lea June, 1935



UNIVERSITY OF LONDON, UNIVERSITY COLLEGE

GOWER STREET, LONDON, W.C.I

Telephone : Museum 8101 Reference :

DEPARTMENT OF ZOOLOGY (Entrance by Malet Place, or Gower Street)

Dear Wiener Your letter excited me sufficiently to cause me to exude the subjoined sheet, which is not to be taken seriously. Note that TO METPION means the measurable rather than the near Assoonas V is nearwable nothing is quite nearwable. and common sense becomes necessary. Neither the logician nor the emotionalist need it. I shall be glad to see your MSS, but nefuse to come in as fornt author. If the ideas which we share are any good, they are of sufficiently small wass to be northere particular and should be allowed to utilize us as they see fit, and not conversely. They will therefore beall the better for 2 presentations as different as possible, which may even enable ongone who reads both our wonks to attain a stereoscopic vew of them. I am busier this ever. I have made I discovery which was had for 20 years been too as obvious for anyone to see it,

UNIVERSITY OF LONDON, UNIVERSITY COLLEGE



GOWER STREET, LONDON, W.C.I

Telephone : Museum 8101 Reference :

DEPARTMENT OF ZOOLOGY (Entrance by Malet Place, or Gower Street)

party because generties developed in America where in science you have a faulastic divorce between experiment and theory. Anyone who does both is regarded as an indecest kind of remaphrodite, so I am left with vast amounts of very obvious theoretical work to do. Some of it involves no mathematics whalever. But I have a problem which if I can formulate it mathematically may involve forctions de lines" and not on drang integrals. We suffered less than night be supposed from the jublee, as it was possible to retire into the country. It won't happen again, anyway, for at least 25 years - and perhaps for ever, as I bund at a little difficult to suppose we short have a revolution within that period. For the same reason I wake ropromises at all about rest year. But we shall have a spare noom for you, and possibly for the whole family. So please write in time forme to make morte you resit year. Insmost since JBS Haldone

. Light frequency

UNIVERSITY OF LONDON, UNIVERSITY COLLEGE

COWER STREET LONDON W

GOWER STREET, LONDON, W.C.I Telephone : Museum 8101 Reference : DEPARTMENT OF ZOOLOGY (Entrance by Malet Place, or Gower Street) y='=0 EV= C VTEN= 0 Politics Laws of the Medes Führer, or omnicompetent Most escusting states, IL-S. A. and Persians, Torah democratic meeting of near night - have border, all citizens (Rouseau, (meek citiz stats) thanks to Mr. Hughes Categorical imperative Actual behavior of good new "Love thy neighbor as and women thyself" Judaism Religion Unitionity (mascimum number of self-catradictions) Mumbo-jumbo (no grenen images) (lots of graven mayes) Mag 2, Bossuet etc Historiography Little Anthwishistory of England. The B (Great men and great battles) (escamples of principles) Ordinary guys. Tragedy ?? Racine O'Neill Shakespere Metaphysics Plato Hume Aristotle Schizophrenia Lunacy Cyclothymice

#### MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE, MASSACHUSETTS

Den norbert, -OFFICE OF THE DEAN OF ENGINEERING Thave just received your letter of from 1st, which & will hold confidential and discors with you later, I the middle of angust. The repartment of mattimatic has had and well have cordial support. Phillips is an excellent head, is doing well has sound objectives including the

have som of you daps balance one of on budget, some time We had to tate 38000 and of sherentions mis year ( which Those we som rentor later) I can't hall cablits ont of hats and neether can the Compton; but by & large the worth while this of the Institutes have been mitty week molected. Me may lose men containly. If we were not being railed I would doubt our standing, But I have much satisfaction in Memplest raids that do

#### MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE, MASSACHUSETTS

anything we can to with Justice and reason. I This The one I mentioned alone was donely in mor class, I did not unge the man & stay.) Men this occurs we show to content, for it is a let of whether we tring place the man's hert interesto bond. But these are me. Now your cole of a discrision of mathematice research does not appeal to me. , Chove an inclimation to integrate notes than divide. For one reason the binder on

There are too doggone many things & wong about in the world for this sort of they to be given the emphasio you give it. Erros have been made? Juie, I are made blenty and had to live more them attentioned. you senior members have not been conneted ? The non was an inshlution wet ons of superior of home & Amon or a Johny than this one.

In Compton is ample at herand without grater complexity. If you people in math can't go it as you are In herfeith welling & ty to fund out why - he my whole interession of to heard the 5 that a som note is worked the justification. From The facts on the record I don't think you have a care, and lan distinuted and you thouse three is basis for ertre disablement on fearfor the future.

you me the antatimiting mattenutual good of The coming. I simonly believe it, although not qualified to judge ling direct evaluation. d's sink I third you can exensity that quality of tolerance and loyalty which will enoble you to alunto as a contin a source organization smoothy are effectively. The combination may be too much to speat, but Jeshert it, for Slower The group. 2mg This when is pursone. But

mainterne of our story in masternatione research, and well have my thorough subfat. He hav, as you know, The vision of closer alliance between part of his reht an the enging machemition of the institution and in this I will back this where to no racial production that I save detect prosent anywhere is the adminitiation of this institution, and this includes phillips. Promotoro true zone stowly - certainly - Thromstond the protitute. I'd lake to

not succeed. The last one involved a mon in an eng deft (ason Mos) who was offered a herdalig of dead at about twise salary. He has no appreciable consulting meone. We made no monso and we knoty well repair brow story so while an offer from outjuste is under consideration. He staged. (am not a list afraid that we will be generally raided, because we do not core for our own. Occasionally a man will be tatien from us by an offer of a post that is so outstandy the he surply anot is Lote it - it have s





OFFICE OF THE DEAN OF ENGINEERING

June 1, 1935

Professor Norbert Wiener Meredith, New Hampshire

Dear Professor Wiener:

It is still utterly impossible to tell whether I will be able to fit in a visit to you at your summer farm, and accordingly I am writing you a note in reply to your memorandum, in order that you may have a little more information with which to talk to Ku. I judge that you obtained the reprints from Caldwell, although this is not essential for Ku probably has them anyway. In regard to the algebraic devices nothing has been printed as yet except my mention of the matter at Cambridge last summer, and a semi-popular article. I will see that you get a note on the latter.

I can tell you of some of our costs, and I will be glad to have Ku have them as well, but I wish he would hold them somewhat confidential, disclosing them only to such members of his staff as he needs to consult. The reason for this is that I would not wish to be committed on these costs by their being known to some commercial concern.

The first model of the differential analyzer cost us \$25,000. This included only out-of-pocket expenses, that is salaries and purchases and the like, with no overhead. The overhead cost was probably as much more, but was not segregated. However, this cost included the development as well as the construction. The analyzer at U. of P., which is more extensive and better built, it is true, was built on government money, and I understand that its cost was twice the cost of ours. I think that a reasonably good job could be done under such circumstances as obtained with us when we built our own machine at about \$25,000. However, as you know, we are going ahead with a new design and development. It would not pay anyone to build an analyzer while this is going on, for we may well make improvements that they would wish to adopt. I have an idea that a cinema integraph could be built for about \$5,000 after our instrument is complete and tested, including again only out-of-pocket costs. I would put the algebraic equation machine on just about the same basis. We expect to do the construction of the present one at that figure. This includes, however, only nine equations. If our instrument is successful, as I have no doubt it will be, then anyone building another unit should build a larger one, profiting by our experience. The cost will go up as the square of the number of equations, of course, except that there will be certain economies possible in a larger machine which would hold the matter down somewhat.

I wonder whether it would be possible for the device that Ku would like to have to be built in China? I imagine that they have some machine facilities, and it may be possible that by purchasing some of the essential elements they could go ahead and construct the balance. We would be glad to furnish them with designs as far as we were able to do so, although many of our devices have been built from sketches rather than from finished drawings, as they have been partially designed during construction.

I think I need a little more information as to Ku's plans and resources before I can advise him fully. However, I judge that this is not a program on which speed is essential, and hence it seems to me best that you talk the whole affair over with him before anything is done. In particular I think he ought to plan, not a single instrument, but a program of mechanical analysis, if he is going into the matter at all, and on this you can help him enormously.

I hope very much to see you before you get away, but if not, I will at least have you in mind continually and I wish you and Mrs. Wiener a very pleasant and profitable journey to the Far East.

Very truly yours, V. Bush

VB:C

## CHINA INSTITUTE IN AMERICA Incorporated 119 West 57th Street, New York, N. Y.

Cable Address "Huamei"

Telephone: CIrcle 7-3772

June 3, 1935.

Dear Professor Wiener:

We have just received the following

instructions from President Y. C. Mei, Tsing Hua

University:

"Kindly remit the sum of US \$1,040.00 to Professor Norbert Wiener of the Massachusetts Institute of Technology, Cambridge, Mass., as his and Mrs. Wiener's travelling allowance from America to Peiping."

Enclosed you will please find a check

for \$1,040.00 for which we ask you to kindly return the receipt attached herewith.

Sincerely yours,

Chih Meny

Chih Meng, Associate Director.

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

Encl.

College of Engineering Chulalongkorn Univ. Bangkok, Siam June 4, 1935.

Professor Norbert Wiener Dept. of Mathematics Mass. Inst. of Technology Cambridge, Mass., U. S. A.

Dear Prof. Wiener.

I have your letter of Feb. 12 and want to thank you very much indeed for the two beautiful letters of recommendation you enclosed.

We have just started our new academic year (we start when you finish) and the University has a record year as to number of new students enrolled.

It was interesting to note that you may spend next year in the Orient.

With thanks and kind regards from us both.

Sincerely yours.

Marles Misautiener

CMG:RW

Charles M:son Gewertz.

From Charles M:son Gewertz The Engineering College of Chulalongkorn University Bangkok, Siam

## Professor Norbert Wiener

Dept. of Mathematics

M. I. T.

Ho Put. Blickfelt Cambridge, Mass. Bland Stanford Aniv U. S. A. Palo GOV, Galif.



CABLE ADDRESS: SINOAM

# FRIENDS OF CHINA, INC.

(SINO-AMERICAN SOCIETY)

## 377 COMMONWEALTH AVENUE

Dr.William E. Chenery

BOSTON, MASS.

党称20家团纪纪VMAR26W PRESIDENT Elmer O. Cappers

June 5, 1935.

Professor Norbert Wiener, 76 Cross Street, Belmont, Mass.

My dear Sir:-

At the Annual meeting of the Friends of China, Inc. held May 28th, you were elected a member of the Advisory Committee. This requires no special duties on your part, only your friendly advice when called upon.

I was elected President and hope to bring together a large group of influential people who are interested in the establishment of friendly relations between China and America.

If you have any suggestions for the good of the Society I would welcome them, and if you know of any distinguished Chinese who are coming to Boston please inform me that we may in some way extend the courtesies of the Society to them.

Please reserve November 6th for a reception and banquet to His Excellency Sao-ke Alfred Sze, Ambassador from China to the United States. This promises to be a very interesting event.

WEC JMB

Yours truly, 6 20hong

William E. Chenery , M.D.

P.S. Do not fail to write us a letter or two about conditions in China that we may read them at some of our meetings. FRIENDS OF CHINA, INC. Newly elected Officers May 28, 1935.

-Presidents,

His Excellency Sao-ke Alfred Sze His Excellency T. V. Soong Honorable Frank Chinglun Lee Honorable Judge A. Lee-Fong Honorable Koliang Yih Professor Kiang Kang-Hu

President, 1st Vice-President, 2nd Vice-President, 3rd Vice-President, American Secretary, Chinese Secretary, Treasurer, Dr. William E. Chenery Sir Herbert B. Ames President Edward M. Lewis Rev. William R. Leslie Mr.Gilbert C. Prown, Jr. Mr. Wing T. Goon Mr. Elmer O. Cappers

ADVISORY COMMITTEE

Sir Herbert B. Ames Rev. Raymond Calkins Mrs. Raymond Calkins Mrs. William E. Chenery President John A. Cousens Professor J. Anton DeHaas Dr. D. Brewer Eddy Professor Albert Bushnell Hart Professor Arthur N. Holcombe Dr. George W. Shepherd Dr. Wilfred R. Wilson

Dr. Tehyi Hsieh Professor Manley O. Hudson President Edward M. Lewis President Daniel L. Marsh Rev. George L. Paine President Harry Seymour Ross Judge Emma Fall Schofield Professor Claire E. Turner Professor Norbert Wiener

## 北平國立清華大學

### NATIONAL TSING HUA UNIVERSITY

PEIPING, CHINA

June 6. 1935 Dear Dr. Wiener This is just a short note to ask you to de me another favor. I an having a package sont from New York to meet you at Son Francisco, and I shall be very much oblighed if you will bring it to me. The package contains some inexpension silver tablemare, several pairs of stockings and a few other things. It is addressed to you passenge. SS President Coolidge, Dollar Steamship E, Ban Francisco, Colif Bailing July 12. You may spen the padege and consider the articles as personal effects to word buty. We hope you will have a very pleasant voyage æd en skæl he peraitig for ya herecost but misters \_

Sincerez. Dec

DEPARTMENT OF MATHEMATICS

STANFORD UNIVERSITY, CALIFORNIA

June 11, 1935.

Dear Wiener:

I am very glad that you can Apend a week with us. The 4th July will somewhat interfere; bot only with sightsering, but also with your talks to us I & Rave set you down for two such. The reason being That the roads will so crowded with notor cars on that day-and to a certain extend over the week endy that it will be deardedy impleasant to go Droing; even dangerous. However, if you come out here on the evening of July3, you could spend a quiet 4th here in Valo alto; or in looking over San Francisco. I propose the following takedule: that you arrive in San Francisco hot later than the evening of the 4th; stay here in Polo alto that wight; give your first between

DEPARTMENT OF MATHEMATICS

STANFORD UNIVERSITY, CALIFORNIA

Inday the 5th and your second on Monday July 7. This will give you Fulsday-Wednesdy-Thursday for one or work long drives; say to Big Basin", Santa Cour, etc. We also coant to plan a pie in the kills back of the University. how, as I told you in Washington, we have no money left « after engaging Szego for the summer quarter ) to pay You a direct Ronorarium. But I can at least offer you and your family entire Rospitality skile you are here. This will be faid for mainly by the Uniting So you must not feel that it is entirely up to me personally. Surce I have to guest rooms in my touse, I will be compelled to lodge you at a totet or apartment house in the town; theke I did Professor and Mrs, Brokhoff a year ago. We will have some very gon

2

DEPARTMENT OF MATHEMATICS

3/

STANFORD UNIVERSITY, CALIFORNIA

dinners at my house; I have a really excellent Danish tousekeepes; probably the best in town. For can practice your Danish at that time. I judge from the tellle "Random motion" that the Physicists and Chemists hight be interested ! Kindly inform me beforehand to that I am invite them. Personally, I do not like to drive in San

Someisee, on account of a slight trouble with my heart. and it may be & little late in the day 510:12 P. M.S for me to impress one of our young men to go with me to fetch you in San Francisco. I can probably do so; but if not, it would be perfectly easy for you to engage a taxi after you get off the fory In San Francisco, to take you to "Third and Townsend" street staten for a train to Palo atto. One leaves at

DEPARTMENT OF MATHEMATICS

ef/

STANFORD UNIVERSITY, CALIFORNIA 10:45; you will have plenty of time. I would the be at the Palo alto Station at 11:39 to meet you. you let me know, as soon as you know definitely, on what day you will arrive in San Francisco; also where I can reach you by letter or telegram, for Definite instruction as to your arrival. - of I an possibly, I will meet you at the ferry in San Francisco. With kindest greetings I am, Sincerely yours,

A.F. Bhalfeldt.



OFFICE OF THE DEAN OF ENGINEERING

June 12, 1935

Professor Norbert Wiener Meredith New Hampshire

Dear Professor Wiener:

After talking with you on the telephone the other night, I discussed the subject of your Chinese visit with Dr. Compton, particularly in regard to the situation in North China and the possibility that this might affect your plans. In order to get the best possible information on this situation we finally wrote to the Secretary of the National Academy in Washington, Dr. Barrows, and asked him to get certain information for us. Dr. Barrows has done this very promptly and thoroughly, and I now have his reply and wired you this morning as follows:

> "INQUIRY INDICATES SAFE TO PROCEED AS PLANNED. WRITING TODAY."

Dr. Barrows went over to the State Department and talked with some of the men in the office of Eastern Affairs. He got in contact with one gentleman particularly who has had long experience in China and whose particular assignment is to keep thoroughly in touch with the situation there. Dr. Compton and I felt that this personal contact would be much more effective than any formal inquiry.

The definite opinion forwarded back by Dr. Barrows is that there are no conditions among present developments which would indicate that you should change your plans for accepting the post as Visiting Professor at Tsing Hua, leaving about July first.

The present activities on the part of Japan involve primarily insistence that Chinese officials in the vicinity of Peiping and Tientsin be changed in personnel to include individuals who would be favorably disposed toward the Japanese; that the troops holding allegiance to the Nanking government be drawn to the south; and that other troops from the Shansi Province to the west be moved into Hopeh Province, as these are entirely acceptable to the Japanese. With this shift and readjustment which now appears to be well toward consummation, there will probably be no further disturbance for some time. Of course if the student body at Tsing Hua university should make a demonstration against the Japanese it might entirely alter the situation for you, but it is thought that it is not probable that a student uprising of that sort will occur.

I also obtained a considerable amount of information concerning the finances of Tsing Hua, and the way in which it is maintained. Apparently its funds will in no way be affected and it has sufficient endowment to carry on its affairs properly.

We never can be sure in any such matter as this of course, and a trip to the far east is bound to be something of an adventure even in the most favorable times. As far as you and your family personally are concerned, I can see no danger whatever. You are a distinguished foreign visitor and would be treated with great respect by the Japanese should you come in contact with them in any connection. In fact as you know, the title of professor carries more weight in Japan than practically any other. Moreover I think it is very unlikely indeed that any disturbance will take place at the present time, for the Japanese seem to have gotten what they want and I hence feel personally that they will be willing to pause a while before making any further move.

I think it is highly desirable that you should make a firm resolution before starting not to express any political opinions while in the East, in any way where you might

possibly be quoted. It would be very serious if the papers were to carry in the East the results of an interview with you which indicated any particular political slant, especially as it would probably be distorted. I would hence make it a point to be interested in scientific matters only, and to indicate a complete lack of interest on all political matters whenever you make contacts. This may be a little difficult to combine with your complete frankness, but I think it is a good policy and those in the East will appreciate and respect complete reticence of this sort when you are on a scientific mission. With this caution, which is undoubtedly unnecessary, as you have already had it in mind undoubtedly, I see no reason why you should not go ahead confidently as planned.

With best wishes for a very pleasant year,

Very cordially yours,

VB.E

June 12, 1935

Professor Norbert Wiener Meredith New Hampshire

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With best wishes for a very pleasant year,

Very cordially yours,

V. Bush

VB.E

Judai, June 17, 1935 Interned Colleague : Two months ago I heard & your intensin & wish our country from Mr. Skehava, and was anxious that you could not come to Sendai by lock of times. Now according your letty to Mr. Izami, we , members of the marti, Institude I Sendar's are very plad to have Aportunity to welcome Jore. We esteen your works, so original and fic turesque, very highly, and some of your wathenaticians in our 東北帝國大學 Institule work under your indirect influence. Your visit I Sendai will stimulate us very much. Altrough the Jumme vacation begins with the end July almost all of us, includy les. Juni, will remain here and will wait the pleasant moment to meet you, Jours very truly M. tuji wara Tokika University Sendar, Japan

## STARR AND STARR

ATTORNEYS & COUNSELORS MICHIGAN TRUST BUILDING GRAND RAPIDS, MICHIGAN

RAYMOND W. STARR JAMES A. STARR

THEODORE P. RYAN

July 8, 1935

Mr. Robert Wiener, Ph. D. c/o Tsing Hua University Pieping, China

Dear Doctor:

You will recall our pleasant interview on the Michigan Central train going into Chicago Sunday, June 30th.

I write this brief note so that you may have a word from the States when you arrive in Pieping. I know you will have a most pleasant year in connection with your work at the University there and I trust that good health and good luck attend you. On your return I shall be intensely interested in your reactions to the social, economic and racial problems of the far East.

My kindest regards and best wishes to you and your family, and trust that I may hear from you.

very truly,

RWS:HW



Institute of International Education, Inc. Two West Forty-fifth Street New York City

July 9, 1935.

Dean Roland G. D. Richardson Graduate School Brown University Providence, Rhode Island

My dear Dean Richardson:

I do not know whether you are aware that the Emergency Committee in Aid of Displaced German Scholars has voted the sum of \$2,500 to the Institute for the purpose of arranging extramural lectures for Professor Otto Szasz, formerly of the University of Frankfurt, who during the past year was a visiting professor in the Department of Mathematics at the Massachusetts Institute of Technology. It is proposed to notify the universities and some of the more important colleges in the East of this opportunity to invite Professor Szasz during the first semester, the length of the visit to be left to the option of the individual institution. His services are to be given free of charge except that hospitality is to offered him during his stay.

Before leaving for Europe, Mr. Murrow suggested that I write to you for advice as to the colleges and universities that should be addressed regarding this opportunity. President Compton of M. I. T. writes that Professor Szasz speaks English very well, has an exceedingly pleasant and friendly personality and has been distinctly successful as a lecturer in Mathematics, expecially in dealing with advanced students. I take it from this description of Professor Szasz that we should approach only those institutions having advanced students in Mathematics.

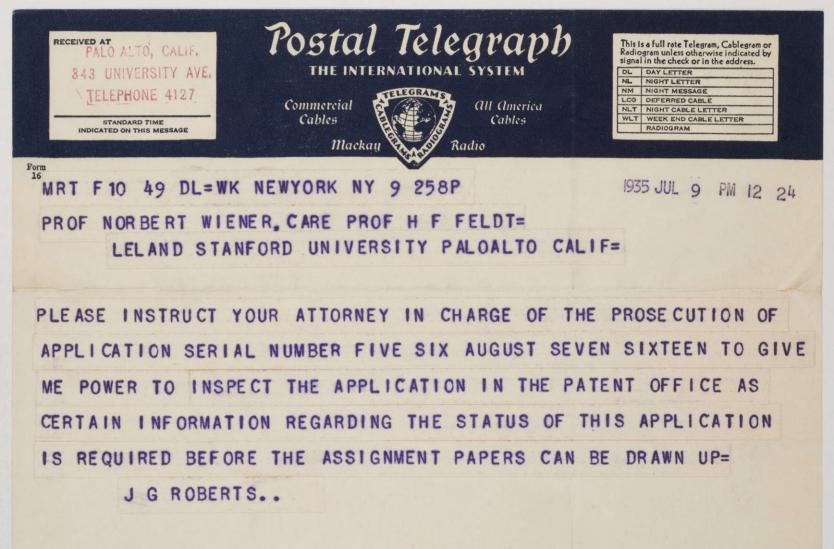
I realize this is vacation time and I do not wish to put you to any special inconvenience. I am therefore enclosing a list of colleges and universities in the East, with the name of the head of the Mathematics Department, as we have them on our mailing list. Would you be good enough to check the institutions which you think might have students sufficiently advanced to enjoy lectures by Professor Szasz? Your assistance in this matter will be very much appreciated. I expect to write to the heads Dean Richardson -2-

. 4

of the Mathematics Departments in the various colleges during the summer in the hopes that I may hear from some of them so that Professor Szasz can begin his lectures the first of October.

Sincerely yours,

(signed) Mary L. Waite Executive Secretary



Telephone Your Telegrams to Postal Telegraph

AMERICAN MATHEMATICAL SOCIETY 501 WEST 116TH STREET NEW YORK CITY

July 24, 1935

Professor Norbert Wiener. Leland Stanford University, Stanford University, California.

My dear Wiener:

I have your letter of July 12 with which you return the paper by J. Geronimus entitled

ON SOME QUADRATURE FORULAE ...

I am glad to know that you feel this paper is first class and that I ought to accept it. I am, therefore, doing so, and I am notifying the author immediately.

Ordinarily I send proof of a paper to the referee and I should like to send proof of this to you, but I presume you will be on your way to China before then. If you care to have me do so and if you will give me your address in China, I shall have the proof sent to you without any expectation that you will return it to me. In any case, I should like to know your Chinese address, if you yourself know it by this time.

With my regards and with my hope that your experience in China will be pleasant, I remain,

Cordially yours,

E. R. HEDRICK

ERH:EH

Personal add. 43 Humizonotyos, nakano, Tokyo, Jul 28, 1935. Dear Dr. N. Wayner, Thave come to see your worthy name on today's "asahi," and beg to say we are just going to have the annal meeting of the mathematical Doces. Practical every mathematician in Japan is a member, of whom some 800 will attend this meeting. It would be very nice of we are honomed by your presence. The meeting is to be held at the First middle (High) Rehool of Totajo Prefecture. Would you be good enough ring me up 40 2408 Kingar 40 Phone 2408 Singa, the school, Monday or Tuesday? Rincerel, Stirano

-2-T/S I am almost sure that you are welcome by unanimous vote, get Lam not so far authorized & invite 200. As soon as there a reply from you I shall make haste to get such anthouzation. at any rate I should litre & have a nice talk at the Hotil or somewhere else as Lam a mathematician proficient in English. A

36 Florence Avenue Revere, Massachusetts

August 17, 1935

Dear Professor Wiener:

Please excuse my long delay in writing. The first few weeks after you left I spent on mathematics with results of a negative nature about which I'll tell you. Then my father came down with a severe attack of kidney stones and infection so that I let everything drop and was concerned only about him. Fortunately he was discharged from the hopital yesterday and it seems that his kidneys have not been permanently injured. If all goes well he will be back at work in about two weeks.

I saw Sumner Myers a couple of days ago. He is a student of Morse and has been at Princeton this past year as an N.R.F. and will be there again this coming year. He gave me some information about living conditions at Princeton. It sounds like a nice place. I suppose the best thing for me to do is forget about the Jewish situation and buckle down to work, but it isn't so easy. Sammy has given me an inkling of the battle you had on your hands this past year. It certainly must have been a rotten experience for you. After Myers told me that there are only six N.R.F.'s for next year and after Sammy told me what went on at Tech, I begin to appreciate how much trouble you went to, to get something for me. It seems that the difference between a gentile professor and a gentile hooligan is not always what it should be.

Do you know that the profs over at the E.E. department are gite enthused about Hitler? They sort of wave aside the Jewish question, the freedom of thought question, in fact everything that an enlightened person should hold as inviolate, and praise Hitler for organising a united Germany. It certainly is disgusting and disappointing, to say the least. Thank heavens I met Hardy to sustain my faith in the educated man. It's a loony world but we haven't much choice.

To get back to mathematics, you remember that the condition  $\int_{\infty}^{\infty} \frac{dx}{1+x^2} \log^+ \left| f(x) \right|^{\infty} \text{ in connection with entire functions of}$ exponential type implies  $\lim_{x \to \infty} \frac{dx}{2}$  exists. As regards this condition, I have proved that for an even function with real zeros  $\lim_{x \to \infty} \frac{dx}{2} + \lim_{x \to \infty} \frac{dx}{1+x^2} \log^+ \left| \int_{\infty}^{\infty} \frac{dx}{1+x^2} \log$  that  $\log \frac{1}{n} |f(w)| = o(x)$  does not imply  $\frac{1}{n} |\phi| \Rightarrow A$ . Also that  $\int_{-\infty}^{\infty} \frac{dx}{tt_{XL}} \log \frac{1}{h} |f(w)| = o(x)$  does not imply  $\sum (\frac{n}{\lambda_{N}} - A)_{N}^{\perp} \Rightarrow$  limit. All these results show that any good necessary and sufficient condition for the closure of  $\frac{1}{2} e^{i(\lambda_{N} \times 3)}$  will be hard to find. I can show that there is a one-to-one relation between

$$\sum \left(\frac{n}{\lambda_n} - A\right) \frac{1}{n} \rightarrow \qquad \text{limit}$$

and

$$\int_{B}^{B} \log |\beta(x)| \frac{\log |x|}{1-x^2} dx \rightarrow \lim_{a \to B \to 0}$$

This last can probably be worked up into a paper that will be a sort of sequel to a theorem of Paley and yourself. I'm beginning to think about random functions again after a long lay-off. I feel a little more at home with them and maybe before the year is up I'll be able to do something with them.

I've been reading some algebra and some tuff on the zeta function. I also read a lot on tatistics and probability this summer.

Sammy's E.R.A. job isnow full time. He tells me Littauer has a \$2800 per year job as instructor at the Naval Academy.

I've just received the picture post card that Ikky and you sent me. Cryptomeria Road looks very impressive. Ikky certainly seems glad to have you. You must be having a great time. China must be a virgin country as far as industrial development goes. What a paradise for an engineer! The Sino-Japanese ituation is sort Apushed off the map here by the Ethiopian crisis and the German domestic

FN. Levinson7

-2-

anguet 23, 1935

Dear hof. Wiener, This morning I received your kind letter with a pleakant news of Pliping. While you were is my country, it was so hold and damp, but the day after you left it rained very theanly and "it toold off telow 80". I and now it is relitening to a pleasant. dry summer. My mative summer was so hot and so un comfortable that I found it hand to bean. In spite I the stremma achedule in Japan you Wisited Sendar so oblignyly Petple of Sendai whe deeply impressed by your visit, and they will prove Hait ful follow enes of you as wer. Vent time you are in my country I hope that I shall be in a position where I can centertain you to my hearts bontents. your manuscript on "American Secondary School mathematics" is now in printing hand, and is will be published inthis a few months.

I am glad to know that you all have started your Chinese life under happy conditions I wonder whether Ama Whenk will give me a letter written in Chines some or later. Barbana and Peggy must be teaching parenta Chinese now. While you are 20 near be shall impose on your good nature and generosity. Will you convey my best inches to Lee? shall be happy tot possess a topy . Again I thanks you for your this here and send your family my best regarde. Prof. Sgasg wrote me that he would deliver lecture at ranons minutes during the first remater. Sincerely yours,

S. Steehana

P.S. Mr. T. Hirano sent me the inclosed photograph with his thanks for your lecture. Anz. Frijishiro alzo sent me two photographs taken at her home while we were in Sendar. By this time you must have received them directly from ter. all the children append enjoying bathing sints on the foreign boil. you see, Frijschive ; children are also schanger in Tokyo.

北平國立清華大學 NATIONAL TSING HUA UNIVERSITY PEIPING. CHINA September 1, 1935.

Note: Original can be found in AC 103 (M.I.T. Faculty and Academic Records Office), Box 38

Dear Bush:

So far my trip has been an intire success. They treated us royally at Stanford, where I gave two lectures. They put us up at their expense in the best appartment hotel in town, gave us lots of picnics, and we enjoyed ourselves thoroughly. Szegð was there for the summer, and our two families had a particularly good time together. The talk at the MIT club in 'Frisco came off well. I talked chiefly on the computing machine program, as I did also in Hawaii. Fields of Hawaiian Electric took us round the east half of Oahu. Hawaii is certainly a delightful spot.

The boat trip was agreeable -- good food and good company. Ikehara met us at Yokohama. He is now Lecturer at the new Imperial University of Osaka, and is finding a much better reception than he expected. He was exampted from military service because of his rather frail physique. His general health is however quite good enough. He has made himself respected in mathematical circles -- Carleman uses his theorem heavily in a recent paper at the Scandinavian math. congress-- and is in line for the new chair of applied mathematics to be established at Osaka. This pays wretchedly by our standards, but fairly adequately by Japanese. My trip helped Ikehara's prestige a good deal.

We put up in the Imperial Hotel in Tokyo. The first night the MIT club gave a dinner in grand style. I trotted out the same old spiel. The company was very pleasant --Mitsui himself gave the party at the Mitaui Club -- and afterwards we were treated to an exhibition of impromptu water-color painting. I learned that MIT has trained a g very large percent of the higher engineer officers of the Japanese navy. Goto and Nabeshima were among the officers there. Young Minami was there too. He is finding himself so American that he is not having an easy time to get readjusted.

an 2 wa

While Marguerite and I were at the party, Ikehara saw to it that a Japanese lady whom he knew in Boston and here little girl were staying with the children. The lady and girl turned out to be acquaintances of ours, and the little girl, Motoko Fujishiro, had been to kindergarten with my children. She is very American, and the kids had a good time.

The next day I dined with the Tokyo math. department. The head, Takagi, is the best mathematician in Japan, and a thorough old crab. He only appoints middle aged men to his department. He was not too friendly to me, and I later learned that he was jealous of a big writeup I had got in the newspapers through no fault of mine. That evening Ikehara and I went on to Sendai. Several of their young men are working right down my alley -- Izumi ( who looks like a young Frenchman) and Takahashi in particular. Fujiwara, the head of the department, and the whole department, gave me a wonderful time. We went to a most beautiful seaside resort, and then back by motor boat along an unbelievably picturesque coast. After resting in a Japanese hotel, I gave a talk on Taubemian theorems. They then took me into the faculty room, propped upa blackboard on the table, and shot questions at me. I am impressed with the calibre of the youngsters, and their seniors' solcitude for them. Then we had a banquet. That evening we returned to Tokyo.

While we were away, "arguerite and the children had been taken by Minami to Mamakura, and had visited Mrs. Fujishiro at home. The next day we rested. The following day I gave a talk on mathematics in American secondary schools to a convention of secondary school teachers. T am afraid I spilled a lot of beans, but our secondary schools rate a good panning. The next day we went on to Nikko -- beautiful scenery and temples. Then back to Osaka, where we went through the same routine of a lacture at the university, a talk to the M.I.T. club, and various visits. Shimidzu, held of the math. department, is a good man and a good friend of Tkehara. He brought his young the department our hotel to talk with me, and I was able to help them considerably. One of them has independently mediscovered my theory of random motion, and I was able to get him in touch with the subject. I think we should make a definite effort to encourage the young Japanese mathematicians to come to MIT to study.

Osaka has a good man in filter theory. I was surprised to see how much they were interested in this.

We went up to Kyoto, and saw some marvellous palaces and gardens. Exchara and his mother saw us off at Kobe. I's father died since his son's return, but had the satisfaction of seeing his son well launched in a career. I. feels that he returned to Japan at just the right moment. His work is in a field now popular, and the Japanese estimate of American mathematical work is very favorable. I. is a man of very fine feelings and character, and will do us much credit. He has improved greatly since his return, and is much morë sure of himself.

We sailed from Kobe to Tangku on a japanese steamer. Food most uninteresting. We met some nice **MAME** English residents of Peiping on the boat. On our arrival at Tangku, a potter from the North China Travel Service was there with a ketter from Lee, and attended to us. Lee and Pi, the business manager of the college, were down on the next train, and saw us safely into Peiping and Tsing Hua. Lee was eager for work as ever, and was full of suggestions as to what problems to attack next. He is interested in the problem of a many output filter for terminating lines of the concentric, large frequency range type.

Our cook was already hired on our arrival, but Mr. and Mrs. Lee

had us over to dinner the first evening. Mrs. Lee is a Canadian girl of English ancestry. There is another mixed couple in this compound -the Ni family. They are Cornell people, and he is second in command to Koo in EE. The Ni children are not far from ours in age, and play with them all the time. We ourselves have as much social life as we can take care of, and when it isn't anything else, we have an evening of bridge with the Lees.

- 4 ....

Our house is of Western type: study, living room, dining room, two bedrooms, sewing room, bathroom, kitchen, unshaded porch, servants: quarters. We got it furnished -- the owners of the furniture are on leave. We have a man cook, a boy who is butler plus porter plus laundryman, an amah -- seampstress and nurserymaid combined -- and shall soom acquire a rickshaw coolie to take the children to school and act as gardaner. We eat well and live well on no great expense. We are out in the country, and have nothing to disturb us except -- they racket of the *si* cleades, the agonized braying of the donkeys, the howl of the pariah dogs (wonks is the local Chinese-English term), and the wailing of the numerous babies of our neighbors.

Politically, nobody expects trouble for at least one year, and a possibly several. The long-time situation does not look so favorable, & but the school has made preparations to weather it. A lot may depend on the European situation, which is none too sweet at present. I cannot think, however, that even dictators are so mad as to embark on another another world war.

The faculty here is thoroughly westernized. There is much lass formality than in Japan. Hiong, head of the Math. department, is French A trained, and a thorough Frenchman. I shall be able to work with the crowd. They have a lot of good young men who are already publishing. Some of the men dress western, some in the long blue gown. The ladies wear gowns of in unbelievable tightness, slit up at the sides. Some of the European tadies here copy the Chinese mode for the evening. The Chinese Tadies are <u>supposed</u> not to have their gowns slit more than nine inches from the ground, they are <u>supposed</u> not to wear ankle socks, they are <u>supposed</u> not to have bobbed hair loose if it reaches below their ears, and not to wave their hair -- but then, we were <u>supposed</u> to have prohibition.

My wife and I start on Chinese tomorrow. Actually, I have already some thirty odd characters, and can direct a rickshaw coolie by the points of the compass, as is the Morth Chinese custom. Our boy speaks English, and my wife communicates with the amah by signs.

I have one version of my philosophical paper done, and am starting on another. I have all the materials for a note on filter theory, and have a mathematical paper all done but the writing. Another paper has considerable work done on it already, but there is a big gap which awaits filling in. It is one of those points that Paley and I had a lot of trouble with, and even without it, the paper is far from empty, but it is an insult to my intelligence not to know the answer. I am working like a horse, and expect a profitable year.

Lee is as helpful and as wise as ever. He has accompanied us on our many shopping trips into town. Mrs. Lee -- she is just recovering from an operation -- is a woman of his own quiet temperament, and in *fg* spite of the racial difference, they are obviously very congenial.

The mathematics people have given us one Chinese banquet. The food was delicious. Both here and in Japan I have manipulated the chopsticks with adequate skill -- better, they tell me, than Ikehara, who has unlearned the art by virtue of his long residence abroad, and uses the rather primitive technique of a schoolchild.

Gossip in Peiping is a fine art. It is a place where any European

-5-

floater can make a decent living, and in addition to the real people of value, it seems to abound in vemittance men, people with pasts, and general inefficients. With the continual contact and exchange of servants, you have an ideal culture medium for gossip. Add to this the easy life and the abundant time, together with the attitude of the Chinese, who will tolerate any lapse in a Westerner.

Two of my colleagues have already broached the question of a longer stay for me here than one year. I have already put the situation before them: the unusually generous treatment I have received from MIT, the many years I have previously been absent from the school, and the need that each generation of graduate students should have the possibility of working with me. I have said that another year's absence is out of the question. I have said that if, after having me here one year, they wish to have me again on some future occasion, they can take the matter up at MIT directly, and if the reaction is favorable there, I might be interested, but I have given them to understand that the financial arrangements on MIT's part are special for this year, and that they cannot expect a repetition. So far it has only been a matter of feelers, but I think it my duty to tell you how matters stand.

President Mei is a delightful person. He has lived a good deal in the States. He comes from Tientsin, and has the somewhat greater size of the northerner. He has a fine presence and voice. Everybody here likes him.

I hope Professor Jackson lets me know when he is coming. Everybody is anticipating his visit so much.

I have so much to say, and so many people to whom I have promised to say it, that unless I put the brakes on, I shall be spending my entire visit in letter writing. Will you please circulate this letter, or at least such parts of it as are considered fit for the general eye, emong my friends at MIT?

Bafore I forget it, they are intending to follow your advice, and make a determinant machine here. Everything waits until Koo's return from 2644 Nanking. Also, will you let Vallarta know that they are ready and eager to cooperate with his cosmic ray program by taking observations, as soon as they know what the details are, and if possible, have the apparatus sent.

m 7 =

Please let me know the MIT dirt, the state of the country, etc. How is Old Man Depression?

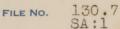
Best wishes to Mrs. Bush, President Compton, Phillips, etc. etc. I am delighted the way the Szasz business has come out.

Sincerely,

法法规管理 化加速电理

Norbert Wiener

IN REPLY REFER TO





AMERICAN CONSULAR SERVICE

American Consulate General, Tientsin, China, September 3, 1935.

DEPARTMENT OF STATE

Memorandum

For Mr. Norbert Wiener, National Tsinghua University, Peiping.

Your application for registration has been approved and will be valid for two years from this date.

You are requested to notify the Consulate General concerning changes of address, marital or family status, or other material facts set forth in your present application. You are particularly requested to notify this office in the event that you remove from the Tientsin Consular District.

Your passport is returned herewith.

Enclosure: Passport No. 188559 issued by Department on May 9, 1935.

BY REGISTERED MAIL.

President FRANÇOIS DIVISIA L'École Polytechnique Paris, France

Uice-President Joseph A. Schumpeter Harvard University Cambridge, Mass., U. S. A.

Secretary CHARLES F. ROOS Colorado College Colorado Springs, U.S.A.

Greasurer ALFRED COWLES 3RD Cowles Commission Colorado Springs, U.S.A.

Editor of Econometrica RAGNAR FRISCH University of Norway Oslo, Norway

## THE ECONOMETRIC SOCIETY

An International Society for the Advancement of Economic Theory in its Relation to Statistics and Mathematics

September 5, 1935

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Dear Professor Wiener:

During the past year several notices have been sent to you at the above address, inclosing bills for \$6.00, representing annual dues to the Econometric Society for the fiscal year September 30, 1934, to September 30, 1935. According to our records you formerly indicated your acceptance of membership in the Society and we have since received from you no notice of resignation. The quarterly journal, Econometrica, has been sent to you regularly during the past year.

It will be necessary in the next few weeks to prepare an annual report of the finances of the Society and I should therefore greatly appreciate payment of your dues at this time. If for any reason you are unable to pay now, will you please communicate with me in any case, in order that I may have a check as to the correctness of your address.

Very truly yours,

alfred Cowles 3rd

Treasurer

AC:GD

### AMERICAN MATHEMATICAL SOCIETY 501 WEST 116TH STREET NEW YORK CITY

September 17, 1935

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

Dear Professor Wiener:

I take pleasure in informing you that at the meeting of the Council in Chicago you were nominated as Vice-President for the years 1936-1937. The ballot is being prepared and I shall take it for granted, unless I hear from you, that you are ready to serve the Society in this capacity.

You are closely enough in touch with the Society's affairs to know that we shall need the very best of our abilities and energies to keep its affairs moving along and on the upward path. I look forward with great pleasure to being associated with you in your new capacity.

I have the honor to be

Sincerely yours,

25 Stillordom

R.G.D. Richardson, Secretary.

Sept. 18. 1935 Dear Prit. Wiener, With much thanks I have just received the copy of Zigmund's book, this will always remind med my pleraant memoired of your this here. Some time ago I sent you photographe taken at yokohama and as Ans. Fujishiro's. I did the proof reading I your article on the "Education" inthe and of my colleague. I am not yet able to ameet Carleman's work with Bickhoffs ergodic theorem. We are studying Random Thinkins in our department with interest and also with difficulty I hope that you are finding you work in Perping interesting, and that your family is comfortal settled Again I thank yo much for your generous gift Sharely your Shikao Akehma

Note: Original can be found in AC 103 (M.I.T. Faculty and Academic Records Office), Box 38

北平國立清華大學 NATIONAL TSING HUA UNIVERSITY PEIPING. CHINA September 22, 1935.

Dear Bush:

This is not a newsy letter, since I pumped myself dry of news last time, and nothing much has happened to affect the even tenor of our existence. The children are settled at school, and we are having as much easy social life as is good for us. We much prefer the healthy easy life of the campus to probing the depths of Peiping European society. Good Americans may go to Paris when they die, but I now know where bad Americans (and Europeans) go while they are still alive.

I have finished three mathematical papers and one philosophical one. I enclose a set up of an electrical simulaaneous equation machine. Its only parts are resistances, voltmeters, potentiometers, and sources of waltage. Of course the voltmeters must be of high resistance, but they may be vacuum tube instruments. Half the voltmeters are merely null-point instruments, and on AC may be telephone receivers. By using vacuum tubes, the resistance of the voltmeters (Not we want J. W.) may be made substantially infinite. There is a little bit of juggling in the adjustment of the set, but I have figured out mathematically that the convergence of the process of successive approximation involved is rapid. The apparatus should be reasonably cheap and very accurate. We are going to build an experimental model here from standard resistance bones, etc., and if it doesn's show any bugs, we shall go out after a really useful seven or ten line instrument. Can you see any hole? Is the gadget worth patenting? It might have a lot of engineering uses, and a ten- equation set shouldn't cost very many thousand dollars, for tenth-of-a-percent accuracy.

Now as to your paper: I think it is hot stuff. If I were you, I should emphasize the mathematical researches connected with the study of just how a back-coupled instrument works. For example, the mechanics of the tape determinant instrument is not at all clear to me. The end result is OK, but the study of forces , and of the dynamics of the gadget in coming to equilibrium, needs a lot of study. In many cases the detailed study of just how a machine solves problems, dynamically as well as statically, and a consideration of matters of stability, will throw a great deal of light on purely mathematical questions. Conversely, it is not a trivial question to ask how a machine for solving differential equations must behave as we approach singular points. I can think of many first-rate pure mathematical doctor's theses which consist in a mathematical analysis of some phase of the machine's operation. The very interesting Gibbs' phenomenon of Fourier series was first discovered by observing the behavior of a harmonic synthesizer. I have checked up a few slips of the typewriter. The paper reads

an 2 m

well, and as you know, the vigor of your style is a great asset. I should not advise you to strive for a greater conventionality of treatment. I think you should emphasise very strongly the fact that much more is known of the statics of computing machines than of their dynamics, and should throw problems of this sort out to themathematicians.

Lee has read your article with much interest. Koo also wants to be remembered to you.

Norbert Ilivier

Sincerely,

BELL TELEPHONE LABORATORIES

463 WEST STREET NEW YORK

CHELSEA 3-1000

J.G. ROBERTS GENERAL PATENT ATTORNEY SEP 26 1935

PROF. NORBERT WIENER c/o Prof. Yuk Wing Lee Tsing Hua University Peiping, China

Dear Dr. Wiener:

The purchase of the inventions relating to electrical network systems made by you and Dr. Lee has been approved by the American Telephone and Telegraph Company. The total price, as agreed, is \$5,000, payable \$2,500 to you and \$2,500 to Dr. Lee. As stated in my telephone conversation with you at Palo Alto before you sailed for the Orient, this sum will be paid upon execution of the assignment of United States patent application Serial No. 560,716 filed September 2, 1931 and one or more additional United States applications which are now in course of preparation and which will be filed shortly, subject only to a non-exclusive, non-transferable license already granted to United Research Corporation.

I have sent this assignment to Mr. J. E. Pickard, Manager of the Western Electric Company of Asia, located at 142 Museum Road, Shanghai, China, who will arrange for its execution by you and Dr. Lee, and an acknowledgment thereof before a United States consular agent at Peiping. Mr. Pickard will either take care of this matter on one of his frequent inspection trips in the Peiping territory, or will arrange to have the transaction handled entirely by the United States consular office in Peiping, and you should hear from Mr. Pickard or the consular office in the near future. The checks, one for \$2,500 made out to you and one for \$2,500 made out to Dr. Lee, will be delivered upon the execution of the assignment. Prof. Norbert Wiener - 2

You requested that your check be deposited to your account at the Cambridge Trust Company, Cambridge, Mass., but it appears simpler to hand the check to you and you, of course, can transmit it to Cambridge if you so desire.

I hope the procedure outlined above for handling this matter will be entirely satisfactory to you and Dr. Lee, and I wish to express, on behalf of the Bell System, my appreciation of the cooperation you have shown throughout the entire transaction.

Yours very truly,

here berto

General Patent Attorney

RTH: JC-1

## A HAROLD F. WILHELM 120 BROADWAY New York

Sept 28th [ca1935]

bran Mienen :-I have not written to you jet about your summer home - I am very song as I may have caused you ome in convening. When I rold my last let of marine Baucoprate stock I gab so little for it that doing nothing a whole winter is now out of The question. A bud a long interesis with the J.E. people on my work. They know more about The public The I thought They did met Thur attack is is inorthedox and Their formulas so feculias that I am me They cannot be right in detail and in The limit in various directions. They have had a certain anout of aperimentat check, however. It will he possible for me to make a definite advitution to the subject, however.

There is one possibility that I may get multing here at Columbia \$600-\$700 for correcting fapers. I have written to Buch at the last menent as I rather be al M. J. T. of come. Jan doubtless had a twely time in Suitzuland! Remember me kindly to hur Wiener. 1 mm 1. Jely att dag zu . Q.S. Things are an awful head-ache het do y- Think it is going to be durine? I am beginning to Third, not - but that may be wishful Thinking . Remember me to Dang lus, Wildes, Phillips, Ichin burgin " Parks! with,

### COLLÈGE de france

4 Octobre Paris, le

1935

Dear Professor Wiener

My best thanks for your kind letter.

I am most happy to think that Mrs.Hadamard and I shall meet you and become that acquainted with Mrs.Wiener.

Of course, I am also most pleased to hear

of the complete safety at Payping, and I am most have thankful to Professor Hiong and you to informed me of that.Indeed, when I saw Mr.Yang, I was reading, in the newspaper, of accidents experienced by travellers in China - probably exaggereted stories Now, your letter gives me a complete

security in that line and I am settling every -

thing for my departure . Letus hope that each to of us has not reakon with the general uneasiness over the whole world, which is a too real fact .

Kindly transmit my best remembrances to Professor Hiong .Tinking most agreeably of the pleasure to see you booth very soon, in I beg you to believe me

Yours sincerely

MAndamant

EDITORIAL COMMITTEE:

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## BULLETIN OF THE American Mathematical Society

BUSINESS ADDRESS: 531 WEST 116TH STREET. NEW YORK, N. Y. EDITORIAL ADDRESS: UNIV. OF CALIF. AT L. A., LOS ANGELES, CALIF. ASSOCIATE EDITORS:

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YALE UNIVERSITY NEW HAVEN, CONNECTICUT

October 23, 1935.

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

My dear Wiener:

Our supply of review material for the Bulletin is somewhat low at the present time and I am wondering if it will be convenient for you to send a review before long of the book by Hardy, Littlewood and Polya.

Sincerely yours,

W, R. Loongley

L:W

04,26,1935

FACULTY CLUB HARVARD UNIVERSITY CAMBRIDGE, MASS.

Dear Wiener; you very kind pot cards reached me and were greatly apprecated by both Mrs. Bukloff and myself. May cladd alos that We are missing your personal presence at the Colleguin mostup. de au myney specially. We are glad that Douglos is back, and Walsh. In you abrene I have ushal I truck to take change of the Machsetzungen, I ha fuet me meste at our faculty lat reptweek I hunday. Chillender will speak to us. He is run neft Collegian speaker and is in haming in Princeton for the purpose. Her needest just

three to couse of the M. G. repulsions. Secondly, it is provide that Morshall Store might go to the East ( Perping in particular) during nept year. He has a ball year of 20Hotical learne at Jule for for the half year coming to him, and mes prototly take the second half of reft year. He might even get an additional balgyens lever of absence of no pay. I have any alluclens pricklig at Parting? He would tragent stimules ad brould enjoyegoing if it cald to made financial feasible, I have written O 2good heafly on the same topic With Endertregards and at with bound great great of the collegues there, Crainer Jerse to Birkhold

about as much as a prize fighter who has been for tending for ten years needs training toget back into jon. Perhaps to will do fatter than allegreed! I have are time wallers in my mind, Furt, Not. Grad, tallets came today ( peliminary tallet), I ree just two candidates when I bour gest for: Walsh and Drylas. (It's accidental that they are Cantidge man, entirely en) claffe it to vote ja then to the end, and I felieve you will do the same

from what you said. But I from what you said. But I year that somehow a title your vallest onight each Cotle trolate ( It does not count unless in his house befor end of year). Why not write Cotle a note at once giving you final official hallot as () () (), noming



OFFICE OF THE DEAN OF ENGINEERING

October 30, 1935

Professor Norbert Wiener National Tsing Hua University Peiping, China

Dear Norbert:

Matters have moved so rapidly this fall that I have found little time to write you. Your letters of September 1st and 22nd were very welcome, and I am delighted to know that you are pleasantly located and that the work is going well.

Your comments on the Gibbs Lecture will be very helpful. I am getting to work on the revision and expect to have it in shape before very long.

Your discussion of an electrical simultaneous equation machine I confess I have not as yet studied through. I asked Hazen to review it, since he is thoroughly familiar with this sort of thing, but we have not gotten together on it as yet. As soon as I have some ideas on the subject I will of course write you. In the meantime the mechanical machine for this purpose is coming along well and I expect it will be in service early next year.

I talked to Struik yesterday, and while I judge that the people in the Math Department have already heard from you directly, I am sending your September first letter along so that it may be passed about the Department. Dr. Compton has already read it and was delighted that you are getting on so well. Of course before transmitting this letter of yours to the department members, I will leave out one sheet which refers to relations concerning possible future visits and the like.

On these I think that no great amount of comment is necessary, for we understand each other thoroughly on this matter. Sometime later on in the year we might have a further letter from you concerning what the authorities there have to say, and I will be glad to talk it over with Dr. Compton. They undoubtedly know however that this present year is a special arrangement on M.I.T.'s part and that a continuation would have to be on some other basis. Furthermore they undoubtedly know that, while we are happy to loan you to them for a bit, particularly as the experience which you are getting is sure to be delightful, nevertheless we need you back here badly.

Undoubtedly Jackson will let you know when he is to be in your part of the country as he is quite thorough in preparing his plans in advance. I have no idea just when he is due to arrive, and in fact his program may be altered as he goes in accordance with his wishes and interests as they may develop.

There is nothing especially notable here to write about. Our financial situation this year is somewhat easier than last in many ways as there is undoubtedly a considerable business recovery. This is not reflected so much in actual balance sheets as it is in the general attitude which has improved enormously hereabouts. We are still in trouble in this country and serious trouble. The next Congress will probably pass a bonus and aid to farmers is running wild. Just how long the national credit can stand this sort of thing is anyone's guess. If we should run into serious inflation you would be fortunate in being out of the country. I rather feel personally that the national credit can stand the strain until the next election, but everything hinges on what happens at that time. There appears to be a considerable reversal of sentiment here, strong in the east of course, but appearing to some extent even in the middle west. Straw votes indicate this among other things and show a considerable turning away from the New Deal. This country being what it is, a swing of that sort once started is likely to go very far. I am therefore more optimistic than I have been at any time since this show started, although I recognize very definitely that unless such a swing occurs in public sentiment we are bound for much more serious times than we have already gone through. The forces of recovery are powerful things, and they operate to a considerable extent independently of political affairs, in the absence of wars or actual destruction of financial systems by foolish manipulation. Hence I feel sure that we are on the way out and rapidly so, provided the political tinkering can be held down.

Won't you give my best regards to all of my friends at Tsing Hua, and my best wishes to Mrs. Wiener for a pleasant winter.

With best regards

Yours very truly, V. Bush

VB.E

Columbia University in the City of New Pork FACULTY OF POLITICAL SCIENCE Theoretical Statistics October 30, 1935 Professor Norbert Wiener Massachusetto Institute of Technology Cambordage, Massachusetts My dear Professor Wiener: On the first page of your preface to your book "The Fourier Integral you state that you originally intended to include periodogram analypis among the topics considered. Inasmuel as I ann saming percodogram analysis from the statistical point ) wears and am completely gnorand I harmonic analysis in general, although I am familian with Lebesque and Radon integration, I would deeply appreciate any references, and reprinted of you can spare any, which you may send to me. I would particularly welcome a statement of your viewpoint

# Columbia University in the City of New York

FACULTY OF POLITICAL SCIENCE

on periodogram analipis.

Respectfully yours William G: Madow Research Assistant m Theoretical statistics

BURNERTONN BEOES 4 CAPEL CLOSE OXFORD Nov. 17, 1535 Dear Wierier Many thanks for your letter and matternatical notes. I an looking forward to seeing you in Oxford unit nummer. I an afraid I shall not be able to go to Oxlo. I have now written rough drafts of the following chatters on Formies integrals. 1. Convergence, purumability, conqueries 2. Mellin's Journala, etc. 3. Transforms of the class L2. 4. Transforms of other L - classes. Conjulate functions, Hilbert transforms δ., 6. Varions auxiliary Journalal Evaluation of depute integrals. Several Transform

9. Differential equation -~ ~ ~ 10. Integral Emotion. 16 Self-reciprocal functions Nort of this is in Hardy's hards at present. It is hardly in a state to send to you. I support that you shald give me a fairly free hand with this bart, and read through that I have writter west minner. I wordered also of it might be a good blan to hublich in two harts ; hart I to contain roughly the above matter which is fairly states, to appear as non as possible. Part I, to contai Tauberian theorem, peneral harmonic analysis, etc. It would habely take

Hady was proched down by a rutor cycle in Lorda in the purmmer, but I understand the he is recovering a has recovered manuscribb did ut feish in yours sincerely E. C. Fitchmarch

much longer to do. I have worked care fully through some of your writings a this part. but have not written ant anything formally. I have I course used zon published work is some barts of Part I, but I take it that it is in Part II that you really begin to get excited . lecturing through I have been equations by volutions of deferential . The subject Fornis Jo this term seems to be about 100 years old but I cannot find that it

Institut de France Académie des Sciences

Institut de France Paris le 21 Novembre 1935

quai Conti , nº 23

Dear Professor Wiener

I must trouble you for a personal infor mation concerning Professor Mong's family . We already know his boy, Ping Ming, but we understand that he has several other children. Will you be kind enough to tell me about their number, and, approximative ages ?

Very happy to think that I shall see you soon, I think you inadvance and beg you to believe me

Yours truly

Madaman)

12 Rue Emile Faguet Paris XIV

Could you write

this to me at once as I plan to leave

rather in advance? I apologize for transling

mation wilder the Transferrer Compton Consister . The

To in that way.

11/26/35 Problem: - Find the Chinese equivalent J" Penny wise, dollar foolish." (Do not practise !!) J. R.Kline 60. Oakley=co2 Sight S.A. Hedlund Rademacher G.C. Webber.

Trofesson NorbertWiener Department & Mathematics national Tsing Haca China Perfin

#### NATIONAL ACADEMY OF SCIENCES

SECTION OF MATHEMATICS CHAIRMAN, A. B. COBLE, UNIVERSITY OF ILLINOIS URBANA, ILLINOIS

> Urbana, Illinois December 3, 1935

Dear Colleague:

seventeen

Only sixteen out of twenty-three members of the Section have voted in the informal ballot. The number of persons voted for by individual members runs from one to seven.

On the formal ballot enclosed herewith it is necessary that precisely <u>three</u> persons be endorsed. Please return this to me at your earliest convenience. In the hope of securing a larger number of returns on the informal ballot I have held up the formal ballot too long.

seven 4 With six votes scattered (\$,2,1) the vote for a member of the committee on government relations has resulted in a tie. Please vote again on this matter.

I have received surveys of the scientific work of W. A. Manning and A. D. Michal. I will have these duplicated and distributed as soon as possible.

Sincerely yours, A. B. Coble

Arthur B. Coble

## NATIONAL ACADEMY OF SCIENCES SECTION OF MATHEMATICS

#### FORMAL NOMINATION BALLOT

Dec. 3 193-2

#### DEAR SIR:

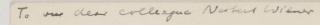
As chairman of this Section, in accordance with the part of By-Law IV.2 of the Academy relating to formal balloting,\* I have to inform you that the persons whose names are given on the accompanying "Formal Nomination Ballot" received on the last ballot of the Section the number of votes shown by the figures in the last column; and I have to request you to place a cross against the name of each one of the **three** persons whom you judge to be most worthy of nomination to the Academy this year, to attach your signature to the ballot, and to return it to me within *two weeks* of the date of this letter.

Please also write upon the ballot near the bottom any new names which you wish to have included in the ballot to be submitted to the Section next year.

A. B. Coble Chairman Address \_ 251 Math. B University of Illinois Grbana, Ill.

\*... The chairman shall then submit to the members of his section a new ballot showing the results of the informal vote; and each member shall be expected to return this ballot to the chairman with his signature and with crosses placed against the names of three persons whom he judges to be most worthy of nomination. In order to secure an adequate number of nominations, the chairman, when necessary, shall obtain by personal solicitation a fuller vote of his section or shall submit to the section a supplementary formal ballot.

The chairman shall then certify to the home secretary, prior to January 1, the names of all persons who have been voted for on the formal ballots, together with a statement of the number of votes each received and of the number of members voting. Of these all persons who receive the votes of two-thirds of the members voting in the section in cases voted upon by one section only, or the votes of one-half (however distributed) of the members voting in any two sections in cases voted upon by more than one section, shall be considered nominated.



#### FACULTY CLUB

Dec. 5, 1935

HARVARD UNIVERSITY CAMBRIDGE, MASS.

Harlelijke groeten van

DJ.Struik George D. Birkhoff Sounders Mac Same Marshall Store L.M. Fravez. Jere Douglas H. Whitney Rudolph 5. TangerJohn L. Barnes. J. L. Walsh L. V. Ahifons m. R. Kettener n. C. gransten

THE STATE UNIVERSITY OF IOWA IOWA CITY DEPARTMENT OF PSYCHOLOGY

Professor Norbert Wiener 76 Cross Street Belmont, Massachusetts

Dear Norbert

This morning I am going to do a strange thing. I have nothing to write about; on the other hand I have not seen you or heard from you directly for almost a quarter of a century and yet ever and anon your name comes up among my associates here. For example, Chittenden and I are fairly close friends. As you know he is at Princeton this year and is selected to give the colloquium lectures which I understand you have already given. In an off-hand manner I have tried to keep up with such a thing as topology.

But I still have strong memory images of our unique experiences at Cornell and the suddenness in which you bobed up in Göttingen in 1914. Every once in a while in connection with our laboratory work here I run through my laboratory reports in which your name appears as my former partner.

How are you anyway and how are things going? I see by your account in <u>Who's</u> <u>Who</u> that you have two daughters and are presumably happily married. If you have a stenographer handy I am sure that a letter would brighten my horizon for several days. It is too bad that I did not improve upon my opportunity when I was at Wellsley for three years to call upon you.

You may like to know that in a few months my magnum opus in the shape of the <u>Psychology of Feeling and Emotion</u> is to appear from the house of McGraw-Hill. It will be a book of about 650 pages full of scientific notations and footnotes. I see that you have already delivered a master-piece which I am sure I could not swallow.

With kind personal regards, I am

Cordially yours,

Thuran G. Rudemick

Christian A. Ruckmick

13 December 1935

CAR:MS

ADDRESS ALL COMMUNICATIONS % WARNER BRDS. PICTURES, INC. BURBANK, CALIF. W. E. BEATTY PATENT ATTORNEY UNITED RESEARCH CORP. 41-39 THIRTY-EIGHTH ST. LONG ISLAND CITY, NEW YORK

December 24, 1935.

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

Dear Dr. Weiner:

The patent application, Serial No. 560,716, filed jointly in the name of yourself and Mr. Lee, is now issued as United States Patent No. 2,024,900.

Will you kindly let me know what disposition I should make of the Letters Patent.

Very truly yours,

W. E BEATTY.

WEB-g