

318

CORRESPONDENCE *Oct., 1962*

N. WIENER - MC 22

October 1, 1962

Cambridge Trust Company  
1136 Massachusetts Avenue  
Cambridge, Massachusetts

Gentlemen:

Enclosed herewith is our check #M-61708, dated September 28, 1962, in the amount of \$500.00 and payable to Professor Norbert Wiener.

By agreement with Professor Wiener, we were asked to forward this check to you with the request that you deposit it to his account and forward him an acknowledgment of the deposit.

Thank you for your attention and cooperation in this matter.

Sincerely,

W. Scott Allan  
Assistant Vice President and  
Manager of Medical Services

WSA:ab

Enc.

*Channel* 13 WNDT

EDUCATIONAL BROADCASTING CORPORATION

1657 BROADWAY

NEW YORK 19

LT. 1-6000

October 1, 1962

Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts

Dear Professor Wiener:

You may have heard that Channel 13 - WNDT, New York's new educational television station is now, finally, after a rather astounding history of legal and labor battles on the air.

One of the programs that will be presented each Wednesday evening at 8:30 p.m. (and aired simultaneously by WGBH in Boston) is COURT OF REASON, an hour-long debate discussion on public issues, presided over by Professor Robert K. Merton, Chairman of Columbia's Department of Sociology.

On October 17, the topic will be "Automation: Public or Private Decision?" Advocating that automation should be a public decision will be Ted F. Silvey of the AFL-CIO Speakers' Bureau; and for the private decision side, we hope to have an automation expert from private business, although we are still awaiting word as to whom.

The format of the program provides that each advocate have five minutes in which to make an opening statement before being questioned by Professor Merton and two visitors who are expert in the subject but more or less impartial on the aspect under discussion. The last 10 minutes of the program are devoted to expressions of opinion by the two visiting questioners and Professor Merton.

One of the visiting questioners will be Ralph Weindling, Executive Vice President and General Manager of The Diebold Group, Inc. I am wondering if you would consider coming to New York, at our expense, to join Professor Merton and Mr. Weindling in the exchange on automation. We would feel tremendously honored if the idea interests you.

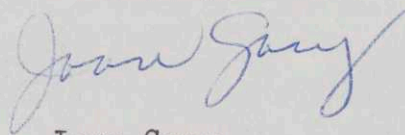
Professor Norbert Wiener

10/1/62

I enclose the press release announcing the series, which describes the objectives and format of the program in more detail.

I will telephone you tomorrow for a reply.

Sincerely,



Joan Ganz  
Producer

JG:mj  
Enclosure

*sent from letter  
Oct 5*

Professor Nobert Wiener

October 1, 1962

The Massachusetts institute  
of technology  
77 Massachusetts ave, Cambridge 39  
Massachusetts U.S.A.

Dear Sir :

We, M.Takagi M.D; chief engineer of TATEISI ELECTRONIC CO, Japan, and S.Yamamoto, manager of TATEISI, will be in Masachusetts in the near future on a short business.

M.Takagi M.D is a physician and a young engineer of electronics and the member of Kawasaki Tumor Institute, Japan. S.Yamamoto is a manager in charge of the institute of health of our company.

And our company, TATEISI, is the one of the most famous manufacturer of automatic control devices in Japan, authorized by U.L in U.S.A.

We are pushing now the studies of the application of control and communication theory in the animal and machine, for your Cybernetics.

The former is a study of cancer, the later is our automatic control devices, depending on your Cybernetics.

We have a desire to meet you and take a brief tour of your research institute, if such arrangements can be conveniently made.

We know a good deal of your Cybernetics and have a high regard for your great reputation that you have earned over the world, and we are anxious to pay our respects for you.

If it will be convenient for you to meet us for a short time, we would appreciate hearing from you, so that we can map our trip schedule out.

We shall look forward to your early reply.

Very truly yours.

*M. Takagi*  
M.Takagi M.D

S.Yamamoto

TATEISI Central Research Laboratory.

Nagaoka-cho Otokuni-gun

Kyoto Japan

[ams 10/10/62]

# COPY

October 1,

Dr. Joseph S. Barr  
Chief Orthopedic Service  
Massachusetts General Hospital  
Boston 14  
U. S. A.

Dear Dr. Barr:

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I have received so much material from different quarters that I <sup>asked</sup> have all of them to write to you directly, and some of this material should be in your hands already. This will enable you to keep better in touch with names and places than I can do in this letter. Therefore this letter will be more an account of general directions and opinions than a compendium of details.

One point of view I found strongly represented was that of involving artificial sense organs in communication chains not going back to the human nervous system. In this the sense organ regulates the motion by changing the electrical pattern of activities. I am not sure that this method is sound, but everything depends on feedback into the

nervous system by vibrators on the skin, direct electrical stimulation and the like. It seems that the bottleneck lies in the nerves rather than on the skin used. Apparently, there is no use grafting skin well provided with end organs on a region not previously well innervated. We shall have to do much more exploration on the regions where we can feed in artificial sensation. Perhaps vibration on the joints may be the best solution. There is a general agreement with my point of view that vibration is less subject to accommodation than continued pressure. There is a young Yugoslav engaged in their project who himself has lost both hands and who has experimented in a somewhat amateurish way on vibratory feedback. He tells me of something that is rather unexpected; that in addition to the immediate accommodation of the vibratory sensation there is a long-time accommodation which makes the response less intense after days. I do not think this observation was made under strictly scientific conditions, but I give it for what it is worth.

I found certain points of view fairly universal. One is that the *work* done concerning artificial pacemakers for the heart is generally applicable and that it is possible to implant under the skin miniature radio sending stations each of which can take the electromyogram from a single muscle and send it to a receiver outside of the body in a highly selective way. The circuits used for this purpose are made by selective depositions of metallic films in vacuo and are extremely light. There seems to be no difficulty from cross talk between the different muscles, and a large variety of well-differentiated signals may be obtained. Some of the doctors were anticipating trouble from the obliteration of signals from implanted electrodes by scar tissue, but the general opinion of those who had more experience was that the signals should be strong enough so there should not be too much difficulty on this account.

There was a great deal of interest in mechanizing braces as well as artificial limbs. Apparently, even badly paralyzed muscles often give much more signal than we have imagined in the past.

As to the general usefulness of feedback prosthesis opinions vary. I heard from many of the doctors and the amputee that there

would be a considerable reluctance among amputees to a complicated mechanical limb. There was a considerable vagueness about the meaning of complication. The more enlightened people at the meeting were quite aware that it might well be that the more complicated electrical structure may be the simpler to use if it allowed the original nervous impulses and channels to be retained as far as possible. Still, we must count on a resistance here which arises not only from the amputees themselves but is also fostered by the medical men with the natural conservatism of the profession.

There is a general uncertainty which particular problem ~~xx~~ requires the most immediate attention. People are reasonably satisfied with leg prosthesis as they now exist, and particularly below-knee-prosthesis; they are also not too satisfied with prosthesis for amputation at the low forearm and at the wrist. In view of the fact that our double-amputee at the meeting is a champion yachtsman using his hooks, I can see the point. The crying need in prosthesis seems to be for high arm amputations including shoulder amputations or even higher ones. Of course, the need and the difficulty are both extreme, but the California group has chosen this field of work as the most likely to get support. The people at the Case Institute have been working on mechanized grasping apparatus actuated according to a preset pattern for the benefit of wheelchair patients.

The Italians are working on telemanipulation, as, for example, in atomic laboratories. They seem to have a very successful apparatus for transferring human sense organs and effectors to a distance. This is not directly along our lines, but it is quite possible that some of the work done may be incidentally useful to us.

The problem of power for artificial limbs is consuming a good deal of attention. A great deal is being said in favor of pneumatic or hydraulic apparatus with a tank of compressed air or liquid carbon dioxide as a power source. In general, the bag type of artificial muscle does not seem to be as much favored as the more workmanlike piston type. The advantage of pneumatic power is the



lightness of the storage and the great quantity of power available over short intervals. On the other hand there are those who wonder if the electric motor may not give a more efficient use of power enough to overcome the great weight of the battery as a means of furnishing power. When you get the documents of this the matter should be taken up with Dr. Amar Bose. Of course, whatever the source of power of actual motion is to be, the obvious mode of organizing it is electrical. This means the design of quick-acting, electrically controlled, pneumatic valves.

My general impression is that the Russians who were absent are sound workers, but that the moment they have an idea they hasten to claim it as if it were something already accomplished, so that they can get the prestige for it when in a few years the technical difficulties are overcome, as they almost certainly will be. Prestige means a lot to them and the ability to say "I told you so" to the West, and they are not above beating the gun. One example is the claims they are making, or at least so I hear, for a direct takeoff from nerves. I have no doubt that they have done something in this direction with freshly cut nerves, but I have grave doubt that they have solved the problem of postponing or eliminating the degeneration of the nerve. The problem of nerve takeoffs certainly belongs to the ultimate scope of our work, but for the present the practical possibilities lie in using the muscle as an end organ for electric signaling.

The next Congress on Prosthesis is to be in Great Britain in two years. I think the Dutch have the claim for a congress two years after that. The Cleveland group has government support and is already angling for a congress in the United States. If we have such a congress, I think the Boston group should get its claim in early and adjust its relations with the U. S. Government. I am very much in favor of a summer meeting at one of the smaller colleges of the New England summer resort area where we can get together for a week or two, of a small working group to keep up the excellent international relations which have already developed. In general, except for Russian governmental interference, the group has proved

to be very congenial, and personal contacts are of the greatest possible value. By the time America gets the meeting the group will be much larger than it is now, and we should be careful to exclude people who are attracted by the sensationalism of the field and have merely come along for the ride. The meeting should be interrupted, say every three days or so, by a day of rest, when the group can perhaps make an excursion; good swimming and tennis facilities will add to the meeting.

There is an English group actively engaged in electronic medicine from whom you will certainly hear, if you have not heard already. The cybernetic medicine groups in the Netherland and in Italy have already had very successful meetings according to the lines I have suggested here and intend to go on. One of the big problems for the future is that of the education of young men equally acquainted with the medical and the engineering aspects of this work. The suggestions which I have made for the organization of this sort of group and in particular for the need of a familiarity on the part of everyone with both the medical and the engineering aspects of this work have met with general approval.

Well, this is my budget of news at this time. Best wishes to the whole group, and please let me know how you are getting on.

Sincerely yours,

(Norbert Wiener)

P. S. I am having Mrs. Ritter, my secretary at M. I. T., send copies of this report to Drs. Bowker, Glimsher and Bose. If you think that others should also have a copy, Mrs. Ritter will send them at your request.

The number of participants were about sixty. I am sending papers and reprints from the congress under separate cover.

[Ans 10/24/62]

Substituted for last two pages  
of report to Barr  
Sent to Lib. Nut. (4)

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*leave out*



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# The M.I.T. Press

(formerly The Technology Press)



MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE 39, MASSACHUSETTS

October 3, 1962

Professor Norbert Wiener

Room 2 - 276

Dear Professor Weiner:

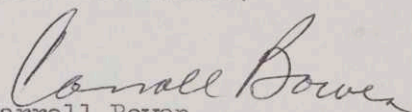
I had hoped that I might have met you first in person but I feel a present obligation to raise a question to you which perhaps is more satisfactorily done by mail. In any event, I hope that it will be my pleasure to meet and talk with you in the course of the near future.

In going through materials found in the office of my predecessor, Professor Lynwood Bryant, I've come across what appears to be the handwritten manuscript of Cybernetics. I know the Institute, as well as others, might well hold such a manuscript in high <sup>commemorative</sup> regard. But the manuscript should be in your possession, or in the possession of those to whom you should like to see it presented.

I would welcome your instructions as to whether I should return the manuscript to you, or discuss with Bill Locke the suitability of presenting it in some formal fashion to the MIT Library, or ~~whether to~~ raise the question of using it as a part of a permanent exhibit here at the MIT Press.

Perhaps you will let me know your opinion of the alternatives and suggest an other if it seems desirable.

With best wishes,

  
Carroll Bowen,  
Director

CB/fm

[ans 10/16/62]

# The M.I.T. Press

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With best wishes,

*Carroll Bowen*  
Carroll Bowen,  
Director

CB/fm

October 16,

2

Mr. Carroll Bowen  
Director, M.I.T. Press.  
Mass. Institute of Technology  
Cambridge 39, Mass.  
U. S. A.

Dear Mr. Bowen:

Thank you for your letter of October 3. I, too, look forward to meeting <sup>you/</sup> when I return to M. I. T. next February. The handwritten manuscript of Cybernetics has already been presented to the M. I. T. Library some years ago, as far as I recollect. It was probably brought to the M. I. T. when the book was being revised and had not been returned. Perhaps Miss Boyd would know. At any rate, the book should go back there.

With best wishes, I remain,

sincerely,

Norbert Wiener

184 Wanondoger Trail  
Battle Creek, Michigan  
October 3, 1962

Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Professor Wiener:

After a study in the field of Cybernetics, I would like to attempt a project. I am interested in producing a mechanical analogue of living processes. In The Human Use of Human Beings, I read of your photo-tropic Moth/Bedbug and would like to know more details concerning it. Thank you.

Sincerely,

*Laura Gieske*

Laura Gieske

*Did not answer*



**Emertron** I N C. 1140 East-West Hwy, Silver Spring, Maryland • JUNiper 8-7273

A Subsidiary of EMERSON RADIO & PHONOGRAPH CORPORATION

4 October 1962

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

Dear Dr. Wiener:

At each Joint Automatic Control Conference a workshop on some particular and timely subject has been held each year. The workshop to be held for the 1963 JACC is on the topic of "Stochastic Processes." The committee has asked me to invite you to present a paper on some subject on this topic.

Since the emphasis in the workshop is placed upon pedagogy rather than original research, the paper should be of a tutorial nature. The level at which your paper would be runs the gamut between that which is presented in Feller's book on Probability Theory and Cramer's book on Mathematical Statistics.

If you are interested in participating in this workshop, to be held at the University of Minnesota during June of 1963, we would appreciate hearing an acceptance from you on or before October 30th. We would be most honored to have you contribute to our session, and we are sure that the audience will have a great deal to gain from your remarks.

Your paper will be published in the Proceedings of the 1963 JACC and in a special workshop edition published by the American Institute of Electrical Engineers.

Looking forward to your affirmative answer, I remain

Sincerely yours,

Alfred A. Wolf  
Chairman

1963 JACC Workshop on Stochastic Processes

cc: Dr. John Gibson  
Dr. T. J. Williams  
Dr. O. L. Updike  
Mr. R. S. Gardner

*did not answer*

*[ans 10/21/62]*

*American Association  
for the Advancement of Science*

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

ADMINISTRATIVE OFFICES

DUpont 7-7171

October 4, 1962

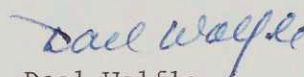
Professor Norbert Wiener  
c/o Professor E. R. Caianiello  
Istituto Fisica Teorica  
Universita de Napoli  
Mostra de Oltremare  
Naples, Italy

Dear Dr. Wiener:

In August I wrote to ask if we might have your permission to use as an editorial in Science an excerpt from your article "Science and Society" that appeared in the July 1961 issue of the Technology Review. I tried to telephone you this week, and learned that you are in Italy, so perhaps you have not received the original letter. I enclose a typescript copy of what we would use.

Volta Torrey has given permission on behalf of the Technology Review. I hope we may also have your approval.

Sincerely,



Dael Wolfle  
Executive Officer

DW/chb  
Enc.

[copy 10/19/62]

## SCIENCE AND SOCIETY

The purpose of science in society is to enable us to react homeostatically to the vicissitudes of the future. This future is, however, not one which we can completely foresee beyond a certain very limited point, which moves ahead in time as our experience moves ahead. This being the case, we must always possess a much larger stock of information concerning the environment, physical, medical, and social, than we shall probably use in any particular course of history. It is of the utmost importance to our safety against the vicissitudes of the future that this stock of fundamental scientific information be kept extremely wide. It is of even greater importance that it be kept potentially extremely wide--that is, that the way for the internal development of science be kept open. It must not be at the mercy of historical predictions and prejudgments which belong primarily to one particular age, and may be proved false, incompletely justified, or irrelevant with the further development of history and the growth of our experience.

Thus the internal life of science must be preserved without a too direct dependence on the policies of the moment, or the official fashions of thought. This means that the scholar must retain for his own efficacy something--not too much--of the ivory tower attitude which <sup>is</sup> the spirit of the times to decry.

It is well that we convince ourselves of the social usefulness of science before we go into it as a career. It is not well that we hold the test of social usefulness too immediately before us in the very difficult task of extending science.

The phenomenon that a human activity may be best pursued according to



its internal logic, even if the general function of the activity should be considered most seriously in matters of the choice of a career, etc., is familiar to all of us. The man who becomes an officer in the army must be brave, but the man who asks during every military operation "Am I a brave man?" is not likely to make a good military officer. The surgeon should have convinced himself of a certain attitude of compassion before he is very far along in medical school, but the surgeon whose sense of compassion unnerves him in the performance of a cruel but necessary operation has chosen the wrong career.

Under these circumstances, we can see that it is possible for a scientist to be so socially minded that he does not find time or attention for the self-contained activity which forms a large part of the life of the working scientist. This fact has important consequences concerning the organization of scientific work. Certainly scientific work should be answerable for its value to the community--but at arm's length. If a man has no sense of social responsibility, don't appoint him, but if he is known to possess such a sense, for goodness' sake don't badger him with an unceasing inquiry as to his social responsibility while he is trying to perform the work that belongs to the fulfillment of his social responsibility. Science is a tender plant, which does not take kindly to a gardener who is in the habit of taking it up by the roots to see if it is growing properly.--Norbert Wiener, Massachusetts Institute of Technology [excerped from "Science and Society," Technology Review, July 1961, pp. 49-52]

281 Via Posillipo  
Naples, Italy

~~September 28, 1962~~

October 4, 1962

Dear Mrs. Ritter:

28.

I started to write this letter on September but decided to wait a few days longer in the hope that some letter would arrive from you in the meantime. Miss Goodwin answered our cable saying that mail was forwarded on/September 20. None has arrived so far. We have been trying to explain it to ourselves, considering the possibilities 1. that the letter was lost, 2. that it was sent by ordinary mail, 3. that it misaddressed, etc..

Just this minute my husband comes in the door with the letter which was delayed because of insufficient postage. So apparently you got my letter from Yugoslavia in which I wrote that we expected to arrive in Naples by the middle of September or at the latest by the 20th. So, of course, we hoped to have some mail waiting for us when we arrived here. My nieces and the husband of one of them are visiting us at present, and I was hoping to have the most important items attended to before they got here. So by this time it is October 9.

First, a few questions about yourself. Are you again working part time at M.I.T., or do you just come in to take care of our mail? Did your other sister come over as you had planned? Since you seem to enjoy your contact with M.I.T. perhaps you like to come in anyway. We are glad to hear that you enjoyed New Hampshire. We love it. It represents peace, simplicity and unspoiled nature to us. I hope that when we are back you can come up with me sometime. This summer has been delightful in the many new places we saw, but it was hardly a vacation. With four symposiums and four other lectures, as well as visits to hospitals in connection with the prosthesis work have not given us much rest. Now we refuse to budget from Naples for the rest of our stay.

Now as to the items we should like to have you attend to as soon as possible.

1. Make six copies of the report to Dr. Barr and

Return the copy I am enclosing to us.

send copies of it to Drs. Bose, Bowker, Glimsher and keep the rest on file. Please correct any mistakes I made. Dr. Barr does not need a copy.

2. Send us the copy of "Mathematik, Mein Leben" by ordinary mail and book rate. We weren't in Germany long enough to buy one.

3. Call up or go to the Cambridge Trust Company who deposited the \$111.38 for us in our checking account. We think it may be a mistake and should have been credited to someone else. *to ask*

4. Call up our new tenants, the Ellis' and arrange with them for the paying of the gas, electric light bills. Since the bills do not begin on the first of the month, ask them to deduct from the first bills they get the part that is not theirs, (but paying the whole bill) and deduct this from the rent due, if that is agreeable to them. I know of no simpler way. Send the McCarthys their share of the bills to pay. I hope this does not sound too complicated. If they would also pay the water bill and deduct it likewise from the rent, it would simplify things for me considerably. Find out also if the oil tank was left full for them as I directed or call up the White Fuel Company and ask when the last oil was delivered and how much. The address of the McCarthys is :

Prof. Philip J. McCarthy, Llen Roc Court, Ithaca, N. Y.

I know of nothing else at this moment that needs attention. Please mail the enclosed letter to Mr. Pearson. If a printed one page year's calender for M.I.T. is available, please send it to us. With best wishes all around, I am, in anticipation of further mail,

yours,

P.S. The McCarthys left the house on the 22nd of August. Check with

Mrs. Carl Sandberg, 55 Dalton Road, Belmont.  
Tel. Iv.4-1860. She usually is not home until in the evening. She would also know about the oil.

four  
Aug. 10  
to  
Sept. 5

X  
The  
Ellis'

Letter No. 2.

Oct. 14, 1962

Dear Mrs. Ritter:

Your letter No. 9 arrived while waiting for my husband <sup>ml</sup> to bring home some large envelopes. This gives me a chance to complete some further business. Enclosed is your salary check. The withholding tax has been paid. One other item which should be taken care of at once. According to statements both from the bank and M. I. T. the bursar's office paid in my husband's salary for September of this year. This must be a mistake because his salary does not begin again until the second term beginning February 1963. Please see Miss Goodwin or Prof. Martin about this and find out what the bursar wants us to do about it. We can, of course send him a check for the amount disbursed.

Some of the questions I asked in letter No. 1 you answered in your letter No. 9. Glad you had such a good time at the Linguistic Congress. Please take care of all the listed requests as soon as possible and answer them by listing them, 1. 2. 3. etc. because I don't make copies of my letters to you.

Best wishes all around.

Margaret Rivner

P. S. We had a wonderful trip this summer, but it can hardly called a vacation. We were busy all the time with lectures, travel for them, congresses, symposiums, etc. We were glad to be back and rest up a bit in Naples. Sometime soon I shall send you all the correspondence with Bromfield, so you read it and get a better idea of the whole transactions. --- My relatives have just been here for a whole week. We had a wonderful visit, and they were delighted with all they saw.

Tell Mr. Arbib we received his postcard. Is Mr. Marcus back at M.I.T. this year. Give him our regards. I have looked for the galleys of "The Brain as a Computer" but am unable to locate it so far and, in fact don't recall receiving them. Will look some more.

[ans 10/23/62]

no. 9,

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE 39. MASS.

DEPARTMENT OF MATHEMATICS

Oct. 5, 1962

Dear Prof. & Mrs. Wiener,

Just a few lines to accompany the mail.

how you are back in Naples - and I have heard of your cable to Mrs Goodwin. You must have been worried. - The truth is that it was returned for insufficient postage. But no one looked at my desk. I found it there on Monday morning and was shocked. I am terribly sorry it happened. I had even weighed the envelope for postage.

Well, this one will reach you right away I hope.

I am presently looking for a temporary full-time job, since my sister Ingrid is now staying with me, but there is very little available. No news otherwise.

Hope Naples is as nice to you as ever; it will be.

Best regards,  
Eva Maria Ritter

to the  
mail

no. 9.

no. 10 sent October  
16, 1962

Oct. 5, 1962

Dear Prof. & Mrs. Wien,

Just a few lines to accompany the  
mail.

How you are back in Naples - and I  
have heard of your cable to Miss Goodwin.  
You must have been worried. - The truth is  
that it was returned for insufficient postage.  
But no one looked at my desk. I found  
it there on Monday morning and was shocked.  
I am terribly sorry it happened. I had  
even weighed the envelope for postage.  
Well, this one will reach you right  
away I hope.

I am presently looking for a temporary  
full-time job, since my sister Ingrid is now  
staying with me, but there is very little  
available. No news otherwise.

Hope Naples is as nice to you as ever, it  
will be.

Best regards,

Eva Maria Ritter

to the  
mail

Wiener

5 October

2

Dr. Evandro Benvenuti  
Rassegna Internazionale  
Elettronica  
Via della Scrofa, 14  
R O M A

Dear Doctor Benvenuti:

I am very sorry that I have been late in returning my corrected version of the conference, but I am sending it herewith.

With kindest regards,

Sincerely Yours,

Prof. N. Wiener

NW:ac

Belgrade, October 10, 1962.

Dear Sir,

Enclosed we are sending you minutes of sessions  
*Tuesday, Wednesday, Thursday & Friday*  
.....  
of the Prosthetics Symposium which had not been distributed in Opatija. We apologize for the delay in preparing this material which has been caused by some unexpected circumstances.

In order to speed up the editioning of all papers and discussions for final publication of the proceedings we would be very much obliged to you if you could send us as soon as possible all corrections and eventual additions to the minutes and papers.

We would also need all slides, photographs and diagrams which were used to illustrate the papers but are not contained in the papers or are not of adequate quality for reproduction.

Stressing again the urgency of your cooperation and thanking you in advance, we remain,

Yours sincerely,

Encl.

*L. Radanović*  
L. Radanović  
Secretary

Note: we did not receive  
the minutes here.  
They were not enclosed.

EMR

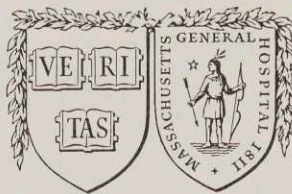


HARVARD MEDICAL SCHOOL



MASSACHUSETTS GENERAL HOSPITAL

JOSEPH S. BARR, M.D.



DEPARTMENT OF ORTHOPEDIC SURGERY  
*Massachusetts General Hospital*  
*Boston 14, Massachusetts*

October 10, 1962

Professor Norbert Wiener  
Universita di Napoli  
Istituto Di Fisica Teorica  
Naples

Dear Professor Wiener:

Your letter of 1 October is at hand. You have conveyed much information which will be invaluable in our prosthetic project.

I will discuss the matters you have mentioned with our group in the near future and will then send you our thoughts and a note as to our progress to date.

We look forward to your return. You didn't mention your hip in your letter. I assume that no news is good news.

With good wishes from all of us at MGH.

Sincerely yours,

Joseph S. Barr, M.D.  
CHIEF ORTHOPEDIC SERVICE

jmk



# SPRINGER-VERLAG

BERLIN · CÖTTINGEN · HEIDELBERG

*Geschäftsinhaber:* FERDINAND SPRINGER, *Dr. med. h. c. Dr. phil. h. c.* · HEINZ GÖTZE, *Dr. phil.*

(1) BERLIN-WILMERSDORF

(West-Berlin)

Heidelberger Platz 3

Telefon: Sammelnummer 83 03 01

Telegrammadresse: Springerbuch

Fernschreiber: 01-83 319

Abtlg. VI, den 10. OKT. 1962

Betrifft: Versand der Rezensionsbelege des  
eben zu Ende gegangenen Quartals.

Zur geneigten Kenntnisnahme überreichen wir hier 2  
Belegausschnitte über Rezensionen, die uns während der ver-  
gangenen drei Monate erreicht haben. Wir bitten, die Belege,  
Originale oder Fotokopien, zu behalten.

Den Herren Herausgebern und Mitherausgebern, Autoren und Mit-  
autoren gehen solche Belegsammlungen unaufgefordert jeweils  
am Quartalsende zu. Für das Sammeln und Versenden der Rezen-  
sionsbelege, wie auch für die Überwachung des Erscheinens der  
Rezensionen überhaupt, ist die Abteilung VI unseres Berliner  
Hauses zuständig.

Mit verbindlichen Empfehlungen

SPRINGER - VERLAG  
Berlin - Wilmersdorf  
Abteilung VI

written for Soziologisches  
Wörterbuch

KYBERNETIK

The recent development of automatization techniques in engineering has indicated certain resemblances between the control and communication problems of mechanical devices and those of the nervous system or of other systems in living beings. The great diversity of the biological and technical fields involved made it desirable that these two phenomena should possess a single descriptive name not already weighted down with specific engineering or biological contexts. For this reason, N. Wiener in a book published in 1947 and devoted to the inter-relation of these two fields employed the term "cybernetics", constructed on the basis of the Greek kybernetes or steersman. He ~~also~~ <sup>was</sup> then unaware of the earlier historical use of ~~this~~ term by Arago and others with a narrower sociological context but with a similar meaning.

There is a group of related ideas which can be most properly described under the name "cybernetics". One of them pertains to the phenomenon of back coupling which is known as negative feedback in engineering and as homeostasis in the case of living beings. At the beginning this notion was chiefly studied in the case of linear feedbacks where the new message fed back into a control system is proportionate to the degree to which the task for which this system is designed ~~has~~ not been fulfilled. The fact that systems with negative linear feedback are prone to go into oscillation when the feedback is too strong, led a group of engineers and physiologists (Arturo Rosenblueth, Julian Bigelow, N. Wiener) to ask the question whether similar oscillatory phenomena were to be found in voluntary action. The answer was in the affirmative and the corresponding oscillatory phenomenon is known as purpose tremor.

These questions came up in connection with a series of researches made during the war on the theory of prediction, particularly as applied

to the prediction of the path of airplanes and the design of automatic control apparatus for anti-aircraft fire. This is essentially a feedback process in which both a machine and a man take part so that a theory neither devoted exclusively to the machine nor to the human element was necessary. In the course of this work it was found that the design of such a system, and, in fact, the design of many varied sorts of communication systems, was essentially a statistical problem to be carried out in an optimum way on the basis of past observations. This was the source of modern information theory which has developed very widely in the last two decades and which constitutes an intrinsic part of cybernetics.

Now that the problems of linear feedback and information theory are well understood and are in large measure disposed of, an increasing interest is shown in problems of nonlinear feedback. All biological feedback, and most technical feedback, contains a strong nonlinear element. In the revision of his book of "Cybernetics", which was originally devoted largely to linear feedback and to information theory, N. Wiener has found it necessary to devote much attention to nonlinear problems, especially in the case of self-organizing systems. Here some of his work has been motivated by the particular example of the electroencephalogram in which the brain organizes itself into resonant systems of a high degree of concentration of power into narrow bands. In the technique of this work much use has been made of the generalized harmonic analysis developed by Wiener in the 1920's (Acta Mathematica, V. 55, pp) 117-258, Sept. 1930) and of the theory of integration in function space also developed by Wiener at approximately the same time. (See Nonlinear Problems in Random Theory, Technology Press of M.I.T. & Wiley & Sons, New York, 1958).

Only a beginning has been made in the application of these fields, but the problems to which this work has led seems to be likely to receive much more attention in the near future.

~~When the outgrowth of the~~

Another outgrowth of cybernetics has been in the technique of automata. Here, some of the principal work being done is due to Claude Shannon who is also from the technical ? and one of the founders of modern information theory. An important source of research in these fields is the laboratories of the International Business Machines Corporation where Drs. Solomen and Watanabe have applied these ideas to the construction of game-playing machines for chess and, in particular, for checkers and to the theory of inductive logic. (See automatization)

While the most successful applications of cybernetics have been in the engineering and in the biological field, the fundamental notions are applicable to other systems as well in social and economic fields. Professor Karl Deutsch, among others, has been following this line of investigation. The great difficulty in this sort of work, as well as in the whole field of the social sciences, is that the use of precise mathematical techniques on their data can only be just so good as the definition of their data and as our ability to interpret our categories unambiguously over a considerable range of cases. There is nothing intrinsic in social data which makes them essentially different from other data, but there is always a temptation in these fields to allow the urgent need for mathematical methods precipitate us into the use of refinements which do not correspond to anything clearly measurable or even definable in the observations. Perhaps the ~~surest~~ safest attitude to take is that cybernetic ideas may be, and are, very provocative in social fields, but that the detailed carrying out of precise techniques is likely to subject us to many disappointments.

# COPY

October 10, 1962

Dr. M. Takagi  
TATEISI central Research Laboratory  
Nagaoka-cho Otokuni-gun  
Kyoto  
Japan

Dear Dr. Takagi:

Thank you for your letter to Prof. N. Wiener in which you expressed your hope to be able to see Professor Wiener on your visit to our Institute. Unfortunately, Professor Wiener is still at the University of Naples, Italy, where he will be working until the end of January.

The only cybernetic work being done at the moment which Professor Wiener has been concerned with during the last year, is

- 1) the study of brain waves (under the guidance of Dr. John S. Barlow of the Massachusetts General Hospital in Boston) and
- 2) a project being studied by a group of physicians (in orthopedics) on problems of bioelectric control in artificial limbs (under the direction of Dr. Barr, also of the Massachusetts General Hospital).

If these projects should interest you, I suggest that you write me and I shall try to arrange for a meeting with the gentlemen named above or their associates.

Sincerely yours,

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

[ans 10/16/62]

Dr Norbert Weiner

12 October, 1962

scientific literature. We are very anxious to have illustrations - diagrams or photographs - to accompany the article; we should be glad if you could supply them or, failing that, suggest where we might obtain them.

In case you are not familiar with the New Scientist, I am sending you two recent issues under separate cover.

Yours sincerely,

*Nigel Calder*

Nigel Calder  
Science Editor

[ans 11/15/62]

SARAH LAWRENCE COLLEGE  
BRONXVILLE 8, NEW YORK

OFFICE OF THE PRESIDENT

TELEPHONE  
DEERFIELD 7-0700

October 12, 1962

Dear Dr. Wiener:

Last August I wrote asking if you might be able to lecture to the College during this academic year on our new Sheckman series. Yesterday our inquiries by telephone gave us word for the first time that you are at present in Italy, and will not be returning until next February. Since we need to complete plans for the series of lectures this year, we are turning elsewhere to secure a speaker, and I am simply writing to give you word of this.

If, of course, my letter is only now reaching you and you should at this moment be thinking it possible to speak here next March, prompt word might reach us before we have concluded alternative arrangements. But we shall consider this only a remote possibility and shall look forward rather to the possible chance of inviting you to the campus another year. The College will be much pleased if it can have you here some time in the near future.

Sincerely,

*Paul L. Ward*

Paul L. Ward

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

*now received from LWS*



3712 Thornapple St.  
Chevy Chase 15, Md.  
October 14, 1962

Prof. Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology

Dear Prof. Wiener:

In the Houston symposium on the results of the MA 7 flight, Scott Carpenter mentioned that he thought that the reason why both he and Glenn found that it was natural to let go of an object in the weightless condition was, he thought, that the cue for the release of an object in ordinary life is the feeling that the fingers have been relieved of the weight. I.e., when we put a pencil down, we let go ~~XXXXXXXXXX~~ not because we see that it is on the table or hear it hit, or anything of that kind, but primarily because we feel the weight, or a part of it, reduced. A book is a better example.

I know that this is very much along the lines of your thinking, at least of some years back. Can you suggest someone who would be willing to work up a joint paper with Carpenter on this point, and perhaps to plan future experiments along this line?

It is very difficult to combine scientific effort with the manned spacecraft program; one is despised both by the scientists and by the engineers. Thus one can be sure that he is doing what is really valuable, in the sense that if he doesn't do it, it won't be done. But it's not for cry-babies.

Sincerely yours,

*John A. O'Keefe*  
John A. O'Keefe

[Ans 11/15/62]

Professor Dr. Hermann Bente  
Redaktion, Handwörterbuch der Sozialwissenschaften  
Theaterstrasse 13  
Göttingen  
Deutschland

Sehr geehrter Herr Kollege:

Erst möchte ich Sie um Verzeihung bitten, dass ich Ihr wertenes Schreiben vom 11. Juli so spät beantworte. Ihr Anfrage, ob ich das Thema Kybernetik für Ihr Wörterbuch behandeln will, erreichte mich spät auf Umwegen während meiner Reisen durch Europa diesen Sommer. Da meine Zeit so stark in Anspruch genommen ist, wollte ich einen meiner Kollegen hier am Institut in Neapel, Herrn Dr. Valentin Braitenberg, dessen Hauptfach hier die Kybernetik ist, bitten mir dabei zu helfen. Professor Braitenberg ist an dem obigen Institut tätig, ist Doktor der Medizin, und hat weitgehende Interessen. Er hat mir seine Mitarbeit zugesagt, wenn Sie damit einverstanden sind.

In der Hoffnung bald von Ihnen zu hören, verbleibe ich,

Ihr sehr ergebener,

Norbert Wiener

Oct. 14

2

Mr. Dael Wolfle  
Executive Officer  
American Association for the Advancement of Science  
1515 Massachusetts Avenue, N. W.  
Washington, D. C.  
U. S. A.

Dear Mr. Wolfle:

First let me apologise for this late reply to your request sent to me in August for use in an editorial of part of an article of mine which appeared in the Technology Review in July 1961. When your letter caught up with me in Stockholm I did not have the article at hand and wanted to wait until I returned to Naples in September where I have a copy of it.

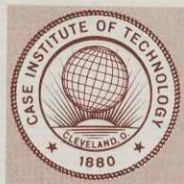
I am very glad to give you my permission to use any part of the ~~article you choo~~ article you choose. With best wishes, I remain,

Very sincerely yours,

Norbert Wiener

Prof. J. B. Reswick

CASE INSTITUTE OF TECHNOLOGY  
UNIVERSITY CIRCLE • CLEVELAND 6, OHIO



Oct 15

Dear Mrs. Wiener -

I thought you would like to  
have the enclosed memento of our wonderful  
trip to Os.?? Ij on the island Kirk.

I enjoyed talking with you about Belmont  
and other things that night.

It was for me an evening of magic  
the repercussions of which will not die away.

With kind regards to you and Dr. Wiener

Sincerely

Jim Reswick



10-24-62



# Tateisi Electronics Co.

In answer to	<input type="checkbox"/> TOKYO	: 4TH FL., ANNEX SANKEI BLDG., OTEMACHI, TOKYO, JAPAN.	PHONE 231-5864	
	<input type="checkbox"/> OSAKA	: 9TH FL., NEW OSAKA BLDG., DOJIMA, KITA-KU, OSAKA, JAPAN.	PHONE 361-8571	Cable Ad. OMRON TATEISI OSAKA
please address	<input type="checkbox"/> FACTORY	: 10 TSUCHIDOCHO, HANAZONO, UKYO-KU, KYOTO JAPAN.	PHONE 44-5181	OMRON TATEISI KYOTO
to	<input type="checkbox"/> RED. LAB.	: NAGAOKACHO, OTOKUNIGUN, KYOTO, JAPAN.	PHONE KOTARI 332	
	<input type="checkbox"/> NEW YORK	: 64-14 WOODSIDE AVENUE WOODSIDE 77, LONG ISLAND, NEW YORK	PHONE OLYMPIA 1-6475	

Our Ref. .... Your Ref. .... Date Kyoto Oct.16,1962

Mrs. Eva-Maria Ritter  
  
 Prof. N.Wiener's office  
 Massachusetts Inst of Tech  
 77 Massachusetts Ave  
 Cambridge 39. Massachusetts U.S.A.

Dear Mrs. Ritter

This will acknowledge with many thanks the receipt of your letter dated October 10, 1962.

It was a bitter disappointment to me, that prof. N.Wiener is absent, but still I am very much interested in the problems of bioelectric control in artificial device.

So that, would you mind to try for arrangement on our short chance to take a brief tour of Massachusetts General Hospital, with Dr. Barr's permission, if such arrangements can be conveniently made fortunately.

We expect to be in Massachusetts at 10.00/AM on November 14th, 1962 and will stay until 7.30/PM on next day.

If it is convenient for you to meet us at prof. N.Wiener's office at 10.00/AM on November 15th, we would be very happy.

Repeating again, I thank you very much indeed for your kindly suggestions.

Very truly yours

*M. Takagi*  
 M. Takagi

TATEISI ELECTRONICS CO.  
 KYOTO JAPAN

Dear Prof. & Mrs. Wiener, Oct. 16

As you can see, the mail has not been too heavy.

Enclosed is a check which you might endorse and send to the N. E. Tel & Tel. It is Prof. McCarthy's amount for the period Aug 14 - Sept 14. The rest will be paid by the Ellises. I don't think they would have accepted my signature.

I am <sup>still</sup> ~~presently~~ looking for a full-time job on a temporary basis since my sister is at home. It is virtually impossible, and I am rather tired of going here for 3 weeks & there for 4 etc. But perhaps something will break.

Best regards, Erat. Ritter

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

..... 19.....

Memo to..... Room..... Ext.....

*No. 10*

from..... Room..... Ext.....



UNIVERSITÀ DI NAPOLI  
ISTITUTO DI FISICA TEORICA  
Mostra d'Oltremare, Pad. 19 - Tel. 303514  
NAPOLI

Napoli, li.....October 16,..... 1962.

Mr. Carroll Bowen  
Director, M.I.T. Press.  
Mass. Institute of Technology  
Cambridge 39, Mass.  
U. S. A.

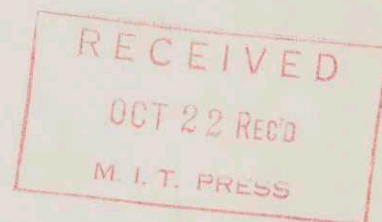
Dear Mr. Bowen:

Thank you for your letter of October 3. I, too, look forward to meeting <sup>you/</sup> when I return to M. I. T. next February. The handwritten manuscript of Cybernetics has already been presented to the M. I. T. Library some years ago, as far as I recollect. It was probably brought to the M. I. T. when the book was being revised and had not been returned. Perhaps Miss Boyd would know. At any rate, the book should go back there.

With best wishes, I remain,

sincerely,

Norbert Wiener





October 16,

2

Mr. Carroll Bowen  
Director, M.I.T. Press.  
Mass. Institute of Technology  
Cambridge 39, Mass.  
U. S. A.

Dear Mr. Bowen:

Thank you for your letter of October 3. I, too, look forward to meeting <sup>you/</sup> when I return to M. I. T. next February. The handwritten manuscript of Cybernetics has already been presented to the M. I. T. Library some years ago, as far as I recollect. It was probably brought to the M. I. T. when the book was being revised and had not been returned. Perhaps Miss Boyd would know. At any rate, the book should go back there.

With best wishes, I remain,

sincerely,

Norbert Wiener

October 17, 1962

Mr. Richard Bellman  
The Rand Corporation  
1700 Main Street  
Santa Monica, California  
U. S. A.

Dear Mr. Bellman:

I have waited until now to answer your letter of July 23, asking if I would be interested in collaborating with Prof. Masani on a book about matrix prediction theory. First, I expected to see Prof. Masani at the International Congress for Mathematicians in Stockholm in August to talk with him about it. Then I did not return to Naples until recently where I would find time to consider your proposal. While I am interested in doing such a book I see no immediate prospect, say for at least two or three years, to devote myself to it, especially since Prof. Masani and I would have to spend considerable <sup>time/</sup> together to accomplish it. I am sorry to have to be so indefinite, but this is the best I can do at this time.

With best wishes, I remain,

sincerely yours,

Norbert Wiener

October 17,

2

Professor L. Radanovic  
Eten, Yugoslav Committee for  
Electronics and Automation  
Terazie 23  
Belgrade  
Yugoslavia

Dear Professor Radanovic:

This is a belated, but very sincere letter of thanks for your kind invitation to myself and my wife to spend a week in Yugoslavia as ~~the~~ your guests and for your wonderful hospitality and all the courtesies extended to us during that time. We were very much impressed by the activity in many fields and the natural beauty of the country. I have recently written to my colleague, Dr. Barr of the Massachusetts General Hospital giving a full account of the meeting at Opatija. I expressed my high opinion both of the agenda and of the spirit in which the meeting was conducted. You will be interested to hear that Dr. Barr commented very favorably on the great use the ideas developed at the meeting are bound to have in the conduct of our project. I am looking forward to the resumption of our contact in two years in England and am hoping that it will not be too long before one of the meetings will take place in the United States.

Please convey our special thanks to Professor Tomovic for his help to us at Opatija, to Dr. Damjanovic for his pleasant companionship on the trip to Bled and Belgrad, and to the young man who accompanied us to Dubrovnik. Please also remember us to all the gentlemen in Belgrad, of whom Professor Jellenic was one, who entertained us there and whom we remember most pleasantly.

With best wishes, I remain,

Very sincerely,

October 18,

2

Prof. H. T. Davis  
Trinity University  
715 Stadium Drive  
San Antonio, Texas  
U. S. A.

Dear Caesar:

I have not got Fermat's last theorem solved yet and hardly expect to. At present I am quite far from Mexico, and I am spending this term teaching at the Institute above. I said far from Mexico but I mean geographically and not spiritually, because Naples too is still something of a Spanish colonial city. Roughly speaking, what goes in Mexico City goes here too.

Thank you for the honor of asking me to speak at Trinity University. At present I see no immediate possibility, but should I be sometime next year or so on the way there or in your vicinity, may I let you know?

With best wishes and in the hope of seeing you again, if possible, I remain,

sincerely yours,

Norbert Wiener

[1962]  
October 18,

2

Mr. Rex Stout  
The Authors Guild  
Six East Thirty-ninth Street  
New York 16, N. Y.  
U. S. A.

Dear Mr. Stout:

I suppose I ought to get back into the Authors League but I am bit scared off by the body of successful authorship represented by your membership committee.

By the way, I have been recently in Yugoslavia to a scientific meeting on prosthetics. While there I found out from a Montenegrin friend that Mr. Nero Wolfe is very well known and appreciated in Yugoslavia, but that they are quite unaware of his Montenegrin connections. I also found out that Yugoslavia is far less restricted and more liberal than the other countries of the Eastern block. I should be interested to know, if you don't mind telling me, why you chose ~~Montenegrin~~ as the native country of your hero. Have you been there, or did you make him up out of whole cloth? I have said that one of my colleagues at the meeting was a real Montenegrin. They have a good deal in common with the Highland Scots as my friend well recognizes. They are as romantic as all get-out and are very likeable people.

Sincerely yours,

Norbert Wiener

October 19,

2

Mr. Bryn Beorse  
Post Office Box 142  
Keyport, Washington  
U. S. A.

Dear Mr. Beorse:

I am in Europe at present and shall not return until next February. As to the people to look up at M. I. T., I frankly have no advice to give which would not consist of names you already know anyhow. I have my doubts as to the advisability of any highly organized scheme of distributing American effort. I gather that you are considering more than unemployment, but are interested in a useful distribution of American creative effort at all levels. This demands an extremely <sup>and sagacious/</sup> wide knowledge not only of the directions of development at present, but of those which are likely to come into importance within a decade.

Frankly, I do not feel competent to express a firm opinion of this nor do I know anyone who is competent. Big schemes like this turn slowly, and the inevitable errors in judgment are likely to weigh heavily on the country for many years to come. I do not think America should be so eager to adopt what I consider the worst features of Russian beaurocracy.

Yours very sincerely,

October 19

62

Mr. A. K. Parker  
University Press Cambridge  
Cambridge, England

Dear Mr. Parker:

This is rather ~~so~~ <sup>late/</sup> <sup>to/</sup> answer your inquiry of August 15, but I have been travelling in Europe all summer and some of my mail was therefore much delayed. Now to reply to your question if I made a start on the book on Harmonic Analysis with Mr. Reber, I must admit that I have been much too busy and can't at this time tell just when I shall be able to make a start. Certainly, at this time I would not be ready to sign any agreement. I am returning to M. I. T. next February when I shall be in touch with Mr. Reber again and see what develops in the way of time and opportunity.

Sincerely yours,

Herbert Wiener

October 19,

2

Mr. J. Marshall Reber  
4213 -- 37th Street  
Washington, D. C.  
U. S. A.

Dear Mr. Reber:

I must apologize for answering your letter of July<sup>18/</sup> at this late date. Apparently, some of the letters sent to Naples were were not forwarded to me while I was in Northern Europe this summer.

Yes, I am still interested in the proposed volume on Harmonic analysis. The big question is when to find the time. If you wish to go ahead with it on your own and keep me informed of your progress you may do so. I had an inquiry from Mr. Parker of the Cambridge University Press and have written him that at this time I feel ready<sup>don't/</sup> to sign any definite commitment.

So far, we have had a very good year, some very interesting trips and lots of work. I shall be back at M.I.T. next February. I am happy to hear that you are settled in a good job at the Bureau of Standards. Best wishes from both of us.

Sincerely,

Norbert Wiener

P. S. I have no suggestions as to what part of the book to tackle first. In fact, I would prefer that you use your own ideas how to write it up.



8 Ben Gamlah St  
Katamon, Jerusalem  
ISRAEL

October 21, 1962

Professor Norbert Wiener  
Institute of Theoretical Physics  
Mostra D'oltre Mare  
Pad. 19  
Naples, Italy

Dear Professor Wiener,

Elaine and I arrived in Israel a few weeks ago and are now fairly well settled. I am about to start a two year program for my M.Sc. degree in theoretical physics. By the way, I am applying for an NSF scholarship for next year, and would like to ask permission to send you their recommendation form.

I am sending you in a separate envelope a copy of the report I submitted to Professor Rosenblith. I demonstrated the nonstationarity of the EEG while nevertheless roughly describing a characteristic spectral shape in two subjects. I was led to hypothesize a model which, if the nonstationarity turns out to be a gradual

change, will "save the phenomenon" of a sharply defined spectral shape characteristic of an individual.

After I emerged from the mass of terribly petty details involved in setting up the wave analyzer, the work became interesting, and it was with some regret that I left it. But I have now definitely decided that I want to do my life work in theoretical physics. I feel that I was justified in leaving the work when I did, having persisted, beyond my original plans, until something definite was achieved, rather than leaving without results and doing more harm than good.

I enjoyed working with you and always appreciated your friendship. Please give best regards to Mrs Wiener from Elaine and myself.

Sincerely yours,

Chuck Robinson

Charles E. Robinson

P.S. I have enclosed, in the envelope containing the report, a reprint which perhaps you haven't seen yet. See especially the last paragraph.

October 21,

2

Dr. Paul L. Ward  
Office of the President  
Sarah Lawrence College  
Bronxville 8, N. Y.  
U. S. A.

Dear Dr. Ward:

Your letter of August 31, in which you honor me by inviting me give one of the Mona Bronfman Sheckman lectures, did not reach me until recently here in Naples when I returned late in September. I shall not be back at M. I. T. until early in February 1963. With the backlog of work awaiting me it would be unwise for me to add to the responsibilities I have already for the remainder of the school year 1962-63. I am sure you will understand.

Thanking you again for the honor of inviting me and with best wishes , I remain,

sincerely,

Norbert Wiener

October 21,

2

Dr. Alfred A. Wolf  
Enertron, Inc.  
11-40 East-West Highway  
Silver Spring, Maryland  
U. S. A.

Dear Dr. Wolf:

Thank you for your letter of October 4, in which you invite me to participate in the workshop of "Stochastic Processes" next June at the University of Minnesota. I have already accepted several engagements for next summer and feel that I should not add to them, since I would not be able to do justice to them. I am sure you will understand.

Thank you again for thinking of me. With best wishes for the success of your workshop, I remain,

sincerely yours,

Norbert Wiener

BRYN BEORSE  
POST OFFICE BOX 142  
KEYPORT, WASHINGTON

October 22, 1962

Dr. Norberg Wiener  
Mathematical Faculty  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Dr. Weiner:

I shall arrive at the Boston Airport Monday, October 29,  
between nine and ten in the morning and take a taxi di-  
rectly to the M.I.T.

I am looking forward to meeting you again.

Sincerely yours,

*Bryn Beorse*  
Bryn Beorse

BB:EJ



Erased by Bond

25% COTTON FIBER

793 Patterson Drive  
Monroe, Michigan  
October 22, 1962

Dear Sir:

The period of higher education which is now upon us makes it imperative for the study of mathematics.

Since mathematics are essential in all things, we would appreciate it if you could possibly send us any materials you might have on primitive, present and possible future uses. Thank you for your time and co-operation.

Sincerely yours,  
Ronald Koller

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TELEPHONE: 51626

AKP/TKC

23 October 1962

Dear Professor Wiener,

Thank you for your letter of 19 October letting me know how you are getting on with the book on Harmonic Analysis. There is no hurry with this, though naturally we hope that you will be able to make a start on it when you get back to M.I.T. early next year.

Yours sincerely,

*A.K. Parker*

Professor Norbert Wiener,  
Istituto di Fisica Teorica,  
Università di Napoli,  
Mostra d'Oltremare, Pad. 19,  
Naples.

no. 11

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE 39, MASS.

DEPARTMENT OF MATHEMATICS

October 23, 1962

Dear Professor and Mrs. Wiener,

Thanks for your long letter (and check). I am glad that you finally received everything. I hope that this one will reach you, too, although with the present world situation this seems almost questionable. All of us here at MIT have only one subject to talk about today, and that is the President's message to the nation. I don't find many in favor of it. It was not too subtle, and all of us who remember WW II can only think with great fear of what might be ahead, but so do the others.

Now to our business matters: 1. I have dropped Prof. Martin a note regarding the paid-in salary check for September. Should know soon. 2. I have been at the Cambridge Trust Co. inquiring about the mysterious \$111.38. Have been told that it will take time, but they will consult their microfilms. They are going to send word to me at our office. 3. The book will be sent off tomorrow; it's already packed. 4. Copies of your report to Dr. Barr have been typed and sent out. 5. With regard to the house bills, I had already settled the phone bills between the McCarthys and Ellises the way you suggested; will do so with the others, too. I shall get in touch with them presently for finding<sup>out</sup> about the fuel, water etc.

Personally, yes, I have worked part-time this year at the Center f. Internat'l Studies, then in Chemistry, subsequently in Mod. Langs., and now in the Cooperative Computing Laboratory under Prof. M.P. Barnett, but this is very temporary, and I am not too enchanted. Actually, I do need a full-time job until you return, but the jobs I could have had would have run beyond February, and it would not be fair to tell them I would stay with them when I won't. -- You will be here in 1963, won't you? Have you already made definite plans regarding 1964?

Michael Marcus is very busy, not only in Math., but also in the Hughes-for-Senator campaign. His wife has joined him, and they have rented a house in Rockport (or Gloucester), are very happy, I think.

My sister Ingrid thinks she will like it here. She loves the scenery, looks forward to skating and skiing in the winter and swimming in the summer.

*Done at the end and must sign off. My very best regards,  
E.D. Rittel*



No. 11

October 23, 1962

Dear Professor and Mrs. Wiener,

Thanks for your long letter (and check). I am glad that you finally received everything. I hope that this one will reach you, too, although with the present world situation this seems almost questionable. All of us here at MIT have only one subject to talk about today, and that is the President's message to the nation. I don't find many in favor of it. It was not too subtle, and all of us who remember WW II can only think with great fear of what might be ahead, but so do the others.

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My sister Ingrid thinks she will like it here. She loves the scenery, looks forward to skating and skiing in the winter and swimming in the summer.

I am at the end and must sign off. My very best regards,  
E. D. Ritchie

October 23,

2

Dr. J. M. Schade  
Associate Director  
Netherlands Central Institute for Brain Research  
59 B Mauritskade  
Amsterdam  
The Netherlands

Dear Dr. Schade:

I have been so busy during the course of the summer with meetings of one sort or another in Salzburg, Royaumont, Stockholm, and in Opatija, Yugoslavia that I had to neglect for a while the revising of my reports for you. I have been able to do so at last, and I am enclosing them in this letter. They are in good shape except for the discussion transcription which I had not gone over before.

Now I am back in Naples for a term and shall return to M.I.T. in January. How is your plan of having me come to Amsterdam progressing? Please don't feel that I am putting pressure on you. I just want to get some idea how to organize my plans for the year 1964. With best wishes, remembering also our pleasant contacts here and in Amsterdam, in which my wife joins me, I am,

sincerely yours,

Norbert Wiener

P.S. May I trouble you to do me a favor? When in Amsterdam a Dr. Nordenbos (I think it was he) invited us to dinner, and I lent him the only copy of a detective story I had written, entitled "The Brain" to copy. He promised to send it back in the course of a week. So far I have not received it. I would be very grateful if you would inquire.

October 23,

2

Dear Ted:

After a term and a busy summer here in Europe my visit to the Rockefeller Institute which you proposed toward the end of January 1963 is drawing near. I should like to know if you still feel the same way about it. If so, I should be glad to take it up all the more so as I have been working with a colleague here (who may come to the States) on the relation between quantum statistical mechanics and the Wiener integral.

I hope all has gone well with you as it has with us. During the summer we visited most of the countries in Central Europe, taking in meetings in Salzburg, Royaumont, France, Math. Congress in Stockholm, and a prosthetics congress at Opatija, Yugoslavia, which confirmed most of the ideas I have discussed with you. But more of that when we get together.

We are due to return on the Vulcania, arriving in New York on January 21, 1963. Will that be too late for the plans you had for me? Don't hesitate to say that it is not convenient at that time.

Best regards to the family from Margaret and myself, and to all my colleagues at the Institute, especially Mark Kac.

Sincerely,



JOSEPH S. BARR, M.D.

DEPARTMENT OF ORTHOPEDIC SURGERY  
*Massachusetts General Hospital*  
*Boston 14, Massachusetts*

October 24, 1962

Professor Norbert Wiener  
Universita di Napoli  
Istituto Di Fisica Teorica  
Naples

Dear Professor Wiener:

Mel Glimcher, Tom DeLorme and I had luncheon together today and discussed in some detail your letter of 1 October.

Our thoughts are as follows:

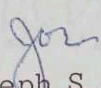
1. None of us have seen the Yugoslavia prosthetic hand. Can you buy, beg or steal one and bring it back with you?
2. To quote you "we shall have to do much more exploration on the regions where we can feed in artificial sensation" - we agree!
3. We expect that Professor Bose will give us the help we need regarding design of buried sending stations for EMG signals. We are aware of the fact that badly paralyzed muscles may give a useful signal.
4. We are not pessimistic regarding the general usefulness of feedback prosthesis. If they are better than the conventional ones, they will be accepted. Remember Bill Mauldin's war cartoon, "If you know of a better 'ole, go to it." Most of the elaborate prostheses were not any better than the simpler ones. If ours is better it will be used.
5. In our opinion, the upper extremity prosthesis problems are as follows in the order of importance:

First - a workable elbow.  
Second - a workable hand.  
Third - a workable shoulder.

6. The power source for artificial limbs is a difficult problem between the electrical engineering and mechanical engineering brains at M.I.T. but we ought to be able to arrive at an educated guess as to the method which will be the better, i.e. electrical or mechanical sources.
7. You will be interested to hear that we have completed one experiment on direct takeoff from the nerves of an amputee. The radial, median and ulnar nerves of an amputee were exposed under local anesthesia and the electrical signals from these nerves along with the record of voice commands were put through a cathode ray oscilloscope and the data reduced by computer. When told to think of making a fist etc., recognizable, useful signals were taken off the nerves. There were some high frequency signals at about 4000 cps which are as yet unexplained. Unexpected results lead to new discoveries!
8. We doubt that Boston should bid for the privilege of hosting a large congress on prosthesis. We do think that a seminar conference for a select group along the lines you have suggested would be fruitful. It might be held just before or just following (preferably the latter) the Congress. The government is putting a lot of money into prosthetic research in California - let them hold the Congress. We will need to get funds for sponsorship of our seminar and perhaps the government is the most likely source.

Our best as always,

As ever,

  
Joseph S. Barr, M.D.

cc: Mr. Scott Allen  
Professor Bose  
Mel Glimcher  
Tom DeLorme

jmk

[see 11/7/62]

The next Congress on Prosthesis is to be in Great Britain in two years. I think the Dutch have the claim for a congress two years after that. The Cleveland group has government support and is already angling for a congress in the United States. If we have such a congress, I think the Boston group should get its claim in early and adjust its relations with the U. S. Government. I am very much in favor of a summer meeting at one of the smaller colleges in the New England summer resort area where we can get together for a week or two, of a small working group to keep up the excellent international relations which have already developed. In general, except for Russian governmental interference, the group has proved to be very congenial, and personal contacts are of the greatest possible value. By the time America gets the meeting the group will be much larger than it is now, and we should be careful to exclude people who are attracted by the sensationalism of the field and have merely come along for the ride. The meeting should be interrupted say every three days or so by a day of rest, when the group can perhaps make an excursion; <sup>good</sup> swimming and tennis facilities will add to the meeting.

(6)

There is an English group actively engaged in electronic medicine from whom you will certainly hear, if you have not heard already. The cybernetic medicine groups in the Netherland and in Italy have already had very successful meetings according to the lines I have suggested here and intend to go on. One of the big problems for the future is that of the education of young men equally acquainted with the medical and the engineering aspects of this work. The suggestions which I have made for the organisation of this sort of group and in particular for the need of a familiarity on the part of everyone with both the medical and the engineering aspects of this work have met with general approval.

Well, this is my budget of news at this time. Best wishes to the whole group, and please let me know how you are getting on.

Sincerely,

Norbert Wiener

P. S. I am having Mrs. Ritter, my secretary at M. I. T., send copies of this report to Drs. Bowker, Glynsheer and Bose. If you think that others should also have a copy, Mrs. Ritter will send them at your request.

The number of participants were about sixty. I am sending papers and reprints from the congress under separate cover.

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October 24, 1962

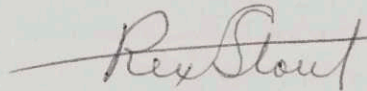
Professor Norbert Wiener  
Universita Di Napoli  
Istituto Di Fisica Teorica  
Mostra d'Oltremare, Pad. 19  
Napoli, Italy

Dear Norbert Wiener:

Thank you very much for your letter and the check, in spite of your preposterous statement that "I am a bit scared off by the body of successful authorship represented by your membership committee." Having had a little correspondence with you, and having met and talked with you, having heard quite a little about you from people who know you better than I do, and having read a book and articles by you, I know quite well that nothing and no one on earth could scare you off even a bit.

It is pleasant to know that Nero Wolfe is known and appreciated in Yugoslavia. Having decided that NW was born in that part of the world, I chose Montenegro as the spot because of a delightful month I had spent there in 1912. I have two good friends who are Highland Scots, and I'll have some fun telling them of your comment.

Cordially,



Rex Stout  
Chairman

RS:jsw

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IRWIN KARP, Counsel

EDITH MACKIN, Membership Secretary



October 24,

2

Professor Gilbert Fullington  
Art Department, Arizona State University  
Tempe, Arizona  
U. S. A.

Dear Professor Fullington:

First let me apologize for this very late <sup>reply/</sup> to your letter of June 14. I have been travelling in Europe all summer, and some of my mail is just now catching up with me.

I wish I had some helpful suggestions to offer, but I am not very good at such things as bibliographies or organizing them. Perhaps if you write to the following people you may get some more help. They are Dr. J. P. Schade, Central Institute for Brain Research Amsterdam, Holland; and Professor J. F. Schouten, Institute for Perception Research, Eindhoven, Holland.

Sincerely yours,

Norbert Wiener

October 24,

2

Herrn Dr. Th. Müller  
Physik Verlag GMBH  
Schriftleitung  
Mosbach  
Deutschland

Sehr geehrter Herr Dr. Müller:

Ihr Schreiben vom 20. September hat mich erst kürzlich hier in Neapel erreicht. Natürlich schicke ich sehr gern einen kleinen Beitrag zu einem Geburtstagsartikel für Professor Born. Ich habe ihn auf englisch verfasst, und hoffentlich ist der Inhalt da was Sie wünschen.

" My first contact with Professor Born was at the time when Professor Heisenberg had begun to develop his matrix treatment of quantum theory. It was clear to me then that Professor Heisenberg's brilliant work represented the culmination of a long contact with Professor Born's fruitful ideas. It is very easy in assessing the work of a brilliant young man to ignore the great inspiration which he probably has received from his teachers, and especially from one so generous and fruitful in ideas as Max Born. I am certain that when the full history of quantum theory is written, it will be seen that Professor Born's role is far greater than is now generally supposed. This is said in full appreciation of the extent that Professor Heisenberg went beyond his master. Max Born belongs with others such as Ehrenfest whose scientific contributions go far beyond the papers which they themselves have published.

Sincerely yours,

Norbert Wiener

October 24,

2

Dr. Michael H. O'Malley  
i.e. Dr. Gordon E. Peterson  
Communication Sciences Laboratory  
The University of Michigan  
Ann Arbor, Michigan  
U. S. A.

Dear Dr. O'Malley:

Thank you for your letter of August 2, in which you kindly invite me to give one of the lectures in your colloquium series of the communication sciences. Mrs. Ritter, my secretary at M.I.T., has answered you in a preliminary way, telling you that I shall be away until the spring of 1963. The only time I shall be in your vicinity during next year, as far as I know now, will be at the Mathematics Research Center at the University of Wisconsin between June 11, and 15. That, I am afraid, would be too late for your purpose.

With best wishes, I remain,

sincerely yours,

Norbert Wiener

# HANDWÖRTERBUCH DER SOZIALWISSENSCHAFTEN

Im gemeinsamen Verlage von

J. C. B. Mohr (Paul Siebeck), Tübingen · Gustav Fischer, Stuttgart · Vandenhoeck & Ruprecht, Göttingen

**HERAUSGEBERGREMIUM:** Prof. Dr. Dr. E. v. Beckerath, Bonn · Prof. Dr. H. Bente, Köln · Prof. Dr. C. Brinkmann† · Prof. Dr. Dr. E. Gutenberg, Köln · Prof. Dr. G. Haberler, Cambridge (USA) · Prof. Dr. H. Jecht, München · Prof. Dr. Dr. W. A. Jöhr, St. Gallen · Prof. Dr. Dr. F. Lütge, München · Prof. Dr. A. Predöhl, Münster · Prof. Dr. R. Schaefer, Speyer · Prof. Dr. Dr. W. Schmidt-Rimpler, Bonn · Prof. Dr. W. Weber, Göttingen · Prof. Dr. Dr. Dr. L. v. Wiese, Köln

**FEDERFÜHRENDER HERAUSGEBER:**

Prof. Dr. Hermann Bente, Köln

Redaktion:

Göttingen, den 25.10.62 Sch/Sti  
Theaterstraße 13, Tel. 59515

Herrn  
Professor Dr. Norbert Wiener  
Università di Napoli  
Istituto di Fisica Teorica  
Mostra d'Oltremare, Pad. 19  
N a p o l i

Sehr geehrter Herr Professor!

Im Auftrage von Herrn Professor Bente, der sich zur Zeit auf Reisen befindet, möchten wir Ihnen unser Bedauern darüber ausdrücken, dass wir von Ihrer liebenswürdigen Bereitschaft zur Mitarbeit am Handwörterbuch der Sozialwissenschaften keinen Gebrauch mehr machen können. Nachdem wir ein Vierteljahr nichts von Ihnen gehört hatten, glaubten wir, nicht mehr mit Ihnen rechnen zu können. Da der Artikel "Kybernetik" aber bald erscheinen soll, haben wir uns inzwischen um einen anderen Autor bemüht und vor einigen Tagen eine Zusage erhalten. Wir hoffen auf Ihr freundliches Verständnis für die uns aus den drängenden Terminen entstehenden Dispositionsschwierigkeiten und möchten uns erlauben, Ihnen für Ihre Bereitschaft zur Mitarbeit unseren verbindlichsten Dank auszudrücken.

Mit verbindlichen Empfehlungen  
Handwörterbuch der Sozialwissenschaften  
Redaktion:

*Gehlen*

Scheuten

Nienburg 28.10.62

Lehrgeehrter Herr Professor Wiener!

Schon immer habe ich Ihr Wirken mit Interesse und aufrichtiger Bewunderung verfolgt und mir sehr herzlich gewünscht, Sie einmal persönlich sehen zu können. Leider ging mein Wunsch aber nie in Erfüllung. So möchte ich mir heute in aller Höflichkeit gestatten, Ihnen eine Bitte vorzutragen.

Dürfte ich Sie wohl recht herzlich um ein kleines Foto mit Ihrer persönlichen Widmung bitten?

Ich würde mich sehr freuen, wenn es Ihnen möglich wäre, meine Bitte zu erfüllen und sage im Voraus meinen allerbesten Dank. Sollte

sie aber zu unbescheiden sein, so möchte  
ich um Entschuldigung bitten.

Auch weiterhin wünsche ich Ihnen alles  
Gute und von Herzen die beste Gesundheit.

Mit den freundlichsten Grüßen

Ihr

Helmut Kirschstein

307 Nienburg/Weser

Carlostastrasse 5

West Deutschland

Qu. Nr. Nov. 15

Referat

**ASSOCIATION INTERNATIONALE  
DE CYBERNETIQUE**

Namur, le 29 octobre 1962.

A. S. B. L.

Secrétariat :

13, Rue Basse-Marcelle

NAMUR (Belgique)

Tél. (081) 279.83

N° \_\_\_\_\_

Madame, Monsieur,

Nous avons l'honneur de vous informer que l'Assemblée Générale Ordinaire de l'Association Internationale de Cybernétique se tiendra à Namur, le 1er décembre 1962, à 10 h. - salle des Conférences du Gouvernement Provincial de Namur, place St Aubain, n° 2 à Namur.

Ordre du jour.

1. Rapport d'activité
2. Rapport financier et budget pour l'année 1963
3. Approbation des comptes de l'année 1961. Rapport des Commissaires
4. Désignation des Commissaires
5. Nomination des Administrateurs
6. Divers.

Le Conseil d'Administration vous serait reconnaissant si vous pouviez assister à cette Assemblée ou vous y faire représenter.

Nous reproduisons le texte de l'article 21 des Statuts de l'Association :

"Tout membre pourra se faire représenter à l'Assemblée par un autre membre muni d'une procuration régulière. Toutefois, un même membre ne peut représenter plus de dix membres absents.  
"Chaque membre présent ou représenté, dispose d'une voix.  
"Aucune résolution ne peut être prise en considération sur un objet ne figurant pas à l'ordre du jour".

Les procurations devront être déposées sur la table du Président avant l'ouverture de la réunion.

./..

Afin de nous donner la possibilité d'organiser cette Assemblée, nous serions heureux si vous pouviez nous envoyer, par retour du courrier, la formule que nous annexons à la présente. Si vous désirez être représenté, complétez la procuration figurant au bas de cette formule.

Nous attirons votre attention sur le fait que seuls les membres de l'Association, qui sont munis de leur carte de membre, sont autorisés à assister à l'Assemblée.

Cette carte de membre n'est délivrée qu'après paiement de la cotisation. Si votre cotisation n'est pas encore réglée, nous vous demandons de faire le nécessaire dès que possible.

Nous vous prions de croire, Madame, Monsieur, en l'expression de nos sentiments les meilleurs.

L'Administrateur-Délégué,

J. LEMAIRE.

Le Président,

G. R. BOULANGER.



ASSOCIATION INTERNATIONALE DE CYBERNETIQUE.

---

Participation à l'Assemblée Générale Ordinaire.

Nom : .....

Prénoms : .....

Je participerai ( je ne participerai pas ) à l'Assemblée Générale Ordinaire qui se tiendra à Namur le 1er décembre 1962 à 10 heures.

Date ..... 1962

Signature,

---

PROCURATION.

Je soussigné,

donne pouvoir par les présentes à M.

de me représenter à l'Assemblée Générale Ordinaire de l'Association Internationale de Cybernétique, qui se tiendra le 1er décembre 1962 à 10 heures à Namur. Le présent pouvoir comporte le droit d'assister à la réunion, de prendre part aux délibérations et votes, de signer la feuille de présence et de faire tout ce qui sera nécessaire dans l'intérêt de ladite Association au sujet des questions à l'ordre du jour.

En foi de quoi, je m'engage, dès à présent, à avouer le mandataire précité et à ratifier les actes qu'il aura passés pour moi et en mon nom.

Fait à \_\_\_\_\_, le \_\_\_\_\_

Bon pour pouvoir,

ACADEMIE INTERNATIONALE DE PHILOSOPHIE DES SCIENCES

-----

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NIKODYM O. M.	Kenyon College, GAMBIER, Ohio	U. S. A.
SPERTI G. S.	Madison Road 1842, CINCINNATI 6, Ohio	U. S. A.

Colby College  
Waterville, Maine  
October 29, 1962

Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Professor Wiener:

I am very much interested in cybernetics especially as it gives insight into psychological and sociological processes. I have not been able to encourage anyone at this institution to give a course in the field, but I have completed some reading on my own, including The Human Use of Human Beings and Cybernetics although I confess that I understood little of the latter.

I would like to inquire if you know of any institution which offers courses in this field? As my own background is primarily in sociology, psychology, and mathematics (six undergraduate semesters), I would not be able to approach the subject with the same rigor as a graduate student in physics or mathematics.

Yours truly,

*Galen Marburg*

Mr. Galen Marburg

[ans 11/15/62]

TOKYO INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MATHEMATICS  
OH-OKAYAMA, MEGURO-KU  
TOKYO, JAPAN

October 30, 1962

Mrs. Eva-Maria Ritter  
Secretary to Prof. N. Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 39, Mass., U.S.A.

Dear Mrs. Ritter:

I should like to be informed of the present address of Professor Wiener and if possible, of his itinerary. I am thinking of sending him a copy of our translation of the second edition of CYBERNETICS.

If I am not asking you too much, would you give me the reprints of Professor Wiener's papers. And I am anxious to know about Professor and Mrs. Wiener in Europe.

Your reply will be greatly appreciated.

Sincerely yours,

*S. Ikehara*

Shikao Ikehara

[ans 11/15/62]



Rensselaer Polytechnic Institute

TROY, NEW YORK

October 30, 1962

Miss Eva-Maria Ritter  
Secretary to Professor Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts

Dear Miss Ritter:

I had meant to write earlier to thank you for suggesting the plan that Professor Wiener send his autographed book to Professor Ambartsumian. Would you please let me know what are the charges, so that I can make prompt payment.

Cordially yours,

V. L. Parsegian  
Rensselaer Professor

VLP:cg

*sent her 8.*

Prof. Vichar Ambartsumian

President

Academy of Sciences  
of Armenian S.S.R.

October 30, 1962

Dear Mrs. Ritter:

At last we seem to be getting the various affairs in order, before they get any more involved or delayed. I have sent the telephone company \$20.25 with the stub you enclosed. I hope the salary error gets adjusted before another check goes in before the end of October. Please send the new Cybernetics to the man in Poland. I am returning his letter in case you have mislaid his address.

By this <sup>e/</sup>time the international situation seems to have quieted down until the next try by our Russian friends. I hope you have a satisfactory job by this time. Of course, we count on your being with us again for next year, beginning the first of February or a few days earlier, as the situation demands. Our plans for 1964 are not yet fully made and won't be until we are home again. We realize that waiting for us to return has put you at some disadvantage, so we inclose a check for \$100.00 to be counted as an unofficial retainer. I don't think you will mind.

We had a letter from Chuck Robinson from Israel sending a report of work done at Tech. I am glad to he



hear that Mrs. Marcus has joined her husband. She is very attractive but quite a han<sup>d</sup>full.

Did I tell you already that we are booking passage on the Vulcania/<sup>Italian line</sup> leaving Naples January 11, and arriving in New York January 21. We shall probably spend that week in that city and certainly expect to be home by the first of February or before. Will let you know as soon as we ourselves know. The Tempter was sent to Dr. Monnier, wasn't it?

We just spent three days in Ischia, a delightful small island off the gulf of Naples. I like it better than Capri which is beautiful too, but already too touristy. The season was over and the island was not crowded. There were still many German guests.

This about covers all the news. Best wishes.

Margaret Wiener

[ans 11/5/62]



SALON INTERNATIONAL DE L'ELECTRONIQUE, DE L'ENERGIE ATOMIQUE ET DE LA TELE-RADIO-CINEMATOGRAPHIE  
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INTERNATIONALE KONGRESSE UND AUSSTELLUNGEN FUR ELEKTRONIK UND KERNKRAFT



## RASSEGNA INTERNAZIONALE ELETTRONICA, NUCLEARE E TELERADIOCINEMATOGRAFICA

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### RACCOMANDATA

Molto urgente

31 Ottobre 1962

prot.n.X/347 EMR/Bea

Sig.na A.M. MAZZARELLA  
Istituto di Fisica Teorica dell'Università  
Mostra d'Oltremare - Pad. 19  
NAPOLI

Gentile Signorina,

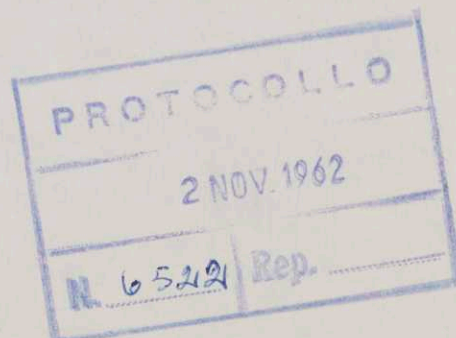
nel rivedere il testo corretto della conferenza che il Prof. Wiener ci ha gentilmente inviato con la sua lettera del 5 corrente ci avvediamo che oltre ad errori di battitura che ci è facile correggere vi sono altresì parole mancanti (indicate dai punti interrogati vi tra parentesi) ed in qualche punto il periodo non è completo (v.pag. 3 e pag.4).

Per non disturbare il Prof. Wiener nuovamente ci permettiamo inviare a Lei il testo in questione con preghiera di volercelo restituire con la massima cortese urgenza essendo il volume già quasi ultimato in tipografia.

Con vivi ringraziamenti e distinti saluti.

Segretario Generale  
(Dr. Sandro Benvenuti)

*Benvenuti*



[am2 11/2/62]

Columbia University in the City of New York | New York 27, N.Y.

DEPARTMENT OF CHEMISTRY

305 HAVEMEYER HALL

October 31, 1962

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

Dear Professor Wiener:

A few years ago we inquired whether you would honor us by presiding at the Phi Lambda Upsilon Speaker-Dinner. Although you were not then able to come, your reply led us to hope that you could do so at some future date. Therefore, we again extend the invitation.

The Speaker-Dinner, which is sponsored by the Gamma Chapter, has for a long time been an annual event in the Chemistry Department and is attended by nearly the entire staff and the graduate student body. Our speakers have mostly been scientists from fields other than chemistry, and have often discussed philosophical implications of their work.

We would like to schedule this event for any Wednesday in March. The time of the dinner is 5:30 P.M. and the lecture is at 8:00. An honorarium of fifty dollars is offered in addition to travel expenses.

It would be an honor and a pleasure for us to hear you.

Most cordially,

*Martin Friedlander*

Martin Friedlander  
Speaker-Dinner Committee  
Gamma Chapter  
Phi Lambda Upsilon

MF:sg

*It just came in -  
have not answered.*

*[ans 11/15/62]*

October 31.

2

Dr. Bernard T. Engel  
Department of Pharmacology - 260  
University of California, School of Medicine  
San Francisco, Cal.  
U. S. A.

Dear Dr. Engel:

I am writing in regard to the lecture which you so kindly invited me to give at the medical center next on May 20-22. I accepted it tentatively, but on further thought I am afraid I must reconsider my acceptance.

As far as I can see the problem of storage of memory has not been solved because memory is not a single phenomenon, but involves many different kinds. This is normally the case in machines using storage of information which generally use storage of many different kinds for long time and short time information. Under the circumstances a detailed account of how human memory works and how the brain stores information can only be given on the basis of a thorough anatomical, physical, and behavioral study. In a living tissue such as the brain there is a continual genesis, and destruction, of cells than probably of synaptic processes. No hypothetical account of this will be of much value unless it is backed up by a great deal of physiological and statistical work. I have not done this work and do not care to give the support of my name to conjectures which may be very easily overthrown. Therefore, while I am very much interested in the matter, I do not see how I can appear as an authoritative speaker.

With best wishes, I remain, sincerely yours,

Norbert Wiener