston or if I turn up in California, let's get in contact with each other.

Sincerely yours,

Norbert Wiener

NW/emr

P.S. You had better follow up the work done by Watanabe in the IBM Technical Journal on the relation between computing machines and inductive logic. Also some of the work being done by Gabor in London is well worth looking up.

January 8, 1960

Mr. H. B. Brainerd
W6-307
M. I. T.

Dear Mr. Brainerd:

Many thanks for your essay which I shall look over with interest.

Sincerely yours,

Norbert Wiener

NW/emr

January 8, 1960

Mr. Eugene Galanter
The Psychological Laboratory and Clinic
University of Pennsylvania
Philadelphia 4, Pa.

Dear Mr. Galanter:

I am forwarding your letter to my publisher Houghton Mifflin Co.,
2 Park Street, Boston, with the statement that if they okay your re-
printing of the passages you want, I have no objection. I imagine
you will hear from them directly.

Sincerely yours,

Norbert Wiener

NW/emr

January 8, 1960

Mr. Keyes C. Gaynor
Consulting Engineer
421 Benson Blvd.
Sioux City, Iowa

Dear Mr. Gaynor:

Many thanks for your kind letter. As to expert testimony, of course, the man who does it only on occasion when his duties call him to it can keep his nose clean. Frankly, I do not see how this is possible for the professional expert witness to whom it is a matter of importance to build up his practice and to look to it for a substantial part of his income. It may be in individual cases, but quite literally, I'm from Missouri.

Sincerely yours,

Norbert Wiener

NW/emr

January 8, 1960

Prof. Henry Helson
Mathematics Department
University of California
Berkeley 4, Calif.

Dear Prof. Helson:

Your results seem to me extremely interesting, and I should be glad to see you any time you turn up in Cambridge. Meanwhile I am sending your letter over to Masani at Brown, and I am sure we shall talk over your results together. With best wishes

Sincerely yours,

Norbert Wiener

NW/emr

January 8, 1956

The Houghton Mifflin Publishing Co.
2 Park Street
Boston, Mass.

Gentlemen:

I have received the enclosed request for permission to reprint from "The Human Use of Human Beings". I have no objection and will leave the matter entirely in your hands.

Sincerely yours,

Norbert Wiener

NW/emr

Enclosure

January 8, 1960

Mr. Jack Kotik
2 Spruce Park
Sycosset, L.I., New York

Dear Sir:

It is possible for f and g which are Fourier transforms of each other both to vanish in some interval. I made the wrong guess about this last year, but my students put me right in the matter. The trick is to take a function which vanishes in some interval and is of period 2π . You then form the convolution of its coefficients with a function vanishing outside an interval of length less than 2π . This will give you the function you desire.

Sincerely yours,

Norbert Wiener

NW/emr

January 8, 1960

Miss Mary E. Mahoney
Vice President
Pleiades
Clark University
950 Main Street
Worcester, Mass.

Dear Miss Mahoney:

Thank you for your kind invitation to lecture on Clark Campus. However, being loaded up with all the lectures I can carry for this spring term, I must regretfully decline.

Sincerely yours,

Norbert Wiener

NW/emr

January 8, 1960

Prof. P. Masani
Dept. of Mathematics
Brown University
Providence, Rhode Island

Dear Prof. Masani:

Prof. Wiener has asked me to forward this letter to you. I imagine sometime in the future he will want to talk Helson's results over with you.

While I am writing you, I thought I should mention that I sent the material you gave me off to the twelve recipients who were listed on the handwritten sheet of paper. (However, I don't have the address for Nevanlinna.) Did you intend to have me send copies off to all the persons listed in the typewritten list of names? Because -- if you did, I misunderstood you and should try to correct my negligence as soon as I hear from you.

Sincerely yours,

Eva-Maria Ritter (Mrs.)

January 8, 1960

Mr. Frederick Mayer
Dracker Hotel
10824 Lindbrook Drive
Los Angeles 24, Calif.

Dear Mayer:

Let's put off the matter of the preface for your work until I have seen the manuscript. I won't be in America this summer so we must wait for our chat till some later time. I am very appreciative of your interest in my book and the conversations we had together last summer. All success to you.

Sincerely yours,

Norbert Wiener

NW/emr

January 8, 1960

~~Mr.~~ A.L. Patterson
The Institute for Cancer Research
7701 Burholme Avenue
Fox Chase
Philadelphia 11, Pa.

Dear ~~Mr.~~ Patterson:

It's always good to hear from you. Thanks for your article on function spaces. I shall look it over most carefully.

Sincerely yours,

Norbert Wiener

NW/emr

January 8, 1960

Mr. John P. Richardson
Williams Lecture Committee
Williams College
Williamstown, Mass.

Dear Mr. Richardson:

Thank you for your kind invitation to lecture in Williamstown this spring. However, being loaded up with all the lectures I can carry for this spring term, I must regretfully decline.

Sincerely yours,

Norbert Wiener

NW/emr

Dear Mr. Wiener: Any financial help you can give at this time to help make the 1960 reunion a reality and a success will certainly be appreciated - Joseph Polunsky

AMERICAN VETERANS OF THE ELBE RIVER LINK-UP
15th ANNIVERSARY
APRIL 25, 1945 — APRIL 25, 1960

January 9, 1960

To the Soviet Veterans of the Second World War

via:

Mr. Alexey Maresyev
Secretary, Soviet War Veterans Committee
10 Kropotkin Street
Moscow, USSR

AN INVITATION

To help strengthen and carry forward the noble work of achieving real international cooperation in peace and honor begun fifteen years ago, on April 25, 1945, by the statesmen of the world in their great modern gathering together at the birth of the United Nations in San Francisco,

To help fulfil the historic Oath to work together to build a good and honorable life for all, sworn by the American and Soviet soldiers at the Elbe River fifteen years ago, on April 25, 1945, at the friendly link-up of the United States and Soviet Armies shortly before the end of the Second World War in Europe,

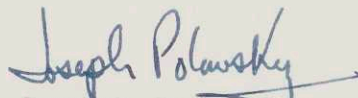
Recalling President Eisenhower's informal, but moving and meaningful words concerning the place of April 25, 1945 in world history: "We could look back, finally, and possibly identify the day that had been almost the peak of our establishment of world accord. And we today, it happens, are celebrating - or almost celebrating - its anniversary. On April 25, 1945 the meetings were formally opened in San Francisco for the establishment of the United Nations. And on that day the American and Russian forces met on the Elbe and the end of the war seemed with us, and on the horizon there seemed to be the dawn of a peaceful organization of the world. As we look back, I think for most of us the day of April 25, 1945 would probably have been the double anniversary, the very height of our performance in that regard.",

Recalling the message sent by President Eisenhower, in his capacity as leader of and spokesman for the American people, to Alexey Maresyev in Moscow shortly after the conclusion of the happy visit of the delegation of Soviet World War II veterans to the United States in Spring 1958: "I am glad that you and some of your comrades visited the United States recently, to commemorate the meeting of the Allied Armies and the Soviet soldiers at the Elbe River.",

And recalling the warm, cordial reception given to the visiting American World War II veterans group in the Soviet Union by the Soviet people, and by Premier Khrushchev personally, shortly before the historic visit of Premier Khrushchev to the United States in 1959,

The American Veterans of the Elbe River Link-up take great pleasure in extending a cordial invitation to the Soviet veterans of the Second World War, and specifically to the Soviet War Veterans Committee, to delegate a group of about nine World War II veterans, including Soviet veterans of the Elbe River link-up, with the wife of each veteran also cordially invited, to visit the United States April 18-29, 1960 to meet with American fellow veterans of the Second World War and their families, during their tour of the United States also to participate in ceremonies in New York and San Francisco honoring the 15th anniversary of the April 25, 1945 convening of the United Nations Conference in San Francisco, which opened up the possibilities for a great new age for mankind.

On behalf of the American Veterans of the Elbe River Link-up,


Joseph Polowsky,
Secretary

4126 Sheridan Road
Chicago 13, Illinois

RESOLUTION

We American and Soviet veterans of the Second World War, meeting in Moscow on the occasion of our 14th anniversary reunion, again resolve to fulfil the oath we took at the historic friendly meeting of our armies at the Elbe river on April 25, 1945, to work for friendship between our two countries.

During our two previous reunions- in Moscow in 1955 and in Washington in 1958 - we approved a resolution calling for yearly reunions and exchanges of friendly greetings between Soviet and American World War II veterans. We here affirm our support of that resolution. We hope that the exchange of visits of Soviet and American World War II veterans- not only of Elbe veterans, but also veterans representative of the various veterans organizations and services- will be considerably increased to facilitate the strengthening of good relations between our two countries.

We believe that the increased exchange of visits of Soviet and American World War II veterans will serve to strengthen the cultural exchange program which exists between the two countries. This will facilitate the increase of mutual understanding between the people of our two countries.

In securing and strengthening good relations between the USA and the USSR, it is important to remember and build upon the cooperative spirit which existed between our two countries during their World War II effort. That remains our objective in the future.

We will continue to work toward the goal that, as the World War II veterans of the two countries meet more and more - veterans representative of various organizations and services, at various times of the year - the friendship between the people of the Soviet Union and the people of the United States will grow secure and strong, to help assure an honorable and happy future for all.

On behalf of the American Veterans of the
Elbe River Link-up

(signed) Joseph Polowsky

On behalf of the Soviet War Veterans Committee

(signed) Alexey Maresyev

Moscow, USSR
May 9, 1959

[and 2/3/60]

PHONE UNIVERSITY 4-7300



AMERICAN SOCIETY OF TOOL ENGINEERS

WAYNE EWING
H. DALE LONG
WM. MORELAND
D. A. SCHROM
P. R. MARSILIUS
C. M. SMILLIE
H. VERNE LOEPPERT
H. E. CONRAD

PRESIDENT
VICE PRES.
VICE PRES.
VICE PRES.
VICE PRES.
TREASURER
SECRETARY
EXEC. SECRETARY

1 0 7 0 0 P U R I T A N A V E

January 9, 1960

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

Dear Dr. Wiener:

It is with deep regret that I learn that it may not be possible for you to be with us in Detroit to receive the A.S.T.E. Research Medal for 1960.

Whether or not you can be with us, it is the feeling of the Honor Awards Committee and of the Society, that you are the man who should receive the award and if need be, in absentia.

Perhaps if you are unable to attend, someone of your choosing may represent you and accept the award in your behalf.

The presentation ceremony takes place Saturday, April 23rd, at our Honor Awards dinner and our reason for having it on a Saturday evening is so that busy men, such as yourself, can get to the meeting without disrupting work schedules.

Arrival in Detroit on Saturday afternoon could easily be accomplished by flying out of Boston in the forenoon to New York and changing planes there, this being the quickest service between Boston and Detroit. Your return to Boston could be made anytime Sunday, the 24th, to suit your convenience and comfort and that way you would be able to get a good night's rest after the dinner and before departing for home. Your expenses for this trip will be covered by the Society.

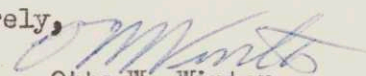
It is our sincere feeling that your very great contributions to Automation and your work in Cybernetics have had such a tremendous impact upon manufacturing methods and machine tool design that we humbly wonder why we have not given you this award before. It is with a fuller awakening and understanding on the part of our committee of your great contributions that this award is now being made.

By the time of our meeting the name of the Society will probably be officially changed to the American Society of Tool and Manufacturing Engineers as it more fully covers the breadth and scope of our work.

We do hope that you will write accepting the award, whether you can be with us in Detroit or not and that the circumstances and your health are such that we may have the honor of your presence as well.

Yours sincerely,

[ans 1/18/60]


Otto W. Winter

Creative Manufacturing is TOOL ENGINEERING

12811 Crisfield Road
Silver Spring, Maryland
January 11, 1960

Dear Professor Wiener:

As a tenth-grade student greatly interested in entering the field of mathematics, I am seeking advice concerning the training necessary for a career in this profession, and information relating to my research on the education of American mathematicians. I realize that your time is valuable, but I hope that you will take a few minutes to read this letter and complete the accompanying questionnaire.

Because I wish to be well prepared for a career in mathematics, I began research last year to find what colleges American mathematicians had attended, as well as some additional information concerning a sample of these mathematicians.

My project consists of three parts: (1) a tally of the schools mathematicians had attended, and an analysis of this tally; (2) an investigation of some selected characteristics of a sample of these mathematicians; and (3) a survey of those mathematicians included in a sub-sample, concerning their reactions to their education and advice to students interested in entering mathematics. The first two parts of the study have been completed, and the third concerns you directly.

The first step in my research consisted of a tally of the undergraduate and graduate schools from which the more than 2,600 mathematicians in the 1955 edition of American Men of Science had graduated. This tally yielded some interesting results. For example, it was found that these persons had taken their degrees from 474 different schools (466 schools for the undergraduate degree and 134 schools for the most advanced degree). The five most popular undergraduate schools on this tally (California, Chicago, City College of New York, Harvard, and Columbia) granted the Bachelor's degree to only 14 percent of these mathematicians, whereas the five most popular graduate schools (Chicago, Columbia, Harvard, Michigan, and Illinois) granted advanced degrees to 32 percent of the mathematicians with such degrees.

The second step in the research was to analyze some selected characteristics of a random sample of 353 individuals. The information obtained from American Men of Science about these men included personal information, information concerning their education, and some information concerning their employment. Thirty cross-tabulations of this information were made, using binary codes with I.B.M. cards modified to approximate the McBee punch card system.

These cross-tabulations were concerned with the place of origin of these mathematicians, the location of the schools they attended, the schools they did attend (classified according to the rank of popularity found in the tally), the year of undergraduate and highest degree, the time interval between these degrees, and their present employment (in 1955).

The next and last step is to consist of a survey of a sub-sample of mathematicians, in which you are included, to determine the reactions of these persons to their education and to receive advice from them regarding the training necessary to enter mathematics. Your cooperation in completing the accompanying questionnaire, and, in so doing, helping to complete my research, will be greatly appreciated. I can assure you that your name will never be associated with your responses.

Besides the value of this research to me in preparing for a career in mathematics, I intend to use it for a project in my school Science Fair and I hope eventually to have it published in a professional journal.

Sincerely yours,

David L. Myers

David L. Myers

Enclosures

[ans 1/13/60]

ADVICE FOR POTENTIAL MATHEMATICIANS

1. a. Was the school you attended for undergraduate training your first choice at that time? Yes ___ No ___

b. If it was not, what school would you have preferred to attend?

2. a. Barring expense, would you attend the same school for undergraduate training if you were to start your college education now? Yes ___ No ___

b. If you would not, what school would you attend?

3. a. Was the school you attended for your highest degree training your first choice at that time? Yes ___ No ___

b. If it was not, what school would you have preferred to attend?

4. a. Barring expense, would you attend the same school for your highest degree training if you were to begin again? Yes ___ No ___

b. If not, what school would you attend?

5. a. Was the field of mathematics your first choice as a career at the beginning of your college education? Yes ___ No ___

b. If it was not, what was your first choice?

6. a. Are you satisfied now with your choice of mathematics as a career? Yes ___ No ___

b. If you are not, what field would you enter if you were to start again?

7. Do you think it important for a person interested in eventually acquiring a Ph.D. in mathematics to attend an outstandingly good school for undergraduate training? Yes ___ No ___. Comments (if any).

8. What, in your opinion, are the more important factors one should keep in mind when choosing an undergraduate or graduate school? (Size, location, good department in field of interest, good reputation, etc.)

Undergraduate school: _____

Graduate school: _____

9. a. If a young person interested in science and mathematics asked you for advice, would you advise him to enter the field of mathematics as a profession? Yes ___ No ___

b. If you would not, why? _____

c. If you would, what field would you advise? _____

- d. What schools would you advise him to attend?

Undergraduate school: _____

Graduate school: _____

10. I should appreciate any comments you may care to make on the strengths and weaknesses of your undergraduate and graduate training in mathematics.

Undergraduate training: _____

Graduate training: _____

January 11, 1960

Mrs. G. A. Campbell
10927-148 Street
Edmonton, Alberta
Canada

Dear Mrs. Campbell:

The article which embraces my Chicago lecture is probably about to appear in SCIENCE. In any case, some of the material will certainly be written up in the new edition of my book on Cybernetics. I hope you can find there the data you wish on the subject.

It is necessary for me to avoid excessive work by confining my publications and conferences concerning these ideas to central places where they will be available to everyone. I am sorry that this makes a more detailed account on my part impossible in our correspondence.

Sincerely yours,

Norbert Wiener

NW/emr

January 11, 1960

Mr^e. Elizabeth H. Court
830 Barrington Road
Detroit 30, Michigan

Dear Mrs. Court:

Prof. Wiener has asked me to tell you that we are forwarding your essay to Mr. Donald G. Brennan who is vitally interested in your (and our) problem. Mr. Brennan is at M.I.T.'s Lincoln Lab. I should think that you will hear from him soon.

Sincerely yours,

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

January 11, 1960

Mr. Weldon Ellis, Jr.
USOM/K APO 271
New York, N.Y.

Dear Mr. Ellis:

I have been reading your brief document on fundamental relationships. Interesting as it is, I am not very much inclined to put weight on a dynamics of the forces of nature which is based on substantial consideration than some actual forces of interaction. It is, of course, quite possible that hidden in your paper somewhere is material which could be put into clear-cut dynamical form; but, frankly, I am unable to see it. My best advice to you is to go further and to subject your own work to the most serious attempt you can to put it into mathematical form.

Wishing you success in this undertaking, I remain

Sincerely yours,

Norbert Wiener

NW/emr

January 11, 1960

Mr. Harry Glidden
3 James Street
Auburn, Maine

Dear Mr. Glidden:

That game-playing machines may find a future application in the study of hearing losses is quite possible. That they have not yet been applied for these purposes is all but certain. This application would certainly involve extensive programs of research. Prof. Rosenblith of the Electrical Engineering Department at MIT who is our hearing and speech expert might be able to tell you something about it, but I rather doubt it. In any case, I am not in the position to point a program of research in this direction. It is not through a lack of interest in hearing matters that I am unable to give you a satisfactory answer, because I myself have a moderate amount of nerve deafness which, they tell me, at the present stage of the game is not very well subject to instrumental help. I hope the subject develops in the future in time to be of use to you.

Sincerely yours,

Norbert Wiener

NW/emr

January 11, 1960

Herrn F. C. Igel
Rua Ouro Branco, 63
S. Paulo
Brazil

Sehr geehrter Herr Igel:

Tatsächlich interessiere ich mich sehr für künstliche Sprachen. Mein Vater war vor vielen Jahren Mitglied einer kleinen Gruppe in Warschau, die sich für die ursprüngliche Arbeit von Zamenhoff über ESPERANTO interessierte. Später jedoch bezweifelte er den Wert künstlicher Sprachen, und eigentlich muss ich gestehen, dass ich mit ihm einverstanden bin. Eine künstliche Sprache wird in dem Moment vollständig, in dem die Grammatik und der Wortschatz vorgeschrieben sind. Erst nach langem Gebrauch und Ausarbeitung hat man eine wirkliche Sprache vor sich und nicht nur deren Skizze. Aus dem Grunde stehe ich dem vorliegenden Programm eigentlich ein bisschen lau gegenüber. Dennoch wünsche ich Ihnen allerhand Erfolg in Ihren Bemühungen.

Hochachtungsvoll,

Norbert Wiener

NW/emr

January 11, 1960

Prof. A. Masturzo
President
Societa Internazionale di Medicina Cibernetica
Via Roma, 348
Napoli, Italia

Dear Prof. Masturzo:

Thank you for your note of Dec. 22. No, September 20 is not available for a talk on Cybernetic Medicine, for that is the very day that I shall talk at the conference of the Deutsche Naturforschervereinigung in Hannover. I expect to be in Naples shortly thereafter, but I have not heard what the plans of Prof. Cainiello will be. Unfortunately, I am unable at present to say anything more definite.

Sincerely yours,

Norbert Wiener

NW/emr

January 11, 1960

Mr. Edgar Willemsen
1334/40 E. Hyde Park Blvd.
Chicago 15, Illinois

Dear Mr. Willemsen:

I think you will understand what a great responsibility it is to give advice as to what to do in the case of the education of a particular child, especially one whom I have not met. You will also realize that it is an equally great responsibility for me to undertake the interviewing which would be necessary for an opinion of any value and that this is a time- and emotion-consuming task which I have no desire to undertake and which I would undertake at the cost of other work which is pressing upon me and which I have to some extent neglected. Therefore, I request from you that you will be kind enough not to involve me further. It is much better to come to a decision in the beginning than to raise various expectations on your part or that of your son which I will most certainly not be able to fulfil in the future.

Sincerely yours,

Norbert Wiener

NW/emr

ELECTRONIC SYSTEMS LABORATORY

DEPARTMENT OF ELECTRICAL ENGINEERING

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE 39, MASSACHUSETTS

UNiversity 4-6900

J. FRANCIS REINTJES, Director
GEORGE C. NEWTON, Jr., Associate Director
JOHN E. WARD, Assistant Director
RICHARD A. OSBORNE, Executive Officer

January 12, 1960

Mr. Iliff Shepherd
4011 E. Douglas Ave.
Des Moines 17, Iowa

Dear Mr. Shepherd:

Your recent letter to Dr. Norbert Wiener concerning material in the field of electric brains has been referred to me for reply.

I regret I have no detailed bibliography available on this subject. However, there has been a wealth of material written on it in recent years and I refer you to the READERS GUIDE to Periodical Literature for references. I am quite certain you will discover there a variety of authors on the subject of your interest and you may wish to contact them directly. The Electronic Systems Laboratory over the years has developed a system of controlling machine tools automatically. A bibliography of articles on this subject is enclosed. You may find this of interest.

Very truly yours,

J.F. Reintjes
Assoc. Professor of
Electrical Engineering

1 Encl.

JFR/men

cc - Dr. Norbert Wiener

C
O
P
Y



M E E T T H E P R E S S

America's Press Conference of the Air

January 12, 1960

Dr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

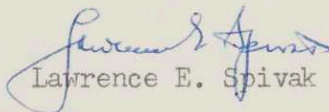
Dear Dr. Wiener:

I have long been interested in the extraordinary contribution you have made in your field.

I would like to talk with you about the possibility of a MEET THE PRESS interview on the subject. For us it would be an off-beat and very difficult interview, but I would like to give it consideration if the idea interests you at all.

I expect I will be in Cambridge sometime during the next month or so, and I would be happy to come to your office to discuss the matter with you.

Cordially,


Lawrence E. Spivak

LES:er

January 13, 1960

Dr. Barry Commoner
Committee on Molecular Biology
Adolphus Busch III Laboratory
Washington University
St. Louis 30, Missouri

Dear Dr. Commoner:

Enclosed please find a list of expenses which incurred on Prof. Wiener's recent trip to Chicago and a verifax copy of the original invoice for the Tampa-Chicago round trip.

While I am writing to you, I thought I should mention the fact that there have been numerous requests for copies of Prof. Wiener's talk in Chicago. I have held most of them, because I realize that fulfilling these requests would take up a considerable amount of your or your secretary's time. Is there any way in which we, here, could handle the matter? Would you consent to send us the extra copies you have so that we may send them out? Perhaps the article could be mimeographed. We should be glad to cover the costs. I should appreciate it if I would hear from you soon in this matter. Thanking you in advance, I remain

Sincerely yours,

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

Enclosures - 2



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Prof. Norbert Weiner
Personal Charge

CODE:	A — Airline	O — Other Charges	DATE	TICKETS			SALESMAN	INVOICE DATE
	R — Rail	H — Hotel		ENCLOSED	CALLED FOR	DELIVERED	2	12/21
	T — Tour	S — Steamship				X		

DATE	CODE	DESCRIPTION	CHARGES	DEPOSIT	AMOUNT DUE
12/26	A	Tampa/Chicago round trip 073A663842/3	146.10 <u>14.61</u>		160.71

PLEASE RETURN ONE COPY WITH PAYMENT

PAYABLE ON PRESENTATION

WE DO NOT SEND MONTHLY ST

Expenses on Prof. Wiener's trip to Chicago:

Airplane ticket (Tampa-Chicago-Tampa)	\$ 160.71
Hotel Morrison, Dec. 26	9.00
Transportation to Tampa Airport and return	5.50
Transportation Midway Airport to Hotel and return	3.50
Meals, Hotel Morrison	
Dec.26, dinner	
Dec.27, breakfast, lunch	5.00
Tips	2.50
	<u>2.50</u>
	\$ <u>186.21</u>

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1701 FOURTH ST. SOUTH • ST. PETERSBURG 5, FLORIDA

Expenses on trip to Chicago:

Airplane ticket

Tampa - Chicago - Tampa 160.71

Hotel Morrison Dec. 26 9.00

Transportation to Tampa Airport and return 5.50 5.50

Transportation Midway Airport to Hotel and return 3.50

Meals, Hotel Morrison Dec. 26, dinner 5.00

Dec. 27 breakfast, lunch } 2.50

Tips \$ 186.21

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"Adjoining Wedgwood Inn"

SCIENCE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
1515 MASSACHUSETTS AVENUE, NW, WASHINGTON 5, D.C. • DUPONT 7-7171

January 15, 1960.

Dr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge
Massachusetts

Dear Dr. Wiener:

I am glad to accept for publication as a leading article in Science your AAAS address before the symposium on Science in the Promotion of Human Welfare.

There are a few minor matters to which I should like to draw your attention. We like to modify such talks to make them more of an article than an address and we thus shall want to make some slight copy-editing changes. The most important one is that we should delete the last two sentences which bear on the relation of your address to the others in the symposium. The paper will thus stand independently and can be published without reference to whether or not we publish Dr. Chisholm's paper.

There is another matter. The necessities of our make-up problems limit us to titles of not more than 2 lines of 26 characters each, including spaces. Thus, a suitable title for your paper would be "Some Moral and Technical Consequences of Automation". In addition, we devise sub-titles in the form of complete sentences of not more than 102 characters and spaces. A possible sub-title for your article would be "As machines learn they may develop unforeseen strategies at rates that baffle their programmers". If this is not suitable we should be glad to entertain other suggestions for a possible sub-title.

May I add that I shall long remember our interesting session at the breakfast table on the morning of December 27, prior to your talk.

With best regards.

Sincerely,



Graham DuShane
Editor

GDuS:evh

yes

[ans 1/18/60]

January 15, 1960

Mr. Edmund Dews
Pergamon Press, Inc.
122 East 55th Street
New York 22, N.Y.

Dear Sir:

I am enclosing a copy of the preface which you have requested me to write for the book of Mr. Stanley-Jones. It gives me great pleasure to do so and I hope it will be satisfactory to you and to him both.

There is one request I should like to make you in connection with this preface. I may want to use some of the material with certain changes as a new chapter of the revised edition of "Cybernetics" which I am writing. Could you take up with the Technology Press the question of a satisfactory form of copyright to permit me to make this use? My plans would not interfere with the value of your book and would be of great assistance to me in doing what is bound to be an arduous task of composition and compilation.

Sincerely yours,

Norbert Wiener

NW/emr

Enclosure

January 15, 1960

Miss Janet Gabele
1466 E. 20th Street
Columbus, Ohio

Dear Miss Gabele:

Many thanks for your kind letter of December 21. Unlike many fan letters it is thoughtfully written and gives me a great deal of pleasure.

I think you are quite right in seeing the points of resemblance between Woodbury and Strickland (or better said: between Heavy-Side and Gauguin) notwithstanding the total difference between the scientific and the artistic field. Creative work is always essentially the same.

I assure you I have not written my book by formula - even by cybernetic formula. As to yourself, you are not the first to have obtained a considerable portion of your education by working in a bookstore. I think that between that and your college work you have good promise of going places in the future.

Sincerely yours,

Norbert Wiener

NW/emr

January 15, 1960

Mr. Thomas A. Keenan
Computing Center
Taylor Hall
The University of Rochester
River Campus Station
Rochester 20, New York

Dear Mr. Keenan:

Thank you for your letter of January 6 in which you so kindly invited me to be among your speakers this year.

Unfortunately, I am finding it necessary to cut down heavily on my list of speaking engagements if I wish, as is the case, to continue my work in research and the literary activities to which I am already committed. I hope you will understand that this situation compels me to turn down your very attractive offer.

Sincerely yours,

Norbert Wiener

NW/emr

January 13, 1960

Mr. David L. Myers
12811 Crisfield Road
Silver Spring, Md.

Dear Mr. Myers:

I am always hesitant to answer questionnaires but I shall be glad to tell you directly what I can that will be of help to you.

There were special circumstances in my undergraduate training which governed my choice of school and I do not think they would be of interest to you. In any case, I began my undergraduate training in 1906 and whatever I might say to you would not be relevant to your choice at present. As to graduate training, there is a wide range of good schools, Harvard, MIT, Princeton, Chicago, California and many others. Which school you should choose will depend on the particular people who do research at the time you come up to do graduate work and cannot be described in advance. As to whether you choose mathematics as a career, it is even more true to wait until you know more than mathematics in your undergraduate year when you will be able to plan on the basis of a real desire for the field or a real hostility towards it. Even after you have chosen your career, there is no law that says that if your interests carry you outside your field you cannot modify your field of work. As to whether I should advise mathematics as a profession, that is not a question that can be answered in a vacuum, but must be answered in terms of the interests and capabilities of a person. This will be equally true of the choice of a field within mathematics. In other words, one of the things I should be most hesitant to do is to make a career on the basis of any questionnaire or questionnaires whatever. If you really want to be a mathematician, you will probably not be able to help it and if you don't, there is no reason why you should take it up.

Sincerely yours,

Norbert Wiener

NW/emr