



LITHOGRAPHIE, SINGERON, AUSCONE

SPAHR & GASPOZ  
Propriétaires

HÔTEL DE LA DENT BLANCHE & D'EVOLÈNE



À EVOLÈNE (Altitude: 1380 Mètres)

G.D'HÔTEL & KURHAUS. AROLLA (Altitude: 2110 Mètres)  
(VALLÉE DU RHÔNE)

Maisons de 1<sup>er</sup> Ordre. Centre d'Excursions & Ascensions renommées.  
Guides. Porteurs. Mulets. Arrangements pour Familles et séjour prolongé.  
Poste. Télégraphe. Téléphone.

16 5 August 1925

Dear Fritz:

Don't be afraid — I'm not going to preach. I am sorry you flunked out, of course. But I have confidence that you will make good. I think you need to work at a job until you can catch up with yourself a bit. I don't for the moment think of anything in particular, but I shall send you any ideas that occur to me. Don't for anything enlist. You can do much better work than polish a rifle and march in a squad. It is the sort of thing you

can do in a minute, but it is equivalent  
to a jail sentence of three years.

What you need is a little time,  
and time can't be hurried. Do take  
a job, make good at it, and learn to  
find yourself.

As you probably know it is  
dollar\$ to doughnut\$ that I shall  
be in Europe next year. There will be  
probably more of the family here, if  
read the cards right. Now, I've been  
looking in to this climbing game, and I  
know you can do it and will enjoy  
it. I want you along for a trip with  
me.

Now, here's to your finding a job  
and having a good time on it

Your brother,  
Norbert

P.S. I am having a great time with  
Alexander. He is a fine fellow.

The women wear the peasant costume, one feature of which is the peculiar hat of straw and velvet, resembling in shape that worn by shepherdesses in the roccoco paintings of the 18th century. As the Valais is a pastoral region, and as it was probably in the 18th century the Ultima Thule of wildness, I wonder whether the shepherdess costume of the paintings isn't a somewhat fanciful rendering of the Valaisian costume. It would be an interesting bit of historical research, at any rate, to learn the origin of the conventional 18th century pastoral types.



LITHOGRAPHIE S. SPYR & C. LAUSANNE

HÔTEL DE LA DENT BLANCHE & D'EVOLÈNE  
À ÉVOLÈNE (Altitude: 1380 Mètres)

Grand HÔTEL & KURHAUS - AROLLA (Altitude: 2110 Mètres)  
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12 Aout 1925

Dear dad:

The Grenoble meeting was a flat fizzle. The papers weren't worth a damn, and only one man of any importance was there. The French do not get together well. Everyone is afraid that everyone else will steal his ideas. They quarrel and squabble much worse than the Germans.

There was a dinner after the meeting. I was sitting next to a Serb named Petrovich. He was cursing out

I am here at Arolla now - part way from Sion by auto, and then two and a half hours by foot. The scenery is wonderful, and there are many inviting and not too difficult climbs. Alexander is here with his wife. He is nice to me, but I have a feeling that he doesn't altogether relish my having got that offer at Göttingen. However, I may be doing him an injustice. But there is always a feeling among the American mathematicians that all the opportunities should be reserved for the men with the stamp of the big schools.

Love to the family,

Norbert.

P.S. The language in this valley is a ~~half~~ patois with strong leanings towards Italian.

the Bulgarians at a great rate. Called them a mixed Tatar people, as opposed to the pure Serbs. I have seen more chauvinism among the representatives of smaller peoples here than I care to think of. Your dear Czechs are not free from this taint. I have heard a lot about the new state church which they are founding, and about their attitude to the Germans. Masaryk is O. K., but there is a large element which is bent on treating the Germans in exactly the same way as the Germans treated the Czechs - suppressing the language, etc. As far as I can see, Europe after the war differs from Europe before the war only by a change of masters, and not at all by a change of methods.

Fynshav, Aaben, Dänemark,  
4. 8. 25.

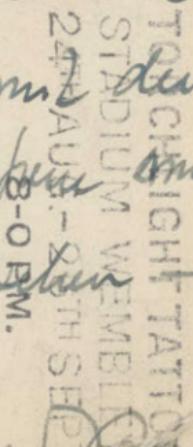
Lieber Kollege Wiener! Vielen Dank  
für Ihre Briefe u. Manuskript.  
Ich sende den Brief mit Kabel  
in etwa 8-Tagen. Hätte wegen  
so freitagschlich - Göttin-  
gen es immer verbummelt.  
Nehmen Sie es nicht übel.  
Viele herzliche Grüße

The R. Wenzel.



Viele herzliche Grüsse und  
Dank für Ihren Brief mit dem  
Manuskriptblatt. Ich komme  
den Sie mal wieder zu  
höflich in Dänemark

Mr. Haug. D. M.





# BREVKORT.

Tut. document  
typ. law  
U.S.A.  
Denmark.



Prof. Dr. Norbert Wiener  
~~U.S. Brown University~~  
Karhans.  
~~U.S. Arola.~~  
~~U.S. Path Mall~~  
Suisse



LITHOGRAPHIE STIPHON LAUDANNE

SPAHR & GASPOZ

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4 Aout

19 25

Dear Bertha:

Yesterday Alexander, Mrs. Alexander & I started for the Jenkins hut on a shoulder of the Pigno d'Arolla. Hiked over a moraine till we reached the glacier - then we roped because of crevasses and had an easy pull to the hut. This morning at 5 we started out for the Pigno. We had a bad night - eight in a hut designed for six, and I snored. Cooking in huts ~~and life~~ in general does not differ in any essential respect from life in a White Mt. hut out of season when the master is not there.

physique and endurance. It isn't expensive. Come over with Carroll some time and start the game.

I am in moderate training, but slow as cold molasses on the down-hill stretches. My knees & ankles are not to be trusted. I carry my share of the load. Es kommt schon.

I shall probably have two or three weeks of climbing (in all). I don't know then what I shall do. I shall probably go to England and buy a couple of suits of clothes.

Do long!

Robert

P.S. I don't think Alpine climbing need be much harder work than the White Mt. variety.

The pull to the Pigno was not bad, except for one ticklish place among crevasses on a steep spot, where we had to belay on our ice-axes. On top of the Pigno (3810 metres) there was a lot of powdery snow, which made the going hard. On the way down we hit a steep spot on the glacier, but the going was good, and with a little care was perfectly safe. We had to cross over from this glacier to our valley by a little saddle called the pas des Chivres. There was a bit of easy rock-climbing here. From there on it was a simple walk.

Alexander draws his business. He takes no chances. The rope is certainly a great reassurance, as is the ice-axe.

There are lots of women climbing here who haven't one tenth your



LITHOGRAPHIE SIMPLICIUS SAISONNE

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Arolla ~~the~~ August 9 1925

Dear Bertha:

I'm awfully sorry Frits flunked out. I've written him what I hope is a consoling letter, and have invited him to a mountain-climbing trip over here next summer. I've no suggestion as to the kind of a job for him at present, but shall let you know if any idea occurs.

I have received two letters from my astronomical friend, and find them of a very encouraging nature. I shall see her in London, and we shall return on the same boat. Quien sabe? She is awfully nice.

He is an only child, and I don't think has had much family life, and so doesn't value family life! He is a triple spoilt, and would be much more so if he hadn't naturally a very sweet and charming disposition. He is as square as a die. We get along together very well, but only because we don't try to judge each other by our own emotional standards.

Mrs. Alexander is nice, but not highly interesting. She has moved on to Parks.

How is Carroll? How are the lunatics? How is the family?

Your loving brother,  
Norbert

Carroll has written me that my letter of invitation is due in about a week. Can you imagine me next summer with a Gottingen job - and a status? Some vacation this year!

Alexander & I have been practicing rock climbing. He has been doing some difficult stunts without me, and I have been taking some of the easier walks of the region - up to M 3200. Today we go out with a rope and scramble over perfectly safe boulders. In a few days we go over the col d'Helens to Zermatt and thence to Bass-Dee.

Alexander is a very nice fellow - but I think he values just a bit too much the expensive virtues - independence, unconventionality, etc. He doesn't seem to realise that there is not much credit in being independent on an independent income.

Blni, d. 10. 8. 25

dear Vorber!

We're leaving at once  
first to St. Moritz.  
Our present abode is:  
Villa Belmont

Please write me how it goes  
and what it was in Grenoble  
was. Who did you meet  
and speak? Did you  
in Grenoble yourself a

Vortrag gehalten? Wie gefallen  
dir die Wege? —

Wir bleiben in St. Moritz  
14 Tage und gehen dann  
in die französische Schweiz  
— auch, das wissen wir  
selbst noch nicht.

Schreibe also  
Dem

Karl spielt von Leon  
[Lichtenstein]  
meine Freu



LITTOGRAPHIE SINGLON VERAISSE



SPAAR & GASPOZ  
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August 11 1925

Liebes Stanzchen!

glad to hear that you  
and the kid are doing well. Wish you  
were here with me.

I have done to date: the Pigne  
d'Arolla, the Dolin and the Roussette (no  
real work), the Grande Dent de Visiver,  
and shall probably do the Mont  
Collon soon. I ask rather slow in  
getting into training, but wait till next  
year! I shall scramble around for  
about ten days more, and then via France  
to England! I have received a most  
encouraging letter from Miss Payne,  
who is returning on the same boat.

of the turning of the leaves.

I am anticipating a great time next fall and a great year's work.

Love,

Robert.

I have also heard from Compton & Bohr again. Compton's official invitation will be at hand this week, and Bohr wants me to spend part of next year at Copenhagen. Do what do you think of your little brother?

I've had about 3 fits. I wrote him what I intended should be a consoling letter which I think has already come to your attention. I can't think from this side of the ocean of just the sort of job he needs. I shouldn't think it mattered too much, as I think he has suffered to date by having his environment picked out too much to fit him.

News is scarce — just as it would be at North Sandwich. We aren't even on a road — just a mule track from Hanover, where the auto road goes to Dian. We are about 7000 ft above sea level. The scenery and air are wonderful — but I am already beginning to long for just one whiff of New England air at the time

Mathematisches Institut  
der Universität

Göttingen, den 15. August 1925.  
Weender Landstr. 2

Lieber Kollege Wiener!

Als Leiter des Mathematischen Institutes möchten wir Ihnen noch einmal herzlich für Ihren so ausserordentlich wertvollen und interessanten Vortrag danken und überhaupt unserer Freude Ausdruck geben, dass Sie in diesem Sommer einige Zeit in Göttingen gewesen sind und mit einer Reihe der dortigen Fachgenossen so wertvolle Anregungen ausgetauscht haben. Die Untersuchungen mit denen Sie beschäftigt sind scheinen uns von sehr grosser Bedeutung; nicht zuletzt für die Anwendungen der Mathematik, wie wir sie gerade in Göttingen zu pflegen und zu fördern hoffen. Wir würden es daher mit ganz besonderer Freude begrüssen, wenn es Ihnen möglich wäre, bald einmal für eine etwas längere Zeit nach Göttingen zu kommen und in engeren Kontakt mit unserem Kreise zu treten. Wenn wir Ihre Andeutungen richtig verstanden haben, so besteht einige Hoffnung, dass Sie ein grösseres amerikanisches Stipendium für einen Aufenthalt in Europa bekommen, und wir möchten Sie hiermit herzlich einladen, in diesem Falle vielleicht während des nächsten Sommersemesters hier in Göttingen eine Reihe von Vorträgen über die Gegenstände Ihrer letzten schönen Arbeiten betr. verallgemeinerte Fouriersche Analyse zu halten. Sie können sicher sein, dass Sie nicht nur Studenten sondern auch viele Dozenten als Zuhörer haben werden.

Wenn wir durch irgendwelche Gutachten zur Erleichterung der Erlangung dieses Stipendiums beitragen können, so bitten wir Sie, uns das wissen zu lassen, bzw. die betreffenden Instanzen auf diese Möglichkeit hinzuweisen.

Mit freundlichen kollegialen Grüßen

D. Hilbert. R. Courant

Zermatt  
August 18, '25

Dear Bush:

Thanks for your letter I  
dove on the machine. I did spread the  
good word about your machine at  
Göttingen, and old man Runge &  
Felix Bernstein were much interested.  
B. was thinking of trying to get one.

I've been having one hell of a  
good summer. By the way, I'm afraid  
that electrical relativity of yours is  
off. I met Einstein on a train the other  
day, and he told me he had made a  
clean up on the electrical aspect of  
relativity - in quite a different direction.  
He minimizes a single expression in  
the  $g^{\mu\nu}$ 's, and obtains a set of

I have been having a lot of fun in the Alps, even if I'm not exactly a Whymper as yet. I intend to learn. By the way, if you ever come over here, we can take it up together.

Next week I shall be visiting friends in England. I shall see all the shows in London — am dated up to take a nice young lady out. — so you see my fun isn't over yet.

Pardon the swanks, and accept the greetings of  
Your colleague  
Norbert Wiener

equations to which the Clerk-Maxwell & Newtonian gravitational equations are both first approximations. The dope isn't out yet.

I wrangled out of Courant an acceptance of my book for his yellow series. If I can wrangle a fellowship out of someone in the states, I shall be at Göttingen in '26-'27, for Courant & Hilbert are sending me an invitation to give a course of lectures there, have an official appointment under the Prussian government, and have an assistant. Niels Bohr wants me to come to Copenhagen a while.

[From M.I.T. Graduate School,  
Office of the Dean  
Records, 1925-1966.]

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D. Hilbert. R. Courant.

August 18, Zermatt.  
[1925]

How is Fritz? Bertha? the  
parents? However, I forgot that this  
will probably arrive too late for you  
to send any answers to

Your loving brother,  
Norbert.

P.S. The Föhn is blowing  
now.

Liebe Stanzchen!

Climbing is over <sup>me for</sup> for the summer.  
I am going to take it up in earnest  
next season, however. I climb well and am  
very strong. I do certain types of rock-work  
well. I need to practice on my balance, and  
am rotten on the downclimbs.

My year's bag is as follows

Dzin (twice)

Pigne d'Arolla (snowclimb)

Grande dent de Véisivi

La Rossette

Mont Rouge

Mont Collon (snow, with guide)

Cle de Bertol & d'Hérens (snow, with guide)

It was all very easy. I have found  
a peach of a guide for the future —

couple of very nice letters from  
Miss Payne. Wer weiss?

Today I am awaiting some  
baggage which has met misadventure  
in the mails - It is the least important  
of three pieces, two of which have arrived  
safely. As soon<sup>as</sup> I place it — nach  
Paris! I attend to a little business  
there, and then proceed to England,  
whence I return.

I got a nice note from Comptant  
& Bohr the other day. C. is sending  
my invitation right along, and B. hopes  
to meet me in ~~Copenhagen~~ Copenhagen.

If this isn't a nifty summer (not  
to say a nobby summer) what is?

How are you and the kid?

a fellow about 55 who is also  
woodcarver and village schoolmaster.  
If I come here next year, I shall have  
several days with him.

I have got to the stage of under-  
standing Alexander, and he has got  
to the stage of understanding me.  
At first my moodiness and his  
taciturnity rather jarred against  
one another. We get along so well  
now, however, that we have plans  
for the future of both a climbing  
and a non-climbing cooperation  
in view.

I am expecting a good deal from  
my English trip. I have had a

G.D. HOTEL & KURHAUS, AROLO

Dear ma:

We did this yesterday.

It wasn't at all hard. One more pull across the Col d'Herens to Zermatt, and my climbing is over for the summer. Am well & feeling fine.

Love,

Norbert

Phototypie Co., Neuchâtel.



Mrs. Leo Weiner  
Appleton Farm

Groton, Mass.  
États-Unis

*Mont Collon 3644 m.*

*Mont Brûlé 3621 m.*

*L'Evêque 3738 m.*



2977. Arolla.- Le Mont Collon (3644 m.)

Zermatt.  
August 18, '25

Dear ma:

You will probably be relieved to know that my climbing for the season is over with no casualties except for a coat of sunburn. Am waiting here for a piece of baggage delayed in the mails — then via Paris to London, where I am counting on a good time. Am feeling great.

Hope all is O.K. at home

Love

Norbert



SPIRINGEN, KLAUSENSTRASSE

# Carte postale Postkarte Cartolina postale



Mrs Leo Wiener

Applecroft Farm  
Grafton, Mass.

États - Unis.

Paris, August 22, '25.

By the way, there is another young Bouzigand  
a day.

I bought (this, is for Phil's benefit) the  
new Volterra & Perer book on permutable  
functions.

I suppose I share about as much in the  
virtues and vices of patriotism as the  
next man, but if the whole tribe of wealthy  
American debutantes, dowagers, <sup>dumplins</sup>, and humble  
males that infests the streets of this city  
in the neighborhood of the Colonne Vendome  
and the Opera were sprinkled with kerosine  
and burned up, wiped out, ausgerottet,  
I should dance a dance of joy over  
their funeral pyre. To see an overdressed,  
overjewelled ♀ of some forty-seven summers  
with an appliquée complexion which would  
eternally disgrace a Parisian courtesan is

Dear dad:

~~19~~  
I am enclosing the official  
Göttingen invitation. Please put it at  
once in the safe deposit box. Does it suit  
you?

After leaving Zermatt, I stopped off  
at Dôle, to get a decent supper and  
to have a night's sleep. The next day  
I advanced on Paris. A nice English  
girl got in the compartment at Dijon.  
She turned out to be the daughter of the  
late Willard Ward, an Anglo-Catholic  
publicist, and to be intimately acquainted  
with Chesterton, Belloc, &c. Belloc, she  
tells me has recently been having  
a frightful row with Father Something  
or - other in an obscure anglo-catholic

I saw H. A. Dallehead Bruce at the bank yesterday, than whose no more resonant bray ~~sustains~~ divides the firmament. Of all the platitudinous, bromidic, self-complacent, self-satisfied, .... ad inf., he is the worst.

Went to the Louvre yesterday - spent my time especially among the classical sculptures. How different the real classic spirit is from the stiff "classicism" of the age of the enlightenment!

I shall visit the Salons & the exhibition of decorative arts.

I bought Lévy's two latest works, in both of which there are copious references to an American mathematician living at 50 Buckingham St., Cambridge, Mass., whom original modesty forbids me to name more definitely. I shall look him up if he is in town.

journal — I think it is called the Christian World — on the Gothic date, and supports himself firmly on your work.

I met here in Paris two English school-maids who had been sitting opposite us in the hotel at Arissa, and went to the English theatre with them. Atmosphere — Copleyesque. Acting — good. Play — dramatization of Kipling's Light that Failed — like all dramatizations poor. The form of exposition which will suit a novel is impossible in a play,

and the adapter finds himself torn between the desire not to do violence to his dramatic opportunities.

Zermatt. Den 24/III/93

Werke Herrn Wiener,

In Beantwortung Thren  
Karte vom 20. August seien  
wir Ihnen mitteilen, dass  
Ihr Paket aus Nizza  
nach Paris, am 19. dieses  
als Lieferung nachgesandt  
worden ist:

Adresse: Herr Vorber. Wiener  
chez Morgan Hayes & Co  
Paris

Place Jérôme

Hochachtungsvoll.

Postbureau

Zermatt.)

CARTE POSTALE  
POSTKARTE  
CARTOLINA POSTALE

MR. H. L. BROWN, SAWYER,  
138, PARK RD.



London

Herrn  
Varbert Wiener

10 ~~Morgan, Mayis & Co~~

~~Paris~~

~~14 Place Vendôme~~

BRITISH ASSOCIATION for  
the ADVANCEMENT of  
SCIENCE

SOUTHAMPTON MEETING  
1925

Reception Room :  
KING EDWARD VI SCHOOL,  
SOUTHAMPTON

Tel. Nos. 2392 AND 4396

August 27, '25

Dear Cona:

Went to the Kunstgewerbeausstellung (or whatever they call it in French) at Paris, located my missing luggage in the mails, travelled by Rovena to le Havre, spent a sleepless, berthless night on the boat, et me voici! Got my tickets validated, got rooms at a hotel (sempful) frequented by ship's officers between voyages, and signed up for the meeting.

Met Miss Payne — awfully nice, awfully cordial, and now that she is rested, really nice looking (She has bobbed her hair by the way). She is very good fun, and very appreciative of my letters. She is even nicer than my recollections of her from the beginning of the summer, and — I intend to go ahead. And the best of it is, that as far as one can judge from appearance, I stand every chance. We find one another very congenial — we have much the same tastes. I don't promise you not to be

engaged by the time I return home.

Perhaps this doesn't sound rhapsodic enough. Just give me time, however! We are going to take in all the shows worth while in London together. And we got fun?

I am having a good time at the meeting. The papers are longer and fewer than at the A'S. Miss Payne did awfully well — has a nice platform manner. I slipped out & had a word <sup>white</sup> on light & periodogram analysis with Sir Arthur Johnstone. He seemed interested. He is the authority on these subjects, but is very old, and rather broken up by a bad accident.

I met F. Fisher, the statistician of the Rothamsted Experiment Station. He was awfully interested in my new method of periodogram analysis — had worked it out in part — but not published — independently. We lunch together tomorrow. The trouble he found was in the pure mathematics of the game, and that's my meat — excuse me, vegetables.

In general, the British pure mathematicians haven't shown up. The applied mathematicians are strong on the computational technique, and except for the big bugs, rather short on everything else.

A second-rate French mathematician tries to imitate Poincaré's elegance, and is superficial, a second-rate German mathematician has all the ponderosity of Hilbert — and nothing else, but the second-rates over here excel in computation and stodge.

Speaking about stodge, you should see the newspaper reports of the meeting! Mostly comments on the fact that the participants are rather more like other people in appearance than could be expected of <sup>members of</sup> such a weird profession. I rather think that in the hierarchy of British respectability the descending order is

- tradesmen
- Dancing-masters
- Men of science
- Anarchists
- artists

— at least in the minds of the ~~H.M.C.~~ — did  
~~stand~~ for lower middle classes.

Good luck to you & to

ABIDAB EHRITTOBILUB

— or however you write it.

Love

Nodat

BRITISH ASSOCIATION *for*  
*the* ADVANCEMENT *of*  
SCIENCE  
SOUTHAMPTON MEETING  
1925

*Reception Room:*  
KING EDWARD VI SCHOOL,  
SOUTHAMPTON  
*Tel. Nos. 2392 AND 4396*

READING ROOM, NOT OFFICIAL.

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123, PALL MALL, LONDON, S.W.1.

September 1. [1925]

Dear Ma:

The Yatsenitch children are going through a siege of tonsilitis. I am staying on, as I think the Y's would feel the reflection on their hospitality which might be implied by my departure more than the extra burden which I throw on them. I help with the dishes, etc., and I really think I don't bother them much.

J. is thinking of writing to Stetson, whom he himself has met, to enlist his aid in getting over to the States. He is trying to get a temporary teaching job there, no matter how humble. I think he will be able to come over soon.

Graham is 5 ft 9 in tall. Missey is a

on the 21st.

Love,  
)

Worbert

The Y's send their regards to all.

plump kid, hand & chunky. Binkie is a darling, & will break many hearts fifteen years from now. The Y's themselves are awfully nice to me, and I turn to Mrs. Y. for advice & counsel in a matter of interest to me at the present moment.

I dine with Miss Payne & her mother Friday — thence to the show. As you know, we are going back on the same boat. A lot can happen on a boat. [See Waite vs. — what is the name of Cosby's nice?] —

I wrote to Fritz. He must have the letter by now.

I'm glad all is going so well at home.

I shall send about two more letters to the several members of the family. After that -- myself. I expect to arrive home

Poitiers, 28 Sept 1925

Mon cher Wiener

# CARTE POSTALE

PARIS -

POITIERS R.P.

POUR PARIS

J'ai bien reçue votre lettre du 15 octobre

et je vous remercie vivement. J'apprends

avec plaisir que courant novembre à Göttingen, et dans un petit

dissement de l'arrondissement

suivraient. Je viens de l'être moi-

même à Cracovie par Zaremba,

pour un cours du 15 octobre au 15

décembre environ. J'aurai donc l'occa-

sion de parler de nos travaux aux

Polonais. - Je vis avec plaisir que

vous ne délaisserez pas l'Europe et me

réjouis à la pensée que votre séjour à

Göttingen me fournira à l'occasion de

nos réunions. Bonjour de tous et bien

amicalement à vous Bourdigan

Adresse

VIENNE

DE L'ARRONDISSEMENT

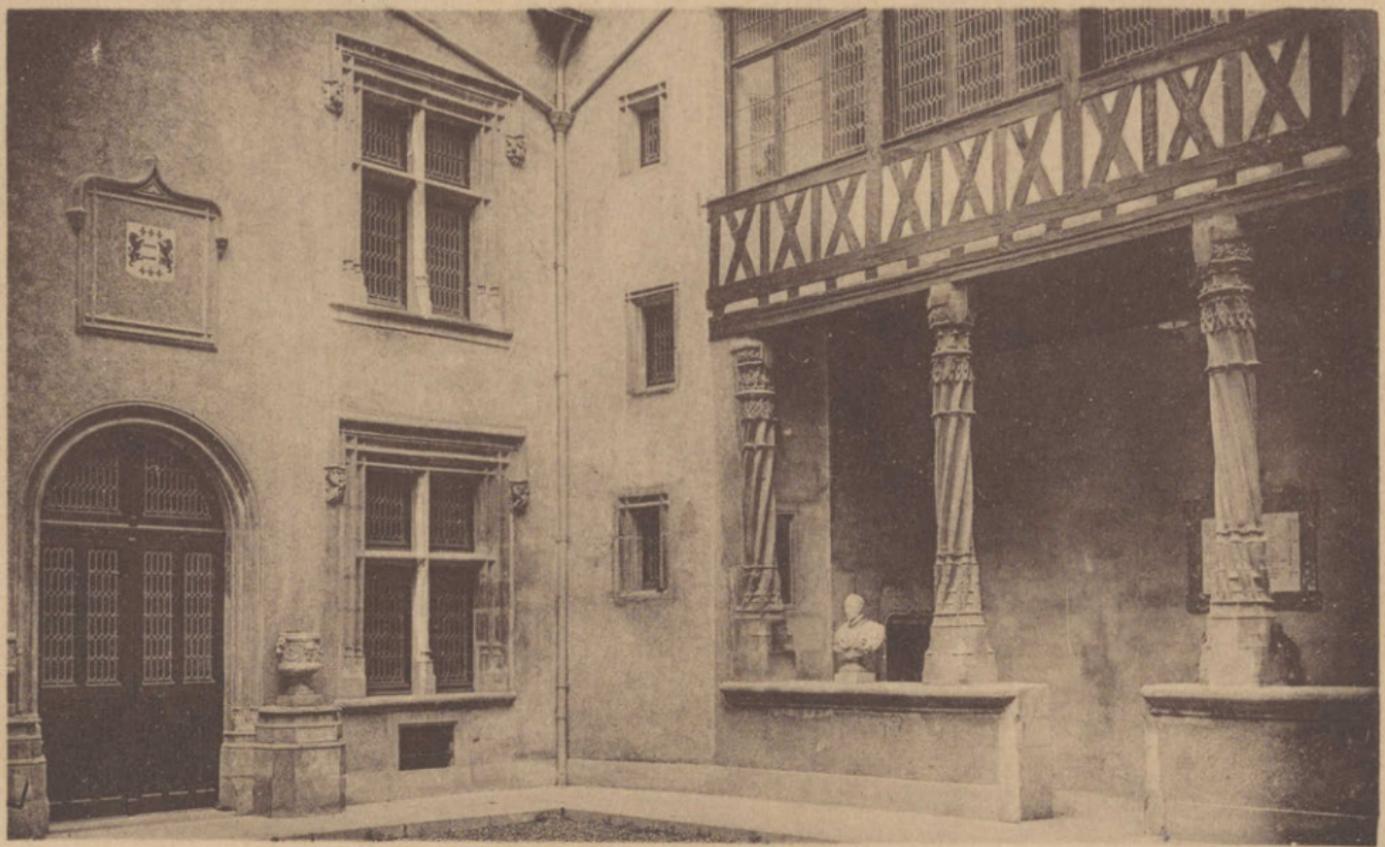
M. Norbert Wiener

50 Buckingham Street

Cambridge

Massachusetts.

U.S.A



La Cour d'Honneur de la Faculté des Lettres

BRITISH ASSOCIATION for  
the ADVANCEMENT of  
SCIENCE  
SOUTHAMPTON MEETING  
1925

Reception Room:  
KING EDWARD VI SCHOOL,  
SOUTHAMPTON

Tel. Nos. 2392 AND 4396

August 28, 25.

Liebes Barthachen!

I'm having a nice time at the meeting. Miss Payne is having me to dinner with her family in London, after which we shall commence a tour of exploration of its environment from the standpoint of the theater. We had a reception here last night by the Mayor. I sat with a bright young Hindu physicist (from Bangalore!) and a traveling fellow of the Harvard zoology department, of Alsatian origin, who is one of God's own jackasses. He talks loudly and reverently of the Mechanistic Gospel of the Holy Jacques Loeb, and doesn't seem to have the least idea that mechanism (in the Newtonian sense) is as dead as a doornail in physics. His scorn for vitalists is as withering as his respect for statistics is complete. I myself don't think the present day vitalists have much to offer, but I certainly don't think that the mechanistic explanation of living processes is anything more than a one-sided schematization — and even as that, is only a pious hope at present. What disgusts me is that any one with any pretensions to scientific standing should have such an atrophied imagination as to regard the dogmata of science in the year of our Lord 1925 as endgültige gospel truths rather than as Zweckmässige hypotheses. If only the supporters of the ape weren't fundamentally of the same religious mentality as the partisans of the old city!

By the way, Ornstein of Utrecht gave a paper on dispersion under quantum theory — 50% Q.T., 50% Classical Mechanics, emulsifier badly needed. There is much disquiet on the part of the Kelvinian generation, and I don't blame the poor old dears. There is no consistent basis for the physics of the present day. The man is yet to be born, probably, who can put together a decent theory of radiation. When that comes, one A. Einstein will step into the background — as he admits.

Dohrster — the periodogram & white light man — is interested in my junk. I have also got in touch with a statistician who has done a very similar stunt independently, but has not published or used it. I lunch with him today. When in London, I am going to look up a guy at the Air Ministry, who is the periodogram expert, and see what a practical man's opinion of my generalized periodogram is. I think it knocks spots off the old method, particularly for meteorological work.

Between you & me & the doorpost, barring the relics of the Kelvin generation, I don't think the gang here has any edge on our crowd at all, at all. Cambridge, Mass. is decidedly on the map, as Miss Payne — who is becoming quite a patriotic American — is finding out. In ten years, the scientific center of the world will be somewhere off the Newfoundland banks; in twenty years, it will be — well, say in somebody's back yard at Springfield, Mass.

There is a considerable lack of flexibility in the crowd — Göttingen is a much homier place (English for gemütlich) I haven't seen anyone as nice as Compton — or Harold Bohr, for that matter. And as for Einstein — you know when I was at Leipzig, went into his class, and he was as bad all over again in his strict but sympathetic handling of the students. It is funny how the stiff German professor type is vanishing.

Love Robert

HARVARD UNIVERSITY

SCHOOL OF PUBLIC HEALTH

VAN DYKE STREET

DEPARTMENT OF VITAL STATISTICS

Edwin B. Wilson

10-6-25

Boston 17, Massachusetts

Professor Norbert Wiener,  
Mass. Inst. of Technology,  
Cambridge, Mass.

Dear professor Wiener: I am glad you had such a good time in Europe and made such an impression at Göttingen.

I should think that you could apply for one of the Guggenheim Fellowships with a reasonable chance of getting favorable consideration.

I do not think there would be anything of real importance in applying your method or anyone else's to the analysis of periodicities in public health problems. The reason I feel this way is because adequate data are not available over a sufficiently long period to determine anything with any reasonable amount of accuracy. Take for instance the problem of our water supply here in Boston. There is a tradition among civil engineers that dry and wet years or groups of years follow each other with more or less regularity but we haven't figures for the annual precipitation that run back more than, let us say, 100 years. Now if we suppose that the annual precipitation has a certain mean value to the dispersion about that mean and is in fact from a statistical point of view determined by a frequency function we have to recognize these facts first, that no frequency function is particularly well determined from 100 points. Second, that if the phenomenon is really totally unregulated we shall have occasionally merely by chance a series of years that are dry and a series of years that are wet, and third, that as the period is not supposed to be short and in fact cannot be short on account of the irregular distribution of precipitation around the year we should expect only something like three dry periods of years and three wet ones in the century, and 4th, with such data as this no method of periodic analysis is of much use. The situation with respect to most reportable diseases is worse than with respect to the water in that the reports of the number of cases is not as accurate as the report of the precipitation, and moreover, the period over which there are any reports that are worth anything at all is not very long. I have read a good deal of Brownlee's work which I consider to be not extraordinarily good either as mathematics or as epidemiology. I have read a great deal of work which seems to me to apply much more mathematics than is applicable in consideration of the kind of data available.

It would of course be interesting to try your method out in comparison with Brownlee's or some other method. I haven't any students over here who could do it. My students do not know trigonometry. They don't even know anything about the

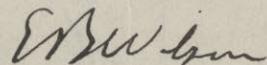
trigonometric functions. Your best chance is at Tech. There are two departments which are more or less concerned with statistical material and with the search for periodicities. One is the department of biology and public health, the other is the department of engineering administration. In one the problem is epidemiological and in the other financial. In both departments the students know considerable mathematics, vastly more than my students or than the students at the Harvard Graduate School of Business Administration. It has always seemed to me that very little was done at the Institute to exploit the various possibilities for the application of mathematics. I may say that there is probably quite as much done at the Institute as there is at the Sheffield Scientific School of Yale, or as there is at Harvard, but I think much more could be done at the Institute than at either of these places, and that the Institute is the best place to go. Why don't you take the matter up with Prescott or some of his subordinates to see whether you can't get a student to write a thesis under you and under Horwitz or Turner and take the matter up with MacKinnon who is interested in statistics and who is familiar with the situation in Course 15, to see whether you might not work out a problem in business.

I don't believe that Luyten would be interested. He suffered a good deal from shock in connection with his accident as almost any one would and his main job at present is to find out what he is going to be able to do with one eye, the other one apparently being probably permanently out of condition for any seeing. He has a number of problems of his own both theoretical and observational on which he is working and I think he has enough to do. However, he is a wide awake fellow and it would not do any harm to hunt him up and talk with him about it.

Sometimes I think that what you most need is a position at some institution where you would have a considerable number of graduate students to help you work out the many ideas you have and then again I recall my own experience which was that I never had so much free time for my own work as when I was doing in the main routine undergraduate teaching. The preparation of graduate courses takes an enormous amount of time and a great deal of the same sort of energy that is needed for research work and is apt except in a lazy individual to hinder rather than to stimulate research work. And finally, I recall that there is this tremendous opportunity at the Institute which comes through having a large body of students interested in a great variety of applications of mathematics and all pretty well trained in mathematics. On the whole I guess you are as well off where you are as anywhere both with respect to your own research and with respect to the possibility of interesting students in your problems, or at any rate in some of them. And one thing I am sure of and that is that you are very greatly appreciated for your ability where you are. I regret to say that I don't find elsewhere as high an appreciation of your accomplishments as I should like to find. It is a great comfort to work where one is appreciated and it may be that next to the Institute the place where you are most appreciated is Göttingen.

Yours very truly,

EBW/o



Walter de Gruyter & Co.

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Berlin W. 10 - Genthinerstraße 38

den 8. 6. 11. 1924.

Liebe Wiener!

Ich wäre dich sehr verbunden, wenn du  
über meine Arbeit im Annals of Math. 21, 157-165,  
1920 für das "Jahrbuch" kurz berichten würdest wolltest.  
De' Bericht ist mit den möglichsten Gründen  
sehr wichtig

Th Den:

Z. Lichtenstein

Meinen Brief wirst du  
wohl erhalten haben. Viele Grüße an der Frau  
und Alle. Sein Name habe ich vergessen



Walter de Gruyter &  
Berlin M. 10  
über den Thiergartenstrasse 38

Jahrbuch  
Fortschritte der Mathematik  
Prof. Dr. L. Lichtenstein.  
Klein



Postkarte

Prof. Dr. Norbert Wiener  
Massachusetts Institute of Technology  
U.S.A.  
Vereinigte Staaten  
der Nord-Amerika  
Massachusetts  
U.S.A.

There is no need to make the review long. The only other thing is this — please don't use any symbols which our printer will have difficulty over. You see, I am assuming you will be good enough to review the monograph. The Editor says he would like the review ~~not~~ to reach him not later than the last week in January, 1926.

I hope everything goes well with you, + with your parents + sisters. I have myself had a very thin time this year, + have indeed only just got out of bed after being there for about 2 months. I have been away from my work at the University for two-thirds of the present academic year, + ought to have been away

The University of Sydney

Nov 11, 1925

My dear Wiener,

I am sending you separately by this mail a monograph on Mathematical Logic which I should be immensely grateful if you would review for our locally-produced journal. As you will see, it is by a fellow-citizen of yours, + you have already perhaps seen it. I know of no one more competent to review it than you, so telling our editor so he asked me if I would ask you to do it. So I am sending it along. You can review it at any length you like, though

My wife joins with me in sending  
kindest remanances to Professor & Mrs  
Wener, your sister, & yourself.

Yours sincerely

B. Muscio

The remaining third. I seem to have  
had a somewhat complicated  
derangement of most of my organs,  
& haven't got them into their proper  
arrangement even yet. But I think I  
am definitely on the up-grade, &  
hope to be quite ready for work again  
next March, when the new academic  
year begins. Fortunately, my wife  
has been & is quite well.

You will realize that I haven't  
much news just now. It is a  
long time since I have done any  
serious thinking - at least it seems so:  
As for my reading, well, it has  
consisted chiefly of detective yarns for  
weeks!

es ist ein kleiner Paris." - Nur,  
dass es <sup>dort</sup> ~~stets~~ keine Avenue  
de la grande Armée, hier keine  
Messe gab. Nächsteres Jahr hoffen  
wir London zu erreichen, und unterwegs  
ein Weilechen in Paris zu bleiben. —

Lieber Norbert, freue mich sehr, dich  
und alle Wiener, die kommen, wiederzu-  
sehen. Deine Arbeit erscheint in 8 Tagen.

Ist also anzunehmen, dass die für  
ein helles Jahr nach Göttingen kommt.  
Ich bin mit ~~verschieden~~ Sachen beschäftigt,  
seit gestern mit der <sup>exakte</sup> Theorie der Gestalt  
der Kometen (genüge Zahlen von Roche)

Herschel'sche Grinde da um bei den

dem Leon

Leipzig, d. 30. 11. 25

Lebe, Norbert,

Mein herzlichster Beileid zu  
dem ersten Misserfolg auf deiner  
wissenschaftlichen Laufbahn! Es  
wird zu schön gewesen, Kärnen ein-  
mal Astronomie und Meteoro-  
logie zusammen; — Es hätte nicht  
sein sollen! Empfalle jetzt, was  
den ersten Wissensheften abzu-  
rechnen und sich andern Gebieten zu-  
wandeln. Übrigens ohne lange zu  
warten. Du gedenbst gar nicht wie

schnell man 31, 32.. 36 wird.  
Und die ist man plötzlich für  
sehr junges Blut zu alt und  
~~für doch~~ <sup>für den</sup> nicht alt genug, um sich  
für eine 32-jährige Schönheit zu ent-  
zücken (zu verzücken). Schließlich  
lebte man mit 43 Jahren, wie  
Kerr Robert König in Münster  
(mein Nachfolger), ohne zu wissen  
wie eine Witwe mit zwei Kindern  
Aho, bedenke lieber Norbert, die  
Zege ist sonst!

Herrlichste Freudenbitten  
für dich bitte Batha von uns.

beiden! Ich habe gleich gemerkt, -  
dass ist ein ~~absolut~~, energische,  
Wesen: Viel Glück also! Und <sup>wie</sup> ein-  
mal viele Grüße an Alle (little  
Franklin geht in Vergessenheit).  
Hör' ~~an~~ sie' mal, alle Wiener  
miteinander. Wir waren mit Mrs.  
Lichtenstein 5 Wochen in Paris.  
Beraubt, épuis, ravis, enchan-  
tés! Ein Wamsler von einer Stadt.  
Die Kapitale der Welt. - Ich  
bin gestern stolz darauf. Professor  
in Leipzig zu sein, wo doch Goethe  
schrieb: Mein Leipzig lob ich mir,

d. 30. 11. 25

lieber Norbert, noch ein Wort.  
Grüße doch sehr schon die beiden  
Graustein's und frage ihn, wie  
weit er mit seinen Referaten ist.  
Ich wollte doch eine Besprechung  
des Buches von Eisenhart von ihm  
bekommen! thun Orgosol, bitte,  
grüße sehr schon. - Wie steht du  
jetzt mit Hirschhoff?

Viele Grüße  
zu seinem

L. L.

[Richtenstein]

Weitere Summationsverfahren sowie die Theorie  
der Parseval'schen Formel hatte ich mir vor-  
genommen, noch zu behandeln. Da Sie  
dieses letztere Problem in so glänzender  
Weise erledigt haben, werde ich wohl keinen  
Autoren raten, darauf zurückzukommen.

Nehmen Sie rechtliches mein herzlichsten  
Gruß und wünsch zu Ihren Erfolgen einer  
den Standort einer aufrichtigen  
Wertstätigung

Sehr sehr ehrerbietig  
Ihr sehr ehrerbietigster

Franz Hahn

Wien 13. XII 1925.

Hochgeehrter Herr Kollege!

Vorgestern erhielt ich vom Verleger des neuers  
Heft der Mathematischen Zeitschrift zuge-  
sandt, das Ihre Arbeit „On the repre-  
sentation of functions by trigono-  
metric integrals“ enthält. Ich bin  
aufs freundlichste überzeugt, dass Sie  
seinen und weittragenden Resultaten,  
zu denen Sie gelangt sind, auch be-  
gleitendeinmale Sie davon aufs bestlichte.  
Da Sie freimüthig die kurze Natur  
liche meines Summations-Vorlesung  
zitieren, so sehe ich, dass es Ihnen  
bekannt ist, dass auch ich mit  
mit diesem Gedankenkreise befreit  
habe. Meine aufrichtige Freude über  
Ihre Ergebnisse wird dadurch in keiner

Weise beeindrückt, denn unser Streben ist die Förderung der Wissenstaf, und will die Beprägung persönlicher Eitelkeit. Ich vermute, dass es Sie interessieren wird, wie es um meine eigenen Arbeiten in diesem Gebiete steht, und erlaube mir daher Ihnen mitzuteilen, dass zwei Abhandlungen mich nicht im Drucke befinden. Die eine ist fertig gestellt seit meinem Innsbrucker Vortrag (September 1924); ich habe sie mit ganz geringfügigen Änderungen im September 1925 an Prof. Nordean geschickt als Beitrag für die Mittag-Leser-Festchrift der Akademie zu erhalten. Sie kommt, so wie mein Innsbrucker Vortrag, nun in dem Falle, dass das Integral  $\int_{-\infty}^{\infty} e^{-x^2} dx$  ein gewöhnliches Stieljes-Integral ist eine bekannte unwillkürliche die Fläche, unter welchen Maßnahmen dieses Integral den Funktionenwert fix darstellt. Einige Beobachtungen zu Ihrer Arbeit sind sicher vorzunehmen und gewiss viele meine Resultate nur Spezialfälle

der Ihren. Eine Abänderung meines Arbeit ist natürlich nicht mehr möglich, ich werde mich begnügen müssen, in einer bei der Korrektur einzufügenden Fußnote auf Ihre Abhandlung hinzuweisen. Eine zweite Abhandlung habe ich in letzter Zeit fertig gestellt, ihren Entwurf am 27. XII in der Wiener Mathematischen Gesellschaft vorgebracht, die ich seit selbst am 3. I. 1926 der Wiener Akademie der Wissenschaften vorgetragen, über den Entwurf dieser Arbeit möchte Sie bei Ihnen keine weitere Tatkraft angabe gewährend untersuchen. Auch hier habe ich mich auf den Fall der Korrigatur gegen den Funktionenwert fix, beschrankt. Das Mittel, mit dem ich arbeite, schenke mir etwas aus, als die Ihren, und soweit ich in der neuen Zeit, seit ich Ihre Arbeit erhalten habe, sehen kann, sind auch meine Resultate nicht engster in Ihre Arbeit enthalten, wenn auch gewiss in sehr naher Beziehung dazu. Ich werde mir gestatten, Ihnen die Korrekturabzüge verfügbare habe, nach Ihnen zu senden.

Dans le cas des points irréguliers, on a nécessairement

$$\lim_{P \rightarrow 0} \frac{G}{4\pi P^2} = 1$$

J'introduis alors la notion de capacité, en évitant de faire appel à des notions qui peuvent ne pas être familières à tous sur l'intégration. Cette notion est acquise dans tous les cas où l'on peut appliquer la méthode de Fredholm. Elle s'applique à tous les cas si l'on remarque qu'une dilatation du système des conducteurs envisagés en aurait la capacité'. De toute façon, on opère un prolongement fonctionnel.

Je démontre alors ce théorème :

Pour qu'un ensemble soit impropre, il faut et il suffit qu'il soit de capacité nulle.

Soit  $\mathcal{E}$  un ensemble frontière.

La notion de capacité permet aussi d'établir un théorème de 1<sup>re</sup> espèce, relatif aux propriétés limites de  $F(P)$ , en liaison avec  $f(Q)$ . Voici ce théorème

Soit le domaine  $S_2$  de frontière  $\mathcal{E}$ ; soit  $f(Q)$  donnée sur  $\mathcal{E}$ . Il existe une fonction harmonique et bornée  $F(P)$  et une seule telle que,  $\varepsilon$  positif étant arbitrairement choisi, l'ensemble des points de  $\mathcal{E}$  où une valeur limite de  $F(P)$  ne serait pas inférieure sortirait de l'intervalle  $[f(Q) - \varepsilon, f(Q) + \varepsilon]$  soit de capacité nulle.

Je ne démontre pas que l'ensemble des points irréguliers (qui n'est pas fermé) soit de capacité nulle. Pour les ensembles non fermés, je remarque qu'on peut définir une capacité intérieure et une capacité extérieure, alors la capacité intérieure de l'ensemble des points irréguliers est nulle.

Je pense que ce court aperçu vous montrera la nature des idées et vous fera déjà pressentir les démonstrations.

En souhaitant que la future année nous donne encore l'occasion de nous voir et de causer mathématiques, je vous prie d'accepter mon très amical salut.

G. Bouligand

Poitiers, le 26 décembre 1925

Mon cher ami

Je suis rentré de Cracovie depuis une dizaine de jours.

Toute ma petite famille s'unit à moi pour vous offrir les meilleurs souhaits en 1926, pour vous et pour les vôtres.

Mon séjour en Pologne près de M. Zarenba a été particulièrement agréable.

J'ai eu grand plaisir et aussi grand profit à donner à des jeunes gens possédant déjà une bonne formation mathématique un enseignement sur les fonctions harmoniques et sur le problème de Dirichlet.

A l'heure actuelle, le fascicule du Mémorial Mathématique que je prépare sur ces questions est à l'impression et M. Villat m'a écrit qu'il passerait à la composition, l'un des tous premiers. D'autre part, les Annales de la Société Mathématique Polonaise ont recueilli la partie de mon enseignement qui se rapporte au principe de Dirichlet.

Je vais vous en résumer dès maintenant les grandes lignes, en attendant que j'ait le plaisir de vous adresser un exemplaire de ce travail.

Le problème de Dirichlet est une question d'analyse fonctionnelle, la solution dépendant à la fois

1<sup>o</sup> de l'ensemble frontière  $\mathcal{S}$  du domaine  $S_2$

2<sup>o</sup> de la fonction continue  $f(Q)$  donnée sur  $\mathcal{E}$ .

La méthode employée sera une méthode de prolongement fonctionnel, qui se développe à l'aide des étapes suivantes

1<sup>o</sup> Le problème est régulièrement résoluble pour les domaines polycubiques (pour lesquels il se présente comme limite d'un pré-problème de Dirichlet, relatif à une fonction potentielle de réseau).

2° Tout domaine  $\Omega$  est limite d'une suite  $\{\Omega_k\}$  de domaines non décroissants pour lesquels il y a résolubilité régulière (p. ex. de domaines polycubiques). Dans le cas où  $f(Q)$  est l'ensemble des valeurs  $\overset{\text{prise}}{\rightarrow} \Sigma$  par un polynôme  $F(P)$ , le théorème fondamental de Wiener sur

l'existence de la sol. du prob. de Dir. généralisé se démontre immédiatement en remarquant que  $F(P) = \text{différence de 2 polynômes à Laplace positif}$  [l'indépendance de cette solution n'a vis du choix d'une  $F(P)$  continue dans  $\Omega + \Sigma$ , réduite à  $f(Q)$  sur  $\Sigma$ , et du choix des  $\{\Omega_k\}$ , résulte immédiatement de l'examen de l'hypothèse  $f(Q) = 0$ ].

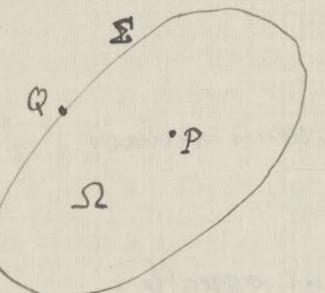
3° Toute fonction  $f(Q)$  continue sur  $\Sigma$  est la limite d'une suite de fonctions de la catégorie précédente, et ailleurs uniformément atteinte. Le théorème de Wiener est donc général.

4° Toute fonction inférieure  $\Phi(P)$  [au sens d'O. Perron] relative à  $f(Q)$  est  $\leq F(P)$  (solution du p. D. gen.)\*. Donc  $\Phi - F$  est une fonction inférieure relative à  $f(Q) = 0$ . Donc  $F$  est la borne supérieure des fonctions inférieures. Contre-partie. - D'où le théorème de Perron-Wiener.

Le théorème d'existence de Wiener et le théorème de Perron-Wiener sont des théorèmes de 1<sup>re</sup> espèce, c'est-à-dire vérifiés pour tous les ensembles frontières  $\Sigma$  de domaines ouverts  $\Omega$ . Nous employons cette terminologie pour les distinguer de théorèmes (dits de 2<sup>e</sup> espèce) qui exigent qu'on ait préalablement débarrassé la frontière d'ensembles appelés provisoirement ensembles impropre.

Soit un domaine  $\Omega$ , sa frontière  $\Sigma$ . Soit  $G(A, P)$  sa fonct. de Green pour quelque point  $A$  intérieur. Appelons  $\Delta_\lambda$  le domaine partiel de  $\Omega$  défini par  $G(A, P) > \lambda$ . Ce domaine est un domaine ouvert. Soit  $\sigma_\lambda$  l'ensemble des points de  $\Sigma$  qui lui appartiennent, et soit  $\sigma$  la limite des  $\sigma_\lambda$  lorsque  $\lambda$  tend vers zéro. On remplace le problème de Dirichlet pour  $(\Omega, \Sigma)$  par le même problème pour  $(\Omega + \sigma, \Sigma - \sigma)$ . On peut voir que  $\sigma$  est la partie impropre de  $\Sigma$  (on

\* Pour le démontrer, former la suite de Wiener pour  $\Phi(P)$  et pour  $F(P)$ , avec les  $\{\Omega_k\}$



montre que cette notion n'est nullement relative), que  $\Sigma - \sigma$  est la frontière réduite.

Les théorèmes de suite copiée sont relatifs aux propriétés limites de la solution  $F(P)$ , en relation avec les valeurs  $f(Q)$ . Ils sont vrais dans le cas d'une frontière réduite.

1° La fonction de Green  $G(A, P)$  a sa plus petite limite = 0 en chaque point de  $\Sigma$ .

Invers' une fonction  $G(A, P)$  telle que  $G - \frac{1}{AP}$  soit harm. et telle que

$$\lim_{P \rightarrow Q} G = 0$$

se réduit à la fonction de Green.

2° Si  $F(P)$  est surharmonique, la p. g. lim. de  $F(P)$  en chaque point  $Q$  de  $\Sigma$  =  $f(Q)$  giv. une  $F(P)$  harm. dans  $\Omega$  dont la p. g. lim. en chaque point  $Q$  vérifie cette condition se réduit à  $F(P)$ .

3° Soit une suite de points  $\{P_k\}$  tendant vers  $Q$ , telle que  $\lim G(A, P_k) = 0$ . Il en est encore ainsi quand on remplace  $A$  par tout autre point intérieur. - En outre, pour une telle suite  $\{P_k\}$ , on a toujours  $\lim F(P_k) = f(Q)$ .

Pour établir ces théorèmes, j'ai souvent utilisé la relation

$$F(P) = F(P) + \frac{1}{4\pi} \int_{\Sigma} \nabla F(M) \cdot \nabla G(M, P) d\omega_M$$

qui s'applique toujours quand  $F(P)$  est un polynôme : les propriétés limites établies dans ce cas s'étendent alors facilement au cas général.

L'énoncé 3° fournit immédiatement ma condition de régularité\*, nec. et suff<sup>ce</sup> : annulation de la fonction de Green, citée dans ma Note aux C. R. du 23 mars 1924 et dont j'avais d'abord donné une démonstration plus compliquée. J'ai repris en le simplifiant, le principe du raisonnement, qui conduit à un critère voisin de celui de Lebesgue, mais plus général :

Pour qu'un point  $Q_0$  de  $\Sigma$  soit régulier, il faut et il suffit qu'on puisse trouver, dans la portion  $\Omega_p$  de  $\Omega$  intérieure à une sphère de centre  $Q_0$  et de rayon  $p$ , une fonction harmonique  $H(P)$  qui soit  $\geq 0$  dans  $\Omega_p + \Sigma_p$  et qui tends vers zéro en  $Q_0$ .

On envoie :

{ il faut et il suffit que la fonct. harm. attachée à la valeur 0 sur  $\Sigma_p$   
tende vers 0 quand  $P \rightarrow Q_0$ .

1 sur la portion sphérique de la frontière de  $\Sigma_p$

Consequences: la propriété de régularité est purement locale  
Régularité et irrégularité a fortiori.

CARTE POST

Cher monsieur

Merci de vos souhaits et  
meilleurs vœux de Nouvel  
An à votre épouse

Cela Valley Poussin



PROFESSOR HORST WIEFER  
OUVAIN

Institute of Technology of  
Massachusetts

Boston (Mass)  
Etats-Unis d'Amérique



#### 4. LOUVAIN — Château d'Heverlé

*Construit au commencement du XVI<sup>e</sup> siècle par les ordres de Guillaume de  
roy, Duc de Soria, Seigneur de Chièvres (qui fut le précepteur de Charles-Quint)  
ce bâtiment se compose d'une immense façade irrégulièrement percée par des  
hautes fenêtres, deux tours carrées avec toits aiguës terminés en poivrières. Le  
parc est traversé par la Dyle.*

F W. Reproduction interdite



Mathematisches Institut  
der Universität

Göttingen, den 15. August 1925.  
Weender Landstr. 2

Lieber Kollege Wiener!

Als Leiter des Mathematischen Institutes möchten wir Ihnen noch einmal herzlich für Ihren so ausserordentlich wertvollen und interessanten Vortrag danken und überhaupt unserer Freude Ausdruck geben, dass Sie in diesem Sommer einige Zeit in Göttingen gewesen sind und mit einer Reihe der dortigen Fachgenossen so wertvolle Anregungen ausgetauscht haben. Die Untersuchungen mit denen Sie beschäftigt sind scheinen uns von sehr grosser Bedeutung; nicht zuletzt für die Anwendungen der Mathematik, wie wir sie gerade in Göttingen zu pflegen und zu fördern hoffen. Wir würden es daher mit ganz besonderer Freude begrüssen, wenn es Ihnen möglich wäre, bald einmal für eine etwas längere Zeit nach Göttingen zu kommen und in engeren Kontakt mit unserem Kreise zu treten. Wenn wir Ihre Andeutungen richtig verstanden haben, so besteht einige Hoffnung, dass Sie ein grösseres amerikanisches Stipendium für einen Aufenthalt in Europa bekommen, und wir möchten Sie hiermit herzlich einladen, in diesen Falle vielleicht während des nächsten Sommersemesters hier in Göttingen eine Reihe von Vorträgen über die Gegenstände Ihrer letzten schönen Arbeiten betr. verallgemeinerte Fourier'sche Analyse zu halten. Sie können sicher sein, dass Sie nicht nur Studenten sondern auch viele Dozenten als Zuhörer haben werden.

Wenn wir durch irgendwelche Gutachten zur Erleichterung der Erlangung dieses Stipendiums beitragen können, so bitten wir Sie, uns das wissen zu lassen, bzw. die betreffenden Instanzen auf diese Möglichkeit hinzuweisen.

Mit freundlichen kollegialen Grüßen

D. Hilbert. R. Courant.

Mathematisches Institut  
der Universität

Göttingen, den 11. November 1925.  
Weender Landstr. 2

Herrn

Prof. Dr. Norbert Wiener,

Massachusetts Institute  
of Technology.

Cambridge. Mass.

Lieber Wiener!

Herzlichen Dank für Ihren Brief vom 28.Okt. Wir freuen uns ausserordentlich über Ihre endgültige Zusage, und ich besonders verspreche mir von Ihrem Aufenthalt hier sehr viel. Hoffentlich werden Sie nicht nur im Sommersemester sondern auch noch einen Teil des Wintersemesters hier sein können.

Ich bitte Sie um Erlaubnis, Ihre Vorlesungen hier ganz offiziell in dem offiziellen Vorlesungsverzeichnis ~~für~~ <sup>als</sup> Gastvorlesungen mit aufnehmen zu dürfen und schlage Ihnen den Titel vor: Ueber harmonische Analyse periodischer und nichtperiodischer Vorgänge. Sollten Sie nicht einverstanden sein, dann senden Sie bitte ein Telegramm. Das Vorlesungsverzeichnis muss ungefähr Weihnachten zusammengestellt werden.

Ich habe noch eine Bitte bzw. eine Frage: Können Sie mir eine kleine Remington-Reiseschreibmaschine <sup>F</sup> mitbringen? Vielleicht äussern Sie sich noch einmal zu diesem Punkt.

Ihre Mitteilungen über Ihre Arbeiten haben mich sehr interessiert. Ich hoffe, im nächsten Semester viel von Ihnen zu lernen.

Viele herzliche Grüsse

Ihr

R. Lewinck.

F...dort ziemlich billig besorgen und dann hierher...

Mass. Inst. Tech.,  
November 29, 1925.

Dear Fritz:

I am glad to hear you are going back to college. You are having much more interesting hikes than I can get around here. If you stay out there any length of time, why not join the Sierra Club?

If you ever run across Bateman of the Physics Department of the California Institute of Technology, remember me to him. I met him at Southampton last summer.

Professor Max Born is here now from Goettingen. He is lecturing on quantum theory. He has asked me to collaborate with him. He is very nice to me.

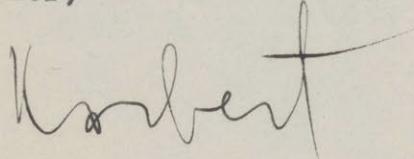
Did you see anything of the shower of meteorites a few weeks ago? It attracted quite a deal of attention in this neighborhood.

Pasadena is quite a scientific center. Millikan of Chicago is out there now. If you run into any items of scientific news from the neighborhood, let me have them.

The family is very well. The baby is gaining rapidly. Bertha seems to be having a very nice time.

More power to you!

Your brother,

A handwritten signature in cursive ink, appearing to read "Herbert".