

192

CORRESPONDENCE

April 15 - 30, 1954

N. WIENER · MC 22

15 April 1954

(2)

Dear Dr. Wiener:

As you state in your letter of April 12, you do not wish to correspond on the subject and I expect no reply from this letter.

However, your reasons were not what I would expect from a scientist. Nevertheless, I thank you for your straight forward answer which brought up invention and scientific reputation.

In all my correspondence on this computer proposal over the last ten years, I had never thought of monetary matters or reward nor have the people I have written too!!

I am writing you again only because I am worried at your attitude (which appears excessively commercialism^{*}) which I can see as more harmful to the spread of useful ideas than even the unpopular forms of McCarthyism. I say this, again only because I have tried to develop this idea on my own time and my own expense without thought of gain while you brought in commercial fees.

Thanking you for your time
Paul A. Baldwin

* As you say we are strangers and I could conceivably be trying to take advantage of you.



THE WORCESTER FOUNDATION FOR EXPERIMENTAL BIOLOGY

Shrewsbury, Massachusetts

April 15, 1954

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

Dear Dr. Wiener:

Thank you for your April 12th letter in which you gave an outline of your talk on statistical mechanics. That was exactly the information I needed.

The meeting will be at 8:00 P. M. on Monday, May 3rd, at the Worcester Foundation. We should like very much to have you as our guest at dinner, which will be at about 6:00 P.M. There will be several other people including Dr. Hoagland, at this dinner.

Would you let me know, at your convenience, whether you plan to drive to Shrewsbury or whether you intend to take a train? If the latter, I shall meet you at the Worcester station. Also, do you plan to return to Cambridge that night or do you wish to remain overnight here?

Sincerely yours,

Harold Levy
Harold Levy

HL/r

4/21/54
phone call
Mrs. Wiener:

*Mrs. Wiener will
drive
over
but
back
after talk*

[ms 4/21/54]

NATIONAL SCIENCE FOUNDATION
WASHINGTON 25, D. C.

April 15, 1954

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

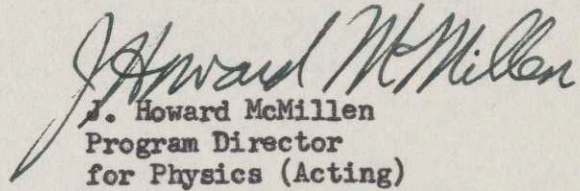
Dear Doctor Wiener:

We are enclosing proposal P-1032, entitled "Physics and Information Theory", submitted by Dr. Leon Brillouin, Columbia University, for your evaluation.

Also enclosed are a guide sheet, a rating sheet, and a return franked envelope.

Thank you for your cooperation.

Sincerely,


J. Howard McMillen
Program Director
for Physics (Acting)

Enclosures (4)

(1)

[Ans 4/20/54]

WHO'S WHO IN WORLD JEWRY

251 WEST 101ST STREET NEW YORK 25, N. Y. UNIVERSITY 5-8818

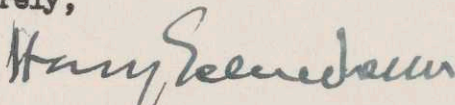
April 15, 1954

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

Dear Dr. Wiener:

Please accept our thanks for your letter of April 13th stating your position with regard to the inclusion of your biography in our forthcoming publication. Although we do not agree with, we respect your views and shall of course not include a sketch of you.

Sincerely,



Harry Schneiderman
Chairman, Editorial Board

HS/js

April 15, 1954

Mr. K. R. Geiser
Building 37, Room 411
General Electric Company
One River Road
Schenectady 5, New York

My dear Mr. Geiser:

First, the second e in Cybernetics is long.

Secondly, while the field of Cybernetics has been and is being extended to cover a larger and larger range of purposive and purposive-seeming activities in control and communication, I do not think any radical change is called for.

Thirdly, I've no objection to the working definition of Cybernetics that you give. In new fields, the best rule is that of Humpty Dumpty in Through the Looking Glass -- Pay the words extra and make them mean what you want.

Sincerely yours,

Robert Wiener

NW:bbc

April 15, 1954

Mr. K. B. McCutcheon
2160 Cornwall Street
Regina, Sask., Canada

My dear Mr. McCutcheon:

I am afraid that I have no extra copies of my papers on purposefulness on hand.

I did not at any time intend my treatment to be a full evaluation of the complex of purpose in the higher levels of human activity. My intention was to show the existence of phenomena of purpose and its nature in the simplest cases we could conceive and what at present we could reduce to mechanism.

In complicated phenomena, little good is done by the insistence ~~that~~ the relevant idea be developed in the first instance in the most complicated cases.

The sorts of statements you make are only capable of analytical treatment after the simple instances have been reduced to some sort of order.

Sincerely yours,

Robert Wiener

NW:bbe

April 15, 1954

Professor Albert Pfluger
Bühnerstr. 7
Zurich 6, Switzerland

Dear Professor Pfluger:

I should be delighted to join in the anniversary volume for Professor Planchelet, and shall certainly give you a manuscript before the first of August.

Will you be kind enough to let me choose the title a bit later? I think it would be entirely in order if the paper concerned some of the integral equations which represent extensions of the work of Eberhard Hopf and myself, and which we solved by methods using the Fourier integral.

Sincerely yours,

Norbert Wiener

NW:bbc

[ms 5/31/53]

HALBERT L. DUNN
7631 FORT FOOTE ROAD, S.E.
WASHINGTON 22, D.C., U.S.A.

4/17/54

Dear Mr. Werner

In case you have not seen the enclosed editorial I enclose it for your interest. Your reference to "The fight with the devil" recalled it to mind.

I would not minimize the need for fighting against the forces of regimentation once thought in every way possible. But I do think that the battle will never be won broadly until a new positive philosophy is developed that is for all mankind and that we can live & die for because it is worth while. I don't

pretend to know the answers but I'm sure we
must struggle to find ^{them} ~~it~~ and that it must bring to
pass a new way of life that appeals to free minds.

Sincerely

Halbert L. Drum

Walking With The Devil

No honorable Administration can ignore the wave of public retching in response to the Stevens-McCarthy fiasco. The issue reaches far beyond the explanation of Secretary Stevens' surrender or the details of the Peress case. What is wrong cannot be cured by Mr. Stevens' apologia or an "agreement" to curb Senator McCarthy. Such an agreement would be about as reliable as an agreement with Hitler; indeed, it would resemble the glowing optimism of Neville Chamberlain at Munich, that it is possible to be reasonable with a fanatic. The question now is simply whether President Eisenhower will grasp his responsibility to speak out on behalf of that most fundamental of all American institutions, the country's self-respect.

The performance of Secretary Stevens is quite incidental in this larger problem. Mr. Stevens was weak when he should have been strong; and he failed to fulfill his own duty to champion the dignity of the military service. The issue is certainly not communism in Government, for no right-thinking person believes that Communists belong in Government. The reprehensible bullying of General Zwicker was symbolic of the evil. Actually, the atrocious treatment of a high Army officer at the hands of Senator McCarthy only dramatized what has been going on for a long time. The inquisition of Reed Harris last spring and the travesties by Cohn and Schine have been fully as revolting as the current case.

The real and inescapable issue is McCarthyism and the Administration's relation to it. The present case is merely the newest manifestation of a plague that has engulfed the country like a prairie fire. McCarthyism has humiliated the United States before its friends and debased its prestige before the world. Worst of all, it has begun to corrode every American institution.

Who now dares, without threat of smear, proclaim the traditional doctrine that a man is innocent until proved guilty? The inquisitor is now the prosecutor, judge and jury. The confusion and distortion over security risks in Government is the direct result of this corrosion. The Foreign Service has been sacrificed upon the altar of the false god, McCarthy. Now it is the military service. McCarthyism has succeeded in deflecting our attention from the real enemy in Com-

munist imperialism to the suspicion of our neighbors. This is the way Germany, and particularly the German army, went under Hitler.

It is said that President Eisenhower, though personally repulsed by this gangrenous infection, is advised that he must not tangle frontally with McCarthy unless he is sure he can win. In other words, the question of right or wrong is secondary. It is also said that the Republican Party needs McCarthy to win the elections this fall. Again, no question of right or wrong. This is a self-consuming doctrine.

President Eisenhower has had previous experience with a similar situation. That was in 1942 when, as General Eisenhower, he made an arrangement of convenience—reluctantly, without question—with the French collaborationist Admiral Darlan. At that time President Roosevelt cited what he said was a Balkan proverb that "you are permitted in time of great danger to walk with the Devil until you have crossed the bridge." Such an arrangement was defensible at the time because American and Allied lives were at stake. There is no such defense today. American institutions are at stake in quite a different context, and an alliance with the Devil is the way not only to defile these institutions but to lose the Eisenhower Administration's own soul.

The control of Senator McCarthy, it is true, is first of all a congressional responsibility. But it is hopeless to leave the matter there. There is only one man in the country with the stature and voice to speak out in clarion tones for the things decent Americans believe in. That is President Eisenhower himself. The bridge is here, and there can be no turning back. Nor can the monster be banished by a slap on the wrist.

Either the President must disavow, in the most unequivocal terms, McCarthyism and everything it stands for, or he and his Administration will be regarded by the public as having joined hands with it. We are confident that the President's every instinct is to do what is right. Now is the time, and perhaps his last chance, to do it and win the enduring respect of the country. For if he should elect to walk with the Devil, he will lose the support of millions of independent, fair-minded Americans of both parties who elected him as a spokesman of moderation; and he will walk alone.

"And I'd Still Like To See You Become President"



Sehr geehrter Herr Professor!

Mit großem Interesse habe ich Ihr ausgezeichnetes Werk "Mensch und Menschmaschine" gelesen, das in einer wirklich auch dem Laien verständlichen Weise die so brännenden Probleme der Menschheit behandelt und sie ihm in wissenschaftlich exakter Weise vor Augen führt. Diese Probleme einmal von der Seite beleuchtet zu sehen, war mir ~~unso~~ interessanter, als ~~sich~~ mich als Dichterin schon seit zwei Jahrzehnten beschäftigen. Auch ich richte in meinen Gedichten "einen Notschrei an alle, denen es um die Erhaltung des Menschen als menschliches Wesen zu tun ist", wie es in der Kritik heißt, die Ihrem Buche (das ich vom Information Center entliehen hatte) eingeklebt ist. Ich gestatte mir, eine Kritik über eine Dichterlesung von mir beizulegen, nur weil Sie daraus entnehmen können, in welcher Weise ich ~~zu den~~ Problemen Stellung nehme.

Da aber die Notschreie ~~aus~~ Gedichten noch viel weniger gehört werden, bin ich zur Prosa, u.z. einer Direktmethode, übergegangen. Ich füge die Abschriften eines Appells an die UNO samt Begleitschreiben bei zur gefälligen Kenntnisnahme. Ich habe erfreulicherweise beistimmende und ermunternde Antworten erhalten, so daß ich immerhin die Hoffnung hege, daß meine Idee, eine "Deklaration der Menschenpflichten" zu entwerfen, vielleicht doch noch Wirklichkeit werden kann. Ein Zusammenschluß aller Verantwortungsbewußten und Opferbereiten wäre schon dringend notwendig und hatte ich die Gelegenheit, aus einem Buche von James Keller "Du kannst die Welt verwandeln" von der "Christopher-Bewegung" Kenntnis zu erlangen. Ich habe bereits im Jahr 1946 von Süddeutschland aus, wo ich als Ausgewiesene weilte, versucht, Persönlichkeiten wie den Papst, Mrs. Roosevelt und Lord Churchill für eine weltumfassende Bewegung zu interessieren und versuche es seit meiner Rückkehr in meine Heimatstadt Wien, ohne daß es mir gelungen wäre, die Sache in Schwung zu setzen. Vielleicht wird von der Uno nun meine Idee aufgegriffen. - Eine Zusammenfassung aller bereits bestehenden Bewegungen in eine einzige große wäre aber gewiß vonnöten, bevor uns noch die Zukunft gänzlich durch Atomrauchpilzschwaden und Atomstaub verdunkelt ist. Fortschritt darf nicht zum Rück^sritt ausarten, den Menschen nicht entthronen und vernichten. Und wir sind durch die Maschine am besten Wege dazu. Unser Leben nimmt, trotz aller Humanitätsdurselei, (der grausamste Vernichtungswille paradoxerweise zur Seite steht) immer unmenschlichere Züge an. Ein Absacken ins Bodenlose - je tiefer, je höher wir steigen - ist kaum aufzuhalten, wenn wir uns in letzter Minute nicht selber im Sturze aufhalten.

Ich erhoffe mir von der Zusendung meines UNO-Appelles an Sie, sehr geehrter Herr Professor, vielleicht ein Aufgreifen und Propagieren der Idee einer rettenden Weltbewegung. Die Schaffung einer höchsten Instanz, welche das "Weltgewissen" verkörpert, übernational, wäre eine dringende Notwendigkeit. Ebenso wie eine einheitliche Leitung die die Vielheit in Eins zusammenfaßt.

Sie, sehr geehrter Herr Professor, durch Ihr obiges Buch kennengelernt zu haben, war mir ein Vergnügen. Ich begrüße Sie freundlichst.

Mit vorzüglicher Hochachtung

[aus 6/23/54] Maria Zwinz-Breyer

Aus dem Sänetten-Zyklus "O, M e n s c h !

Zu Formen all' das Chaos zu gestalten
in unsrer Innenwelt, sind wir berufen....
So, wie aus Nebel Seine Hände schufen
einst Welten, die geheimnisvolles Walten
verschiedner Stoffe im Zusammenhalten
entwickeln ließ von Stufen auf zu Stufen
im "WERDE LICHT!"... zu selbigen Behufen
gab **Gott** den Geist uns, daß wir im Entfalten
des Gottesfunken können hell erglänzen
als Sterne über allem Lebensrund...
doch wir bewerfen uns mit Feuerkränzen (des Geistes)
Verstandes gegenseitig brennend wund,
statt uns, einander helfend, zu ergänzen
in einem V Ö L K E R einigenden Bund!

Sopron 1943

Maria Zwinz-Breyer

Entwicklung inneren Gesetzes wäre
die höchste Pflicht des Menschen... das Gewissen
zu wecken, das nur d a n n sei Ruhekissen,
wenn Tun und Handeln deckt sich auch mit Ehre.

"Du sollst den Nächsten lieben ... Unrechts-Schwäre
ausschneiden... Recht zu tuen, sei beflissen...
dem Armen gib... den Schwachen schütz'...nicht missen
darf man an deiner Seele Größe, Hehre... "

Ein, durch die Ethik neugeschaffnes Eden
entstünde, ausgebaut schicksalsbewußt
im Schatten kläglicher Vergangenheit

mit Höchstverantwortung von jedem, für jeden: (für all' u.j.)
durch Tat und Worte ja im H e u t e fußt
das M o r g e n mit und o h n e Sicherheit.

Sopron 1944

Maria Zwinz-Breyer

Maria Zwinz-Breyer

Wien, den 16. XII. 1953
XIII., Elßberggasse 10

An das
Hauptquartier der Vereinten Nationen
New - York

In der Anlage gestatte ich mir, Ihnen einen Appell einzusenden!

"ENTWERFT EINE DEKLARATION DER MENSCHENPFLICHTEN!"

Ich wünschte, daß meine Anregung Gehör fände und Wirklichkeit werden möchte, denn es ist hoch an der Zeit, daß endlich Ruhe und Frieden in die Welt kommen, die Menschen zu sich selbst und zum N ä c h s t e r finden und e i n e Völkerfamilie bilden.

Dem "Jahrhundert des Kindes" müßte ein "Jahrhundert des Erwachsenen" folgen, in dem alles das Erlernte klug und weise zur Anwendung gebracht und alles das Zerstörte wieder aufgebaut wird, soweit dies überhaupt möglich ist, denn das "Jahrhundert des Kindes" hat sich leider auch durch Zerstören, Zerspalten und alles Zerlegen ausgezeichnet. Es hat auch den M e n s c h e n in seine Teile zerlegt, und e r müßte als erster wieder zu einem Ganzen zusammengefügt werden. Und da möchte ich auf eine Anregung zurückkommen, die ich in einem Schreiben an die hiesige Botschaft der U.S.A. am 25.VI.1953 ergehen ließ. Darin schlage ich vor, von den USA aus täglich eine Sendung in die Welt hinauszuschicken, die ich "Die Stimme des Gewissens" betitelt hatte, nun aber, damit der moralisierende Geschmack wegfällt, vorschlage, sie wie einen Weckruf hinauszusenden als "MENSCH! ERWACHE!"

Diese Sendung soll täglich, vielleicht sogar zu verschiedenen Tageszeiten, damit a l l e Gelegenheit haben, sie hören zu können, in die Welt gefunkt werden. Sprecher sollten Menschen aller Nationen und Volksschichten sein, deren Worte und Stimme fähig sind, in die Herzen der Zuhörer zu dringen. Denn d a s ist das Wichtige: daß das Innere des Menschen ergriffen wird, das in ihm Schlummernde, Scheintote oder auch noch nicht Erwachte geweckt wird; e r, der M e n s c h, der ja d e r Baustein ist, aus dem die neue Welt gebaut werden soll, e r muß zuerst zugehauen und s o gerichtet werden, daß er sich fugenlos einpaßt und ein festes Gebäude errichtet werden kann. N i e m a l s kann ein solches von Bestand sein, wenn nicht Übereinstimmung und Anpassung herrschen. Eine Befriedung, eine innere Befriedung, muß vorausgehen, eine Bereitschaft, sich einzuordnen in das Weltganze. Das Verantwortungsgefühl in jedem muß erweckt, ihm seine Pflichten der ganzen Welt gegenüber klar gemacht werden. Dank unserer welterschütternden Erfindungen ist der Nächste ja heute der N a c h b a r geworden, und dem müssen wir Rechnung tragen.

Wird in einer "Deklaration der Menschenpflichten" ein Ehrenkodex aufgestellt, der Geltung in der ganzen Welt bekommen muß, dann kann damit auch eine, durch die ganze Welt gehende Front der Anständigen gegen die Unanständigen gebildet werden. Nation, Rasse oder Klasse werden dabei verschwinden, die Empörung gegen das Unanständige, Korrupte, Gemeine, die verlogene Mentalität, wird sie verbinden. Inszenieren Sie so einen Feldzug gegen alles Niedrige und das Hohe im Menschen wird sich wieder aufrichten. Und d a z u soll eine "Deklaration der M e n s c h e n p f l i c h t e n" helfen.

Mit den besten Wünschen für ein Gelingen, für ein gesegnetes Weihnachtsfest, das bald der ganzen Menschheit werde, und ein glückliches, erfolgreiches Neues Jahr begrüße ich die Vereinten Nationen!

Maria Zwinz-Breyer e.h.

VEREINTE NATIONEN

ENTWERFT EINE "DEKLARATION DER MENSCHENPFLICHTEN!"

Die 5-Jahrfeier des "Tages der MENSCHENRECHTE" wird heute begangen. Müste es nicht auch einen "Tag der MENSCHENPFLICHTEN" geben? Denn o h n e Pflichten k e i n e Rechte. Und da wir a l l e die Menschenrechte für uns in Anspruch nehmen, müsten wir auch a l l e die Menschenpflichten übernehmen, u.z. im selben universellen Sinne, wie die Menschenrechte gedacht sind. Als erstes Gebot dieser Menschenpflichten müste stehen:

"DU mußt überall und jederzeit für die Menschenrechte eintreten und für deren Einhaltung dein Möglichstes tun".

Vom bloßen Wollen und Reden haben wir nichts, es muß es jeder durch die Tat beweisen. und d a ß es zur Tat kommt, müste ein gewisser moralischer Druck ausgeübt werden; und das kann nur geschehen, wenn wieder ein Ehrenkodex aufgestellt und für Durchführung durch eine entsprechende Gewalt gesorgt wird. Diese Gewalt muß die öffentliche Meinung sein, und an der UNO läge es, diese in der ganzen Welt mobil zu machen.

Ich schlage daher vor: Die Errichtung eines neuen Ehrenkodex, in dem die ewigen Werte wieder an den, ihnen gebührenden Platz gesetzt sind, und andere, den heutigen Anforderungen genügende, hinzugefügt werden. Eine Gesetzestafel muß alle "DU SOLLST"; und eine andere alle "DU SOLLST NICHT" enthalten. Denn leider wissen schon so viele nicht mehr was nicht erlaubt ist, was gegen Moral, Anstand und gute Sitten verstoßt. Es muß also ganz klar und deutlich darin zum Ausdruck gebracht, und auch der notwendige Nachdruck unzweideutig allen vor Augen geführt und fühlbar gemacht werden.

Ideen und Gedanken dazu werden aus aller Welt kommen und Berufene können sie dann zu Geboten entwerfen, ja vielleicht sogar zu Gesetzen, die verankert werden können und eine Gewähr für die Durchführung bieten.

Ein Ausbau des inneren Gesetzes im Menschen ist bereits eine unabdingbare Notwendigkeit geworden und ist es Aufgabe der UNO an sie heranzugehen und ihr kraft ihrer Stärke und weitweiten Umspannung d i e Dynamik zu geben, die für eine solche Bewegung zum Gelingen notwendig ist.

Wien, den 10. Dezember 1953

Maria Zwinz-Breyer, Wien
XIII., Elßlergasse 10

Nachtrag: Dieser Appell samt Begleitschreiben wurde außer an die UNO an Papst Pius XII., an die Regierungschefs der vier Großmächte, sowie an verschiedene in- und ausländische Organisationen und - Persönlichkeiten gesandt.

Das Echo war sehr erfreulich, anerkennende und zustimmende Antworten liefen ein, so von der UNO Sitz Genf, daß mein Appell der kompetenten Stelle überwiesen werde und man ihm alle Aufmerksamkeit widmen werde, die er verdiene.

Mein Appell ist auch an alle gerichtet, die gleichen Sinnes sind wie ich mit der Bitte, die Idee weiterzuverbreiten und ihr zur Durchführung zu verhelfen.
d.O.

Springfield State Hospital
Department of Psychology
Sykesville, Maryland
April 20, 1954

Dear Dr. Wiener,

As a partial fulfillment of the requirements for the Ph. D. degree in clinical psychology, I am working on a dissertation involving the concepts of information theory. Hence I would appreciate it very much if you would send me a reprint of your article, Speech, language, and learning, which appeared in the Journal of the Acoustical Society of America (1950 22).

Sincerely yours,

Mark L. Isaacs.

Mark L. Isaacs

4/23/54

Mr. Brillouin is a leading physicist in the world, and one of the more important thinkers on matters of communication.

His project is well-thought-out, and I see every reason to back him.

Prof. of Mathematics

April 20, 1954

April 20, 1954

Mr. Cornelius D. Thomas
P. O. Box 462
Chapel Hill, North Carolina

My dear Mr. Thomas:

Your letter finds me in poor health
and not able to take up new work.

Sincerely yours,

Norbert Wiener

NW:bbc

BY AIR MAIL
PAR AVION
AIR LETTER
AÉROGRAMME



Professor W. T. Martin,
Mathematics Department,
M. I. T.
Cambridge 39,
Massachusetts

← Second fold here →

Sender's name and address: D. K. Ghosh,
1, Glenlyon Road,
Eltham Park,
London S. E. 9

IF ANYTHING IS ENCLOSED THIS LETTER
MAY BE SENT BY ORDINARY MAIL

← To open cut here

Professor W.T. Martin,
Mathematics Department,
M. I. T.

Dear Professor Martin,

Thank you very
much for your letter dated April 14.

I am sorry to note that there
are no means of getting any financial
help so that I can spend a
year at M.I.T. I am sure you
appreciate my difficulties. Perhaps
sometime later I will be able
to support myself and fulfil my
ambition. I am only 21 now.

In the meantime I will try
to make the best use of my
time and ~~try~~ to acquire knowledge
in the proper direction. One can,
I suppose, always learn and advance
one's knowledge.

Please convey my sincere thanks
to Professor Norbert Wiener.

Thanking you again for the
interest you have shown.

1, Glenlyon Rd,
Eltham Park,
London, S.E.9

Very sincerely yours,

~~D. K. Ghosh~~

(D. K. Ghosh)

First fold here →

THE RAMO-WOOLDRIDGE CORPORATION

8820 BELLANCA AVENUE

LOS ANGELES 45, CALIFORNIA

April 21, 1954

Professor Robert Wiener
Department of Mathematics
Massachusetts Inst. of Technology
Cambridge, Massachusetts

Dear Professor Wiener:

Will you please send me a copy
of your paper entitled "Information Theory" presented
at the 1954 I.R.E. National Convention in New York.

Very truly yours,

E. M. Grabbe

E. M. Grabbe
Computer Systems Division

THE RAMO-WOOLDRIDGE CORPORATION

EMG:mw

*no such
paper*

4/23/54

I have been reading over this proposal, and there is certainly something in it, and it is a valid subject of investigation. I do not find it startlingly new to revise our notion of what the individual unit of writing or typesetting should be, because it is already so various in different languages and different systems of writing.

If the subject is taken up on a broad basis and if the authors try to make themselves familiar with what has been done not only in our own system but in widely diverse systems such as the Chinese, various Indian, or Semitic alphabets, I think something very valuable can come of the work.

I am in favor of the project, but not as overwhelmingly in favor as I have been, let us say, of Brillouin's project and other similar work, either involving a greater novelty of idea, or being done by people who, by their past work, have shown a considerable ability to absorb new ideas. In other words, it ought to go ahead, but I would not give it absolutely first priority. Of your ratings, excellent is too high, and average is too low, so let's call it good.

Prof. of Mathematics

April 21, 1954

April 21, 1954

Mr. Harold Levy
The Worcester Foundation
Shrewsbury, Massachusetts

Dear Mr. Levy:

Mrs. Wiener plans to drive Professor Wiener over to Shrewsbury in time for the dinner at 6:00 pm. Let me remind you of what you perhaps already know, that Professor Wiener is a vegetarian.

They will not remain overnight, but will return after the lecture.

Sincerely yours,

Mrs. James Cole
Secretary to
Professor Wiener

[ans 5/23/54]

" SCIENTIA "

Asso, 22 Avril 1954

Via Roncaglia, 4 - ASSO (Como)

Cher Monsieur,

je vous remercie vivement de votre aimable réponse, tout en regrettant beaucoup que vous ne puissiez me laisser espérer votre article pour une date prochaine. Mais connaissant votre amabilité et votre sympathie pour notre périodique, j'espère vivement que vous ferez tout votre possible pour ne pas renvoyer à une époque trop éloignée la rédaction de votre article. Nous vous en serons bien vivement reconnaissants.

Je vous renouvelle, cher Monsieur, l'expression de mes sentiments les plus distingués et les plus cordiaux.

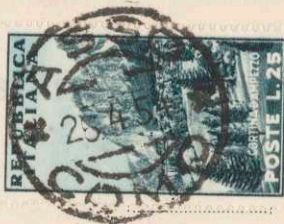
P. "SCIENTIA,"



(Dott. Paolo Bonetti)

"SCIENTIA"

Rivista internazionale di sintesi scientifica
Revue internationale de synthèse scientifique
International Review of scientific syntheses
Internat. Zeitschrift für wissenschaftliche Synthese
Revista internacional de síntesis científica



Via Roncaglia, 4 - ASSO
(Como, Italie)

NICOLA ZANICHELLI, Bologna

HERMANN & C. ie, Paris

ATLAS PUBL. & DISTR. Co. Ltd., London

STECHERT - HAFNER Inc., New York

ROBERT MÜLLER, Berlin

FRIEDR. KILIAN'S NACHFOLGER, Budapest

F. ROUGE & C. ie, Lausanne

EDITORIAL HERDER, Barcelona

FERNANDO MACHADO & C. ia, Porto

THE MARUZEN Co., Tokyo

PROF. NORBERT WIENER

Massachusetts Institute

of Technology

En cas d'insuffisance d'adresse prière de renvoyer à
"SCIENTIA" Via Roncaglia, 4 - ASSO
(Como, Italie)

CAMBRIDGE

(Mass., U.S.A.)

Writing to you was in a sense a long shot, but I had
little to lose.

Thank you for the trouble and for extending the
invitation to you so that you might
suggest a suitable doctor. I do not feel as if
in this particular instance I do not feel as if
a doctor is what I need. I do occasionally take
osteopathic treatments to relax the body so that

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

Dear Dr. Wiener:
to

It was really quite a surprise/receive your reply
after all these months.

I really had no intention of getting you into
trouble by asking you to "practice medicine."
In the first place I NEVER avail myself of the
services of anyone who does practice Medicine.
The very word sends me off in a completely
different direction. Seriously, my problem
can only be helped by someone with a purely
inventive turn of mind, as there is nothing
functional wrong with me. My anomaly is
that I was born with one side considerably
more developed than the other. From a cosmetic
point of view, in clothes, this is never observed.
But when an X-Ray is taken one lung is shown to
be about twice the size of the other...one rib
formation is larger more developed and actually
has more ribs. When I was born I had six fingers
on my right hand and only 5 on my left and this
assymetry is obvious throughout my body.
I do want to add that this sixth finger, while
a normal finger in every respect, was not fully
attached to the hand but hung by a thread so that
it was snipped off when I was 3 weeks old and all
I have to show for it is a very small wart at the
edge of my hand.

I thought If I could just wear something that would
be a mild stimulant to my left side, the weaker side,
it would be of much help...as my vibration is always
"off balance." I do exercise it ^{THE LEFT SIDE} a good deal with a
dumbell and that sort of thing but I feel perhaps I
could improve this condition. ^{STILL MORE!}

I do not know whether you ever heard of Walter Russell
but it was he who said God is Balance, and if you want
another word, God is Rhythmic Balance, ~~another~~
~~another~~ This is the balance I unfortunately do not
possess. I have resigned myself to living with it as
best I can but if there is anything in this world that
would help I feel I should try it...

(over)

Writing to you, was in a sense a long shot, but I had little to lose.

Thank you so much for taking the trouble to interest yourself with this problem and for extending the invitation that I write to you so that you might suggest a suitable doctor. It just so happens that in this particular instance I do not feel or think a doctor is what I need. I do occasionally take osteopathic treatments to relax the body so that my tensions, etc. that are naturally accumulated due to this imbalance do not cause any serious functional disturbances.

Thanks again so much and God bless you for the wonderful work you are doing with our servicemen.

Sincerely yours,

Gran Harowitz

(Faint, mostly illegible text, likely bleed-through from the reverse side of the page)

Navasaraopet,

22nd April 1954

Respected sir,

Permit me to introduce myself as Mr. Gade,
ex. President, Mathematical Society, Banaras Hindu University

I hope you are in receipt of the copy of the
photo of our Society. I like to thank you once again
for your interesting lecture which has opened new
channels of study to us. We are highly gratified to
know a lot of new approaches that are given to various
subjects of Mathematics by you. I hope and wish
that you may find time to visit India again and give
us the benefit of your lectures.

Sir,

I remain,
yours sincerely
Gade V. Krishnavas

[ms 6/18/54]

BY AIR MAIL

AIR LETTER

IF ANYTHING IS ENCLOSED
THIS LETTER WILL BE SENT
BY ORDINARY MAIL.



To

Dr. Norbert Weiner

Massachusetts Institute of Technology

U.S.A

Conn - 66

First fold here

Third fold here

Second fold here

Sender's name and address :-

Gade V. Krishnarao

Ramireddipet

* Narasaraopet *

Guntur Dt.

S. India

April 22, 1954

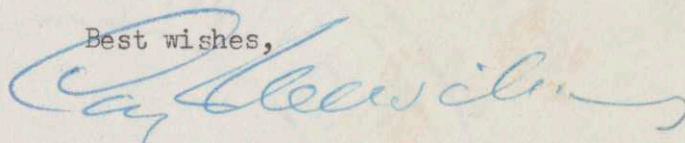
My dear Dr. Wiener:

Many, many thanks for your prompt response to our wire.

Since a proof might not reach you in time to make any corrections you care to make, I am enclosing a copy of your statement. Please make any changes you wish, and return it, and we will watch the proofs very carefully to be sure that the changes are incorporated. This must reach us by Monday morning.

Would you have any objection if we referred to the fact that early in the game you had decided not to participate in the development of nuclear weapons, etc.? I would appreciate it if you would let me know whether a statement of this kind could be made, and if so what form it should take. Also, how would you like to be identified?

Best wishes,



Carey McWilliams
Editorial Director

Dr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

[ans 4/23/54]

1863



Toa April 22, 1954

[on April 22, 1954]

Dear Professor Wener,

On behalf of the Political
Science Club and the
college community of
Maurit Halvaks, I should
like to tell you how
much we enjoyed having
you and Mrs. Wener with
us all day 20th. We
especially enjoyed meeting

and talking to you both
personally during dinner,
and your lecture opened up
new avenues for us. I am
enclosing an article which
appeared in our college
newspaper which you might
be interested in reading.

Thank you again for
visiting us. Sincerely, Ellen E. Messing

Physical Education Teacher Holds Various Championships

Versatile Varner Vies, Victors In Net Sports

Since her arrival here last fall the name of Margaret Varner has become synonymous on campus with championship tennis and badminton. Today the holder of many tennis trophies, she first began to play when she attended high school in El Paso, Texas. Even there, she went on to study under Richard Skeen and Eleanor Tennant, two of the outstanding tennis coaches in the country today.

A victor in the National Junior Doubles in 1944 and 1945, Miss Varner subsequently rose to the rank of fourth woman player in the junior classification. Among her other tennis championships, Miss Varner counts the National and Junior Hardcourt Doubles of 1945, in which she participated with Nancy Chaffee Kiner, and the Texas Women's Singles championship, which she has held for six years. In 1951, Miss Varner was rated sixteenth among women players in the senior group.

Although her interest in badminton came later than her love of tennis, Miss Varner has matched her skill in that sport by becoming the second ranking player in the United States. She first started playing in 1947, when she attended the Texas State College for Women. After winning the Texas and Oklahoma Women's Championship for several years, Miss Varner was named sixth ranking player in 1949 and 1950. She won her present title after becoming a runner-up in the national badminton tournament.

Before coming to Mount Holyoke, Miss Varner taught physical education at Louisiana State University for two years. At Mount Holyoke, Miss Varner teaches volleyball, swimming, softball and basketball, in addition to all levels of tennis.

BY JIMMIE

Famed Men Address Political Students

Norbert Weiner Reveals Theory Of Information

Norbert Weiner, speaking on Tuesday evening, April 20, under the auspices of the Political Science Club, discussed "Communication and the Scientific Method." Dr. Weiner, ex-prodigy and famed physicist of MIT, has, with Claude Shannon of Bell Laboratories, been instrumental in the formulation of the Communication or Information theory. It was he, also, who recognized that communication of information is a problem in statistics, and thus afforded electrical engineers a comprehensive understanding of their trade by providing for them a measure of the commodity which they transmit, a commodity termed "information," and a manner for testing the efficiency of their machinery for transmitting it.

The speaker, using his Communication Theory both as the basis for his remarks and as a point of departure, revealed the influential factors in its development. He emphasized particularly the revolutionary period of physics around 1900, and the work of Einstein and Willard Gibbs. The Theory of Statistical Mechanics developed by the latter was very important as the foundation upon which the Communication Theory was built.

Dr. Weiner emphasized the importance of probability both in his theory and in present physical and mathematical research. Actually, the unit of information treated by Dr. Weiner in Cybernetics, the control of communications within men and animals, is defined by him as "that which makes a decision between two probable events."

The impact of Weiner's Communication Theory upon the social sciences cannot be underestimated, for being philosophic in its concept, statistical in its application, it offers a test of the effectiveness of communication. *Fortune Magazine*, December, 1953, states that "The power of the theory lies in its ability to cope with messages of any nature . . . It is hard to see how information theory can fail to rank with the enduring great. For it goes to the heart of what appears to be life's most essential feature—the ability to communicate information."

UNIVERSITY OF CALIFORNIA

DEPARTMENT OF MATHEMATICS
STATISTICAL LABORATORY
BERKELEY 4, CALIFORNIA

April 22, 1954

Professor Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

go ahead

My dear Wiener:

You may have heard that, at about five-year periods, we arrange gatherings labeled Berkeley Symposia on Mathematical Statistics and Probability. The Third Symposium is now being planned and the Laboratory would consider it a great honor if you consent to take an active part in it. Although all the papers are not yet signed, we have assurances of funds which will permit us to pay the transportation of the invited participants and a modest honorarium, probably \$150.00 for the manuscript to be published in the Proceedings.

One part of the Symposium is to be held conjointly with the National AAAS meeting in Berkeley, December 26-31, 1954. The other part, with a much smaller prospective audience, some time during the summer of 1955. It is our policy to let the speakers select their own subjects. However, there is no harm in telling them the particular items of their works that arouse special interest.

Your own name came up twice. First it was agreed that our past Symposia were sadly deficient because you were not there. Second, your name was particularly mentioned when we discussed a session on applications to physics. Loeve informed us - and I am sorry to say that before that I did not hear of this piece of your work - of your recent contribution to the theory of statistical mechanics. He gave us a brief outline of what you did and it was enthusiastically agreed that, if you would consent to preface a paper on this general subject for us, this would be an excellent contribution and would interest not only the statisticians but also the mathematicians and the physicists. For this reason the session on applications to physics is planned for December 1954.

I repeat that this is just an item of information, but you are perfectly free to choose your own subject.

My firm belief is that the symposia are worth while only if the papers are printed and that the printing of the papers is worth while only if this is done fast. The ~~publication of the~~

[ans 4/27/54]

Professor Norbert Wiener
April 22, 1954
Page 2

Proceedings of our First Symposium were published with an unpardonable delay of three years. However, I made a reasonable row about it, spoke three times in our Senate, and our performance with the Proceedings of the Second Symposium was better: they appeared in less than nine months after the Symposium. In order to achieve this, with a volume of about 600 pages, it is necessary to collect all the manuscripts at the time of the meeting. Occasionally this requirement causes difficulties. However, with your ease in writing, I am sure that you will not be embarrassed.

May I have your reactions before very long?

Cordially,

J. Neyman

J. Neyman

P. S. In addition to you we hope that Mark Kac will agree to speak on statistical mechanics, perhaps with reference to a recent paper by Khintchine.

P. P. S. Recently somebody called my attention to the fact that, in connection with the study of the structure of the universe, I (jointly with E. L. Scott) published something that is an easy consequence of some results of yours published in 1938. A forthcoming paper will include the recognition of this fact.

JN:so

cc: Chancellor Clark Kerr

CONTEMPORARY PRESS

545 FIFTH AVENUE

NEW YORK 17, N. Y.

26 HEBER ROAD
LONDON NW2, ENGLAND

ROOM 906
MURRAY HILL 7-6865

Apr. 22, 1954

Norbert Weiner
Mathematics Department
Mass. Inst. of Technology
Cambridge, Mass.

Dear Mr. Weiner:

The pressing importance of the subject treated in the enclosed leaflet makes it important that the public at large be brought to understand the issues involved. Since you have from time to time commented on the "Atomic Bomb" question we would be interested in any statement which you would care to make on the matter, possibly for publication in our quarterly magazine Contemporary Issues.

One of our authors is currently preparing an article on the social aspects of the technological revolution in Cybernetic devices and automatic control mechanisms. We would also be greatly interested in anything you might have to say on this question.

Cordially yours,

B. Page

B. Page for
Contemporary Issues

(2)

[ans 6/16/54]

STOP THE BOMB

An Appeal to the Reason of the American People

THE RECENT HYDROGEN BOMB EXPLOSIONS in the Marshall Islands' area comprise a decisive juncture in human history: Either the explosions must be stopped at once or mankind faces nearly certain doom. This last danger does not come from a distant atomic war between the shaky Russian Slave Empire and the United States. By far a more immediate threat is the fact that explosions in the Marshall Islands' area are rendering large parts of our marine food supply radioactive and unhealthy, sending radioactive particles by air and ocean currents to all parts of the world, polluting the Pacific Ocean, and thereby producing incalculable effects on delicate natural balances indispensable to life itself. While a war in the long unforeseeable future may result in the destruction of cities and whole populations, the poisoning of the land, ocean and atmosphere *is occurring here and now*. Long before nations meet in battle with all the horrors of modern weapons, the air and soil, the water and food supply of the world, indeed, the health of mankind and all living things may be undermined irreparably by "mere" experiments. The gravity of this threat can hardly be overestimated. If the present explosions in the Pacific Ocean are continued or graduated further in intensity, they may simply make the earth uninhabitable for life.

Admiral Strauss and the Atomic Energy Commission deny this—but what are the known facts? Although the Strauss report of March 31st tells us nothing about the contemplated and actual "hazard area" of the March 1st bomb, it claims that the 23 Japanese fishermen on the *Fortunate Dragon* "must have been well within the danger area," and the 264 American observers and natives subjected to radiation were "well within the area of the fallout." If we judge solely by the criteria employed by Strauss, this means that the bomb could produce severe radiation effects at least 80 miles away from the center of the explosion, that the "hazard area" was over 20,000 square miles—a region about four times the size of Connecticut. That the area was even larger is proved by American and native casualties who were more than 100 miles away, making the "fallout area" about the size of a huge state like Maine. For its April explosion, the Atomic Energy Commission appears to have decided to fix the hazard area at 445,000 square

miles. It is enough of a commentary on the size of the April bomb that *this zone will comprise the number of square miles that enter into all the Atlantic seaboard states of the United States—from New England to Florida!*

In fact *none* of the laconic accounts, plans, estimates and reports supplied for public consumption by the Atomic Energy Commission and Admiral Strauss are trustworthy. This agency lavishly spends the money of American taxpayers and juggles their lives behind a veil of super-secrecy. It even refuses to supply the people of the United States with facts that admittedly are possessed by the Russians and that are readily given to the English people by the British government. There is no way of directly checking the veracity of AEC statements and no clear means of determining whether secrecy laws are used in the interests of "national security" or for promoting lies—except by apparent contradictions between AEC reports and those of outspoken observers. If these contradictions are considered, absolutely no doubt remains that the Commission treats the people of the United States as though they were a bunch of gibbering idiots. The most obvious, common sense facts have a way of becoming transformed by AEC spokesmen into the most arrant nonsense.

Time Magazine, for instance, notes that American casualties in the March 1st explosion were exposed to "radiation . . . ten times greater than scientists deem safe . . ." Without denying the *Time* report, Admiral Strauss has the unabashed temerity to inform the American people that the victims "could be returned to duty, but [!] are still being kept on Kwajalein for the benefit of further observation." This is an attempt to convey the impression that the casualties are unharmed and their lives are perfectly safe. A Marine corporal on Kwajalein, writing to his mother about the explosion, says that casualties of the March 1st blast "were suffering from various burns." The AEC say: "There were no burns." Admiral Strauss later confines his statement to: "None of the twenty-eight weather personnel [Americans] have burns." If this is true, what about the natives involved? "The 236 natives also appeared [!] to me [!] to be well and happy," says Strauss. The studied omissions and contradictions cry out for clarification. Who lied in the matter of burns—the corporal or the Commissioner? And how can radiation "ten times greater than scientists deem safe" be reconciled with Strauss' claims and an earlier AEC statement that "all are reported [by whom?] well"? If it took modern science years of experimentation to determine a hazardous dosage of atomic radiation, it seems to require the subtle brain of Strauss a few minutes to establish entirely new standards for the American people.

Similarly, nearly every report on the condition of the Japanese fishermen of the Fortunate Dragon contradicts the medical prognoses of United States spokesmen. On the one hand, Dr. John J. Morton, director of the U. S. Atom Bomb Casualty Commission, visited the injured fishermen and declared that the victims "will recover completely in about a month." On

the other hand, the chief doctor treating the fishermen is reported by the press to have declared that the victims will suffer from radiation for twenty years, and two or three of the men will probably die. Even this conclusion reads like a gross underestimation of the facts. As early as March 17th, the *New York Times* reported that the radioactive count of fish on the Fortunate Dragon was "sufficient to be fatal to any person who remained for eight hours within thirty yards of the contaminated fish." In the course of his report, Strauss did not try to cudgel with the problem of how fishermen who lived on a small trawler for about fourteen days with radioactive fish could avoid remaining within the prescribed eight hours and thirty yards of a fatal dosage.

In fact, Strauss conveniently "forgets" to tell us many things. He "forgets" to tell us, for example, that although another fishing vessel, the Myojin Maru, was 780 miles away from the blast site, it registered Geiger count readings described as "above the danger point" by an *Associated Press* dispatch of March 27th. As if to anticipate this fact, the worthy Admiral hints at a possible change in wind direction. Could it be that the bomb creates its own atmospheric conditions, rendering weather and fall-out predictions nearly meaningless? The *New York Times* prints a report from one American observer of the explosion to the effect that the bomb "set off a local wind storm that might have upset weather forecasts that had been correct earlier," and the Marine corporal, cited above, writes that the explosion "was followed by a very high wind."

Finally, Strauss tells us that there has only been a "small increase" of radioactivity in "some localities within the continental United States." He insists that "this is far below the levels which could be harmful in any way to human beings, animals or crops." He does not tell us that this increase in radiation reached as far eastward as New York City, and that the Japanese fishermen on the Fortunate Dragon were exposed to radioactive strontium isotopes which have a half-life of twenty-five years! Will these isotopes, Mr. Commissioner, "decrease rapidly after the tests"? Or have they been scattered throughout the world by air and ocean currents? *How, amidst all these qualifications, contradictions and shrewd omissions, can we trust you to tell us the truth?*

It is useless to demand that the AEC tell us anything as long as we do not have the means for tearing away the veil of secrecy that surrounds the Commission's activities. Fortunately, other atomic scientists have been more outspoken about the risks involved. Dr. Eugene I. Rabinowitch of the University of Illinois frankly warns: "Radiation from a thermonuclear reaction . . ., if a large number were set off, can alter the genes of all living things within its reach. And if cobalt is added [as the AEC seems intent on doing!] to the reactor, the radiation is prolonged." An *International News Service* Science Writer reports: "Evidence that Japanese survivors of the first atomic bombs at Hiroshima and Nagasaki may develop

deadly cancers in their old age was disclosed by a top cancer specialist . . . Similar effects, the scientist indicated, conceivably could appear in the future in the Japanese fishermen recently showered with ashes from this month's hydrogen bomb explosion." The scientist, Dr. Jacob Furth of the Children's Cancer Research Center in Boston, based his conclusions on a number of striking facts. While working at the Atomic Energy Commission's Laboratories at Oak Ridge, Dr. Furth found that 6,000 adolescent mice exposed to the Bikini blast "developed tremendous tumors of the pituitary gland in their old age." The report continues that the "mouse studies already have found a grim parallel in some of the biological changes occurring in surviving men and women at Hiroshima and Nagasaki." The mice developed cancer of the blood (leukemia), "—and Dr. Furth said some reports show the incidence of leukemia in the two Japanese cities has been seven times normal since the bomb was dropped."

The lunatics who are devising the bomb haven't the faintest idea of its power and effects! They have miscalculated on the hydrogen bomb everywhere along the way! In flat contradiction to what Strauss had to say, Rep. Chet Holifield (who witnessed the March 1st explosion and apparently is familiar with the facts) speaks of it as "so far beyond what was predicted that you might say it was out of control." This statement was even confirmed by the great golfer in the White House before the suave Admiral arrived from the Pacific to obscure the dangers involved. The British *Manchester Guardian*, a responsible and well-informed source, expressed "doubts" as to whether any further experiments in the Pacific should be continued. According to a *Reuters' Dispatch*: "It said flatly that this time American scientists would be moving into the realm of the unknown." It has even been suggested that thermonuclear blasts might well set off chain-reactions in the earth's crust. But at any rate, as one periodical put it, we seem to have reached "a frontier beyond which pure theory ceases to be a reliable guide."

The domestic press has been only too glad to seize upon Strauss' report and justify the explosions. Even before the report was issued, the *New York Times* rebuked the *Manchester Guardian* by urging that it "is the business of science to enter the unknown. A score of men were killed in early attempts to fly. The history of Arctic exploration is in part a history of death from cold and starvation. But the aeroplane was nevertheless invented and the North Pole was reached." Alas, Messrs. Sulzberger, Adler and Nelson of the *New York Times* Incorporated, this is one piece of print that does not fit! The men who tried to fly or conquer the Arctic wastes took their own lives in their hands—not ours! Their entry into the "unknown" threatened nobody but themselves. As Yamamoto, a Japanese fisherman who was "Bikinied," so eloquently put it: "If we had known we wouldn't have been there." By what mandate, then, have you, and the Truman and Eisenhower administration, abetted by Strauss and the doubtful

scientific talents of Dr. Edward Teller brought mankind to the brink of a catastrophe? By what right do you toy with billions of lives? Who has endowed you with the privilege of effacing civilization and destroying human existence on earth? You are perfectly welcome, gentlemen, to blow yourselves to kingdom come if you so choose. If a horror like the hydrogen bomb happens to mark one of those scientific frontiers you wish to colonize, by all means take your cursed bomb and yourselves, with all your cursed "scientists," generals and businessmen off to Saturn and blow away on the "unknowns" to your hearts' content. But we, the American people, prefer to remain alive! We don't prefer to go with you! If you decide to stay on *this* planet, kindly let us and the rest of the world—whose waters and air are also being invaded by radioactive poisons—decide what frontiers *we* want to explore!

You tell us a lot about military "deterrents" to war. But what, pray, is the sense behind a military "deterrent" which, if used, will destroy the United States as well as Russia? And if, as you suggest, the weapon will thus "deter" us as well as the Russians, why continue with insane explosions that may simply poison all life on the planet unless both you and the Russians intend to tear down the whole fabric of human civilization one fine day rather than give up your social interests and obsolete way of life? These questions have thrown the fear of a catastrophe into the hearts of the entire world. Yet despite world-wide protests and denunciations, the AEC went ahead on March 26th and exploded another bomb. This outrageous *fait accompli* exhibits a savage, authoritarian indifference to public feeling and opinion. By continuing the explosions against the will of mankind and increasing the power of the bomb, the Eisenhowers, Strausses, Tellers and Company are placing themselves outside the law of society. No self-enclosed government agency has the right to reduce humanity to ashes. There is no law, no police agency and no sanctimonious institution higher than the law of life itself.

The denunciations of the experiments have already reached the level of open demonstrations in many parts of the world. In Japan, a stormy sentiment for immediate cessation of the tests has unified both press and public; in India, Nehru has personally demanded an end to the explosions; in Britain, if not all of Europe, the newspapers and population are virtually of one opinion that the experiments be stopped at once. The French Foreign Minister has been compelled by popular feeling to describe the experimenters as "sorcerer's apprentices, who often unloose forces over which they have no control." These nations and peoples rightly emphasize that by exploding the bomb over vast areas of the Pacific Ocean we are impinging on their simple right to the freedom of the seas—a liberty which American historians insist was the cause that brought the United States into two major wars. Finally, many Americans have begun to speak out against further experiments. According to one newspaper editor on the West Coast, "the general trend

of letters his paper was receiving favored calling off future hydrogen bomb tests in the Pacific" (*New York Times*, April 4th). Lewis Mumford, in a letter to the *Times*, warns that "retaliation is not protection; that total extermination of both sides is not victory; that a constant state of morbid fear, suspicion and hatred is not security; that, in short, what seems like unlimited power has become impotence." And in a letter to the same paper, Professor H. David Kirk strongly criticizes the attitude of the *Times* on the test and urges the American people to speak up against the explosions. "At Nuremberg we judged war criminals on the basis of personal responsibility for acts of brutality committed while under higher orders," observes Mr. Kirk. "What about our own political leaders who in the face of international questioning and protests pay no heed but insist that the experimentation must go on? . . . The time has clearly come for ordinary citizens to see how big this [H-bomb] monster has become . . . Let every one of us be heard. The time is now."

Indeed, the time is now! Every human being in the United States owes it to himself once and for all to pause in the bustle of daily life, look clearly at the danger ahead, and act within his legal means to prevent this H-bomb insanity from bringing all his plans, efforts and aspirations to a catastrophic end. A widespread public protest must be heard against any further explosions, against horrible poison gases that can kill millions of people in a few minutes, against ever more devastating means of destruction. The American people must write to men like Mumford and Kirk, and all individuals who have taken a stand against the "testing" and development of the bomb. They must solidarize themselves with every voice that speaks out for sanity and urge these voices forward. All socially-responsible people must write to their legislators (who are dozing, as usual, in their comfortable seats on Capitol Hill) and let them know that no more bombs should be exploded and no more genocidal weapons should be developed. Public meetings must be held to this effect, in which men and women of good will, irrespective of political beliefs and affiliations, should participate. Whoever receives this leaflet should show it to his friends and neighbors, and help distribute it as widely as possible. *Contemporary Issues* is willing to participate in this protest and do whatever it can to coordinate the efforts of individuals who communicate with it.

If you are interested in acquiring additional copies of this leaflet and taking action against continued explosions of the bomb, write to:

CONTEMPORARY ISSUES

545 Fifth Avenue

New York 17, New York

Published by *Contemporary Issues*, a magazine for a democracy of content.



April 22, 1954

Dear Professor Wiener:

done →
I am sorry to be returning the contract for the book on the theory of invention, but our contract department will not accept it unless your signature is witnessed.

will do →
I am also writing at the request of our copy-editing department to ask if you would be kind enough to supply us with an index for our edition of THE HUMAN USE OF HUMAN BEINGS. It seems their regular indexer does not feel he is equipped to handle it. We would be most grateful if you could help us out in this matter. The page proofs are now on my desk, and I shall hold them here until I hear further from you.

Sincerely yours,

Natalie Rosin

Natalie Rosin
ANCHOR BOOKS

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

Enclosure

[ans 4-27-54]

THE UNIVERSITY OF CHICAGO
CHICAGO 37 • ILLINOIS
COMMITTEE ON MATHEMATICAL BIOLOGY
5741 DREXEL AVENUE

April 22, 1954.

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

Dear Wiener:

I received from you a copy of Dr. Sandoval Vallarta letter to you. I must apologise for a misunderstanding which is probably my fault.

When we discussed the matter with you I understood that you were to write to Dr. Sandoval Vallarta and send me a copy of your letter. I understood that I was to write to him upon receipt of that copy from you, since I did not wish my letter to arrive ahead of yours. Having never received anything from you at that time I did not write to Dr. Vallarta.

Needless to say that I am deeply grateful for your having written to him. I shall follow up the matter with Dr. Vallarta. But before that, I feel that I will have to find something more definite about the possibility of financing the project. So far nothing has transpired in that direction. Of the six individuals whom we are loosing this summer, five have already been placed in various Universities. The question of possibly financing the work of the whole group in Mexico unfortunately remains still in exactly the same position as it was on the day of our conversation in February.

If you have any specific suggestions along these lines I shall of course deeply appreciate them.

May I again express to you my personal gratitude and the gratitude of our staff for your interest in the matter.

With best regards to you and your family,

Very cordially yours,

N. Rashevsky

NR: ab

[ans 6/18/54]

THE UNIVERSITY OF CHICAGO
CHICAGO 37 • ILLINOIS
COMMITTEE ON MATHEMATICAL BIOLOGY
5741 DREXEL AVENUE

c
o
p
y

April 22, 1954.

Dr. Manuel Sandoval Vallarta
Instituto Nacional de la Investigacion Cientifica
Puente de Alvarado No. 71
Mexico 3, D.F.
Mexico

Dear Dr. Vallarta:

Dr. Norbert Wiener sent me a copy of your letter to him of March 30, from which I see that you expect a letter from me.

I must apologise for misunderstanding on my part. Last February when I discussed with Dr. Wiener some of our administrative problems, he suggested that a fair size group of mathematical biologists could be placed in Mexico as a unit. He also felt that it would be possible to raise money in the US for financing such a project. He told me that he would write you and I understood that he would send me a copy of his letter to you, upon receipt of which I would have written to you myself. Having received no word from Dr. Wiener since I hesitated to write to you.

As things stand now we have placed all but one individual of those who are losing their positions with us this summer. The immediate urgency of placing a larger group is therefore past. Moreover, I still have no idea where I would raise the money for financing such a project. I am, however, deeply grateful to you for your interest in the matter and would definitely like to keep the whole matter alive.

Although I realise that outside financing would be needed for a large group, I wonder whether you could possibly offer a position to the one man who is still available, namely Professor H.G. Landau. I am enclosing his curriculum vitae herewith. His scientific publications speak for themselves. As regards his personality I have been associated with him for six years and know him to be a fine, pleasant, and cooperative gentleman. I am glad to give him my highest recommendations. If it were not for drastic budget cuts here I would never part with Dr. Landau.

If you could offer a position to Dr. Landau now, this may possibly constitute an excellent beginning for something to be done later on a larger scale. I shall be happy to hear your reaction to this suggestion.

Thanking you for anything you may do or suggest. I remain,

Sincerely yours,

N. Rashevsky, Chairman
Committee on Mathematical Biology

NR:ab

Box 1024
 Grand Central Station
 N.Y.C. 17.
 23 April

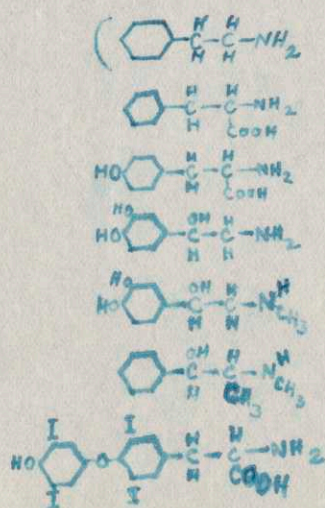
Dear Dr. Wiener,

I have just heard (via your secretary and Mrs. Brackett) that you have been unwell and wish to take this opportunity to express my sincere wish that by the time you receive this you will once again be in perfect shape.

If you actually did write me that work at Shrewsbury was unavailable, then your letter surely went astray. I have had no letter from your office since December 15 at which time you were on the point of sending the vita to Shrewsbury.

In the absence of preliminary training there, where do you suggest that I can pick up the necessary technical prerequisites for work under you? Can they be obtained, e.g., either by independent study or through summer-school courses at Johns Hopkins or MIT (what ones?)? Let us assume that the first long-term project I would work on is an investigation of your hypothesis that marked biological differences exist between persons of front-rank genius and those of lower capacities, even at "near-genius" level. It would presumably not take too long to acquire the necessary theoretical background to indicate what sorts of tests would have to be devised to discriminate among the child prodigies and older individuals of comparable ability who would serve as proving-ground for this hypothesis. The actual construction, administration and interpretation of such tests, however, might require a team of technicians of interlocking specialties. Otherwise the necessary training would take prohibitive time and expense: administration and interpretation of EEG's; organic quantitative analysis to determine any possible consistent differences in blood or hormonal chemistry, etc.; long and unwieldy specialization in the psychology of mental measurements (a field which is in sad need of sensible biological foundations) in order to construct and validate a battery of verbal and performance tests which would accurately discriminate among people all of whom score in the upper ten-thousandth of the population in IQ; etc., etc. If the biological differences you postulated actually indicate that a mutation has taken place (and I am inclined to agree, having known ^{all} at least three ^{unrelated} instances of authentic IQ-170-plus genius in the Baltimore whose parents were ^{all} low-grade morons), then obviously new methods of establishing the fact must be invented. The old favorite test (sterility of crosses) probably would not apply since this mutation presumably represents only a variation likely under inbreeding to become a species, not yet an actual species. And if we wait until the gene map of H. sapiens is known in as great detail as is that of Drosophila, there may not be any H. sapiens left on earth, let alone any Homo superior.

I have lately been speculating on the nature of the peculiar metabolic changes which invariably accompany so-called "high usage periods", and have discovered that there is a series of related organic chemicals each of which produces some few of the physiological symptoms found in "high usage." The sequence is particularly suggestive if presented as follows:



β -phenylethylamine (pressor).

Phenylalanine, essential amino acid.

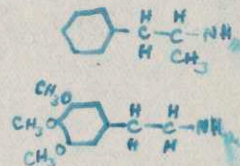
Tyrosine, normal metabolite.

Nor-epinephrine (15% of adrenal medullary secretion).

Epinephrine or adrenalin (85%).

Ephedrine, of similar effect.

Thyroxine.



Amphetamine. Reported in rather large doses to "trigger" high wave periods - lasting long after the ~~drug~~ drug was excreted.
 Mescaline.

About a dozen other members of the same series of polysubstituted β -phenylethylamines are known, all except "dopa" and di-iodotyrosine having analogous effects.

My hypothesis here is that the individual metabolic patterns (hereditary?) of people capable of having "high-usage" periods can on occasion, generally under an extreme challenge to their intellects, secrete an as-yet unidentified member of the same series, probably closely related to adrenalin. The specific effects of this X-amine would be twofold: (1) inducing the remarkable physiological symptoms characteristic of "high usage", and (2) catalyzing the dramatic temporary alterations in metabolism there found. It should be possible to test blood samples from individuals in and out of such periods for members of this series of accelerator amines, and in particular to note which one is low or absent in normal state and present in "high usage," and to see if the amine so identified would induce high usage on injection.

I suspect also that a similar member, call it Y-amine, is responsible for all cyclothymic and manic-depressive states. Everything I have ever heard about these syndromes (which differ mainly quantitatively) can be explained by the following assumptions: 1. Y-amine is a normal metabolite, continuously produced, and in general tending to accumulate in the bloodstream. 2. The rate at which Y-amine is produced varies with the product of endomorphy and mesomorphy in the individual; it would be least in the 1-1-7, and greatest in the 4-7-1 and 7-4-1, 5-6-1 and 6-5-1, and $5\frac{1}{2}$ - $5\frac{1}{2}$ -1. 3. Its unique effects appear only above a certain threshold concentration and greatly increase at still higher concentrations; hypomania expands to overwhelming mania with its sometimes delirium-like accompaniments (is Y-amine toxic above a certain concentration?). 4. The intellect's ability to impart order to the rapid flight of ideas during such periods varies with "original endowment" or hereditary component of intelligence. This explains why the actual "psychotic" or epistemically disordered behavior appears in inverse degree to intelligence. (The latter negative correlation I discovered at the VA hospital, where there were housed several dozen manic-depressives and over 100 milder cyclothymes. I do not know if it has elsewhere been observed, but it probably has been.) 5. Probably the increased metabolic activity in mania, as well as the normally quite high metabolism in ectomorphy, either 'poisons' or decomposes the Y-amine. This would explain both the absence of appreciable cyclothymia in high ectomorphy, and the transitory character of manic episodes. That delirium is followed by stupor, mania by depression, and "high usage" periods by temporary exhaustion, also follows. Tests analogous to those for X-amine should verify this hypothesis too; but the human guinea-pigs should in this case be well within the somatotype range in which cyclothymia occurs. A therapeutic use of Y-amine would be in arresting depressions, probably in combination with intravenous glucose and amino acids. *Does the anti-depressive drug 'pyrhexyl' belong to the series?*

The presence of mescaline in the series of accelerator amines quoted above was, not wholly unexpected, inasmuch as before learning its chemical formula I had read accounts of peyotism among Indians and Huxley's "Doors of Perception." The internal symptoms induced by mescaline come startlingly close to many of those found in extreme "high usage" periods. Chief among these are the extreme rapidity and creativity of thought, hypernormal sensory acuity, tendency to perceive supposedly isolated events as parts of a single gigantic Gestalt; and a running accompaniment of vivid visual imagery, sometimes akin in effect to the imagery in problem-solving hypnagogic states which you described and I have also experienced. The chief difference is that the challenge aspect is lacking and there is no feeling of urgency. The Gestalt-constructing effect is far greater in mescalism than in "high usage". It undoubtedly has (along with the extreme acceleration of thought and imagery) much to do with the "ineffable" character of the experience, which in the details described (as in most others) closely matches "mystical experience" in all cultures. *Also relevant to the 'ineffable' character is inadequate ornamental vocabulary.*

This has given rise to a hypothesis concerning the biochemical origin of "mysticism". That such experiences are extremely similar in all cultures regardless of whether they are produced by yoga, flagellation, or religious frenzy in a Dionysian fertility-cult, has been long known; it was mentioned by William James in 1903, as well as by Huxley, P.D. Ouspensky and Gerald Heard. That the visions produced are characteristic of the cultural matrix of religious presuppositions, as well as of the personality of the "mystic," and that their quality differs with his original intellectual endowment, also follows. My hypothesis is that these experiences are induced by the production of an abnormal metabolite of the same series--call it Z-amine--probably closely related to mescaline, if not actually this drug or one of its derivatives. Whether repeated mescalism introduces the same cumulative personality changes that ensue from repeated "mystical" experiences, i.e. repeated subjection to Z-amine, is a moot question.

In any case, the effects and presumably the composition of Z-amine are constant and extremely similar to those of mescaline. The "high-usage"-stimulating effects of mescaline or Z-amine explain why the mystical state or samadhi is usually referred to as the 'superconscious state.' It should be possible to isolate Z-amine from the blood of persons in this state, and to test the hypothesis by similarly administering it to normals and observing their reactions.

I refuse to believe that "mysticism", although it is probably the origin of the various world religions and tribal cults, requires gods. It seems much more reasonable that a biochemical explanation should exist. It also seems probable that religiously inclined people of lower original intellectual endowment should have been inclined to ascribe these experiences to external forces (gods); they would hardly have thought of internal chemistry as a cause.

That both a common "mental" disorder and the origin of religion should be at least hypothetically explainable in biochemical terms is in itself notable. Probably the extremely diverse effects (pressor activity; fatigue postponement; maintenance of metabolism and cerebral activity above a cretinous level; "fight-or-flight" emergency mobilization of resources; "high usage"; mania; and mysticism) of the various drugs of this series of polysubstituted β -phenylethylamines arise from the various substitution groups on both the benzene ring, the ethyl chain, and the amino group. The similarity of biochemical activity observed in all these states, and of internal symptoms in most of them, points to structural similarity in all of them. (One might draw an analogy by considering the series of steroids, in which the presence of various side chains on certain carbons of the unaltered four-ring nucleus causes extreme change in the physiological consequences. Compare the 17-ketosteroids as a group with the sex hormones and other adrenal cortical steroids, for instance.)

The preceding studies appear as aspects of what might be termed biological humanics, a sort of unified field theory of human structure, behavior and motivation, which presupposes that behavior and motivation follow logically from structure. Sheldon regards his "constitutional psychology" as a tool of wide potential use in biological humanics. The trouble is that so many people, mostly under Freudian influence, or Jungian or Adlerian or Christian influence instead, pay at best forgetful lip service to the idea that *H. sapiens* is as much an object of biological study as is the white rat or *Drosophila*, and try to investigate behavior or motivation on the basis of unbiological hypotheses. Both the ubiquitous oedipus complex, "will to power", "class struggle" and "conflict of God and Satan for man's immortal soul" appear to have begun as such unbiological hypotheses and can now only be regarded as catch-words in terms of which anything can and everything must perforce be explained by their respective partisans. If psychology of human behavior is ever to become a science, it can only come about in two ways and those simultaneously. These are (1) the cybernetic approach and (2) the constitutional and biochemical approach. What I call biological humanics, following Sheldon, will of necessity require both approaches and must eventually synthesize them into a single whole. This science (as yet only an infant) will some day have both an explanatory and a normative aspect, as the study of human nutrition already does.

In the long-range context of biological humanics, whose fundamental problem is "What is man and how does he behave now--and how can which men be most benefited from an evolutionary standpoint?", your idea that real genius may represent a mutation acquires extremely great importance. In an earlier letter I mentioned a quadrilemma which *H. sapiens* is rapidly approaching: Conditions of "civilized" life approach a complexity such that man, if he is to survive, must eventually do one of the following: reduce the complexity if even to Dark Ages level (and that may happen anyway), increase the average IQ of the population sufficiently (and only eugenic methods can succeed. The idea of giving X-amine or intellectual force-feeding to 40 or 50 million stupid people in the U.S. alone is too staggering to contemplate!), mutate into a species which can take care of itself, or perish like the dinosaurs. I think that the third alternative is the only one offering a great deal of hope, and it is possible that we have the answer within our grasp.

Or let me state it in more concrete terms: The only long-range answer to the threats to human existence represented by authoritarianism (Russian or McCarthyist or papal) and the H-bomb, so far as I can see, is to bring together a sufficiently large sample of real front-rank genius young enough not to have been warped out of shape by an environment notoriously hostile

to prodigies as to other extreme deviants, give them the sort of education which will enable them to preserve among themselves the finest fruits of human (particularly scientific) thought, inform them of their evolutionary destiny, and encourage inbreeding among them. If war actually reaches the United States, it may be necessary to find for these a sufficiently remote hiding-place where both education, research and multiplication may go on among them. ^{no matter who takes it to us.} The Okefenokee or the Florida Everglades or perhaps some relatively inaccessible island in the Caribbean or the Pacific may have to serve for this. A prerequisite to this experiment in evolution will of necessity be the verification of your idea that real genius is biologically different. And the sooner we can begin, the better.

Another major problem--perhaps the very first one--of biological humanics will be to determine what actually constitutes full biological health for the human organism, in all senses including the sexual and "psychiatric", and what would be the mental performance of a "perfectly healthy" individual. It is hardly an exaggeration to say that the "normal" person in western civilization is an antithesis to the "perfectly healthy" one, and functions in all spheres at a decidedly sub-standard level. That neurosis, covert sadism, philistinism, and the authoritarian two-valued thinking characteristic alike of Christianity, McCarthyism and (worse) communism, can survive among so many people of "normal" intellect is a frightening testimony to the antithesis between "normal" and "healthy." That none of these occur in many primitive societies despite all our scientific and therapeutic advantages over them is even worse. That malnutrition, degenerative diseases, etc., are even more frequent here than there (per 100,000) suggests that "civilized" life has created more medical problems than it has solved. That people with IQ's below 90 and of poor resistance to disease ("poor protoplasm poorly put together") are at once so numerous and so quickly multiplying suggests that degeneration may have reached the germ plasm. It is inconceivable that homo sapiens could have evolved under such conditions. A more reasonable view is that the conditions of man's life have changed both too rapidly and too drastically for the human organism ^{yet} to evolve structurally to adapt to them. And it is not a perfectly safe assumption that he should adapt to them, as this would entail a lessened adaptability to other conditions. If a muscularly and dentally weakened species, dependent on "civilized" life as farm animals today are dependent on human support, should suddenly lose or break its crutch of civilization (and the H-bomb may suffice for this), then it could not survive as a species. Nor would evolution into anything more adaptable be too likely. In H. sapiens, it appears that not only is this happening, but that only the poorest germ plasm is reproducing itself. Modern medicine has been cited as anti-evolutionary, and with a great deal of reason, in that it enables this poor biological stock to survive and spawn yet more millions of weak-bodied and weak-minded people.

In the study of what makes up "healthy" men as distinct from "normal" ones, it will be necessary to consider the possibility that performance differences of perhaps 80% may arise from environments, both intrauterine and postnatal, which handicap individuals to a greater or lesser degree. The only effective method in this study, it seems, would be to consider the conditions under which H. sapiens could have evolved--dietary conditions including those of the pregnant mother, climatic conditions, etc. Ideally, we should be able to hold environments constant both in studying ordinary H. sapiens and in investigating presumptive mutants. This could hardly be done short of establishing two relatively isolated enclaves in which the restrictions of western civilization would be absent--overcrowding, hunger, burdensome and hopeless labor, vitamin-depleted foods, polluted atmosphere, theological taboos, etc. In such environments, which could be made sufficiently similar to those in which mankind ^{presumably} first arose, the differences between fully healthy homo sapiens (even up to near-genius level) and the biologically distinctive true geniuses would be thrown into much sharper relief.

In the present likelihood of frustrated human beings destroying the civilization on which they depend and thus jettisoning the baby with the bath water--or rather, the diabetic jettisoning the insulin syringe, such a procedure with true geniuses as I previously suggested appears as our only long-range hope, even if we cannot fully quantify the biological differences between them and ordinary mortals. I know that the above sounds pessimistic, but at least there is something we can do rather than collectively sitting on our hands and intoning O tempora, O mores. Pardon me for taking up your valuable time with this Cassandraish thinking aloud, but I felt that you would understand, who have been concerned with problems whose relation to these is obvious. Your advice on when and how we could begin to work together on such problems will be greatly appreciated. Much of what I have suggested above I would not dare to mention to lesser people, but its investigation seems vitally important, and you can help.

Very best wishes — Walter Green

stud. phil. et psych.

Karl Philipp

23. IV. 1954

ERLANGEN

Walter Flex - Str. 1

West Germany

Bavaria

(7)

Hochverehrter Herr Professor,
zur Zeit arbeite ich gerade an meiner
Vordiplomprüfungsarbeit für Psycho-
logie. Das Thema heißt:
"PANIK - ein Sozialphänomen"
Beiliegend überende ich Ihnen die
Zusammenfassung meiner bis-
herigen Ergebnisse. Auf Grund
Ihrer damaligen kybernetischen
Veranschaulichung (im Jahre
1936) steht mir für mich die
Frage, ob die Paniksituation elektro-
plastischer Systeme im schaltbaren
Raum ausschließlich auf der
Frage basiert, daß fast alle Sinnes-
leitungen über den Thalamus
laufen. Weitere Assoziationen
ergeben sich bei dem Vergleich
des Panik mit dem von Kette-
ner und Hufschmidt im chemisch-
physikalischen Sinne. D. h., daß es
sich dabei um eine Art "biogene =

Aisches Grundgesetz handelt.
Ich wäre Ihnen auch dankbar
wenn Sie mir einige Ergänzungen
oder Gedanken - insbesondere
im Aspekt der Kybernetik -
zum Thema Punkte mitteilen
würden.

Mit vorzüglicher Hochachtung,

Heidi Dietrich

P.S.: Die Beantwortung kann zu
keinerlei Folgen.

2) Habe ein Namenszettel.

[ans 6/16/54]

Ziehen wir jedoch zunächst - unter Zusammenfassung der bisherigen Ergebnisse - die Konsequenzen aus dem Erörterten:

L e r s c h, wie auch H e l l p a c h ziehen in Erwägung, dass Panik entwicklungsgeschichtlich auf jenen Bewegungsturm zurückzuführen ist, den wir schon beim Einzeller beobachten können. Diese Definition gilt auch bei höheren Tieren (Vergl. Affen, Raubtieren und Pferden, "Stampede of horses".)

Der Verfasser schlägt deshalb grundsätzlich vor, den Begriff Panik bei Einzellern und höheren Tieren zu vermeiden und an seine Stelle die Definition "Bewegungsturm" einzuführen.

Bei Zusammenfassung der allgemeinen und speziellen Definitionen lassen sich zunächst folgende Thesen aufstellen:

P a n i k kann nicht nur in der Masse, sondern auch beim Einzelindividuum auftreten.

Zweckmässig erscheint es, wenn bereits an dieser Stelle eine Trennung zwischen der "lauten" und "stummen" Panik gezogen wird.

Die Begriffe des Herdeninstinktes, oder überhaupt der Instinkt als solcher, sowie des bedingten Reflexes und des Gattungsbegriffes und der Gruppenseele, stellen nur Einzelaspekte dar. Sie sind begründet auf den Schulen des Behaviorismus oder denen der Reflexeologie.

Trotter

Alverdes

Espinas, Mc. Dougall,
Brinkmann, Grabowski,
Kretschmer.

Das Entstehen einer Panik ist - abgesehen von der Stellung des Individuums zur Masse oder zur Gruppe - im allgemeinen abhängig von äusserst intensiven optischen, akustischen- und motorischen Reizen. Die Folge davon ist, dass in der Masse, oder aber auch im Einzelindividuum eine Urangst entsteht. Der Mensch fühlt sich allein, verlassen, er ist führerlos. Das Symptom der Angst wird - abgesehen von hormonalen Ausschüttungen in die Blutbahn - ausgelöst durch einen infinitesimalen Ansteckungsbegriff, das heisst es sind (wie es Prof. Hellpach in seiner Sozialpsychologie ausdrückt.) "Sozialfunktionen der Wirksamkeit".

Weitere Einzelvorgänge sind:

der "Carpentereffect", das "James-Lange-Paradoxon", das "ideomotorische Gesetz", die Neugier, Suggestion und Fascination, Suggestibilität, Unruhe - erhöhte Bewegungen-, "Zusammenballungen der Masse in verschiedene Stossrichtungen", völliges Chaos, Entwusstheitsprozesse.

Vergl.
Tafel IX

Die Untersuchungen der Versuchsgruppe Norbert Wieners haben bewiesen, dass mit Hilfe von elektroakustischen Systemen eine Panikstimmung im Individuum erzeugt werden kann. Es ist deshalb naheliegend die Frage zu stellen, ob durch Rundfunk eine ähnliche Situation erreicht werden kann.

Die ausserordentliche Schwierigkeit, eine Panik "künstlich" zu zeugen, liegt auf der Hand. Die Amerikaner haben sich jedoch mit Methoden verschiedener Art an jenes gewagt, was als massenpsychologisches Experiment bezeichnet werden kann. Sie haben nicht einmal davor zurückgeschreckt, künstliche Massen und Massensituationen zu bilden.



THE WORCESTER FOUNDATION FOR EXPERIMENTAL BIOLOGY

Prof. Norbert Wiener
Mass. Inst. of Technology
Dept. of Mathematics
Cambridge 39, Mass.

April 23, 1954

Shrewsbury, Massachusetts

Dear Dr. Wiener:

Thank you for your letter informing me
of your travel plans to the Foundation ~~of~~ on
May 3. We shall therefore expect you to
arrive at 5³⁰ p.m. or earlier.

Sincerely yours,
Harold Levy

Sent, autographed, 4-26-54

MRS. PORTER S. LUCAS

BOX 386

CRANE, MISSOURI

April 23- '54

Dear Dr. Wiener,

Your reply of April 13 to my request for an autograph in my Cybernetics arrived the day I returned home from the hospital following major surgery, so I have had to wait to answer it.

If I am not asking too much will you put my name in the inscription, too?

I am so glad you continued your autobiography - "and so they lived happily ever after"... is not enough for people like you.

Thank you -

Margaret S. Lucas

April 23, 1954

Mr. Carey McWilliams
Editorial Director
The Nation
333 Sixth Avenue
New York 14, New York

My dear Mr. McWilliams:

You may identify me as Professor Norbert Wiener of the Massachusetts Institute of Technology.

Any statement of my past record I leave to you, to include or omit as you see fit. Should you include such a statement, I leave it to your judgment, to do it without any fanfare of trumpets.

Sincerely yours,

Norbert Wiener

NW:bbe

The Florida State University
Tallahassee

SCHOOL OF HOME ECONOMICS
DEPARTMENT OF INSTITUTION ADMINISTRATION

April 26, 1954

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

Dear Dr. Wiener:

Thank you for the address of Dr. Alex W. Rathe
which you so kindly forwarded to me.

Very truly yours,

Mary K. Bloetjes

(Mrs.) Mary K. Bloetjes
Department Head

HISTORY OF SCIENCE SOCIETY

(CONSTITUENT OF THE AMERICAN COUNCIL OF LEARNED SOCIETIES)

Official Journal: *Isis*

President

DOROTHY STIMSON
Goucher College

1st Vice-President

HENRY GUERLAC
Cornell University

2nd Vice-President

CONWAY ZIRKLE
University of Pennsylvania

Secretary

MARIE BOAS
Brandeis University

Treasurer

STANLEY M. LOOMIS
Burndy Library
Norwalk, Conn.

Brooklyn College
Brooklyn 10, N. Y.
April 26, 1954

Professor Norbert Wiener
Mass. Institute of Tech.
Cambridge 39, Mass.

Dear Professor Wiener:

Our Metropolitan New York Section of the History of Science Society is completing a very successful year of activities, and we are making plans for the program for the next academic year. Our Executive Committee agrees unanimously that it would be a great privilege and pleasure if you could see your way clear to address one of our meetings. In particular, would you be willing to address our meeting of December 6th, Monday, at 8:15 P. M. at Hunter College? You could speak on any topic you preferred, for I am sure that it would be of interest to our group with its widely varying background. We realize that you have many demands upon your time, but we do hope nevertheless for an affirmative reply.

Sincerely yours,

Carl B. Boyer

Carl B. Boyer, Chairman
Metropolitan New York Section
History of Science Society

*Yes - tentatively
"History of
Invention"*

[ans 4/27/54]

LOOK

COWLES MAGAZINES INC. *Look Building, 488 Madison Ave., New York 22, N. Y., MURRAY HILL 8-0300*

FLEUR COWLES, *Associate Editor*

April 26, 1954.

Dear Dr. Wiener:

I have just been clearing out FLAIR files - and came across the attached drawing of you which was done for the FLAIR Annual, and which you have probably seen.

I thought you might enjoy having the original drawing for yourself. For your information, it was done by Federico Pallavicini, an Italian of some renown.

Sincerely,

Fleur Cowles

Dr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge 39
Massachusetts



P-23-1-1

1911

1911

YALE UNIVERSITY SCHOOL OF MEDICINE
AFFILIATED WITH THE NEW HAVEN HOSPITAL

SECTION OF PREVENTIVE MEDICINE

333 CEDAR STREET
NEW HAVEN 11, CONNECTICUT

April 27th

Dear Mr. Winkler,

I would be very grateful if you could send me a reprint of your article "The concept of Homeostasis in medicine" which appeared in the Transactions and studies of the College of Physicians and Surgeons of Philadelphia (Vol. 20. 1953 p. 87-93).

Very sincerely yours
A. Lwoff.

P.S. I am head of the dept of microbial physiology in the Institut Pasteur in Paris, am now traveling in the United States, and would be pleased to receive the article at the following address: c/o Dr. R. Dulbecco
Biology division. California Institute of Technology. Pasadena. Cal.

Sent

4/29/54

MOUNT HOLYOKE COLLEGE
SOUTH HADLEY, MASSACHUSETTS

DEPARTMENT OF POLITICAL SCIENCE

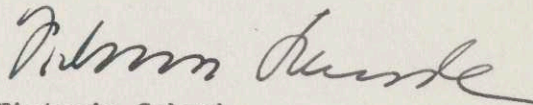
April 27, 1954

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

Dear Professor Wiener:

It was an extraordinary pleasure and intellectual experience for us to have you at Mount Holyoke last week. We thoroughly enjoyed every moment of it and only wish that you and Mrs. Wiener might have been able to stay longer. Your lecture has been the subject of continued discussion, I am sure, in many courses. We hope that in the not too distant future we may again have the privilege of another visit from you and Mrs. Wiener.

Sincerely,



Victoria Schuck
Professor

VS:f

April 27, 1954

Mr. Carl B. Boyer, Chairman
Metropolitan New York Section
History of Science Society
Brooklyn College
Brooklyn 10, New York

My dear Mr. Boyer:

I should like at this time to accept tentatively your invitation to speak at your meeting next December 6, on the topic "The History of Invention" if you think it suitable.

I cannot, however, make a definite promise to you now. I suggest that you write me again next September or October, when my plans for the fall semester will be more complete.

Sincerely yours,

Norbert Wiener

NW:bbc

[ans 5/6/54]

April 27, 1954

Professor J. Neyman
Department of Mathematics
Statistical Laboratory
University of California
Berkeley 4, California

My dear Neyman:

At this point, I say go ahead with your plans. I should like very much to speak at your Berkeley Symposia on mathematical statistics next December.

At the present time I can commit myself only tentatively. If you would write me about it again at the end of the summer or early in the fall term I can give you a more definite answer then.

Sincerely yours,

Norbert Wiener

NW:bbc

[ans 5/7/54]

April 27, 1954

United Bank of India Limited
4, Clive Ghat Street
Calcutta 1, India

Gentlemen:

This is to acknowledge receipt of
your Demand Draft No. 072230 for \$178.29,
dated 24.3.54.

Sincerely yours,

Norbert Wiener

NW:bbc

April 27, 1954

Miss Natalie Rosin
Anchor Book Department
Doubleday and Company
575 Madison Avenue
New York 22, New York

My dear Miss Rosin:

I hope you have received the properly
witnessed contract by now.

As to the index for The Human Use,
will do. Send up the page proofs, along
with any suggestions you may have about
indexing.

Sincerely yours,

Norbert Wiener

NW:bbc

April 27, 1954

Mr. E. B. Weiss
Director of Merchandising
Grey Advertising Agency, Inc.
c/o The Advertising Age
200 East Illinois Street
Chicago 11, Illinois

My dear Mr. Weiss:

When an advertising agency, for its own interests, makes a big hullabaloo about what I have done, which has not been done for them, the least I can expect from them is the courtesy to get the facts right. Incorrect statements, flattering or unflattering, are likely to do me great harm in the long run.

In particular, I am not a Nobel Laureate, and while I do not expect to be, any chance I might have would be seriously injured by statements such as yours in "The Advertising Age", claiming me to be a Nobel Laureate.

I do not know what amends can now be made, because any explicit statement on the subject would seem as if I were making a play for the award, but I will tell you that any further statements of this sort that could be damaging to me will be brought to the attention of my lawyer.

Very truly yours,

Norbert Wiener

NW:bbc

36 A. Tilak,
Medan, Sumatra.
April 28, 1954.

Professor Robert Wiener,
Department of Mathematics
Massachusetts Institute of
Technology
Cambridge 39, Mass.
U. S. A.

Dear Professor Robert Wiener,

I am very glad to receive your letter. Thank you for your good suggestion.

I do not intend to go to resident Institute or University in order to take further training. I like to learn mathematics only in spare time because of my poor circumstance.

Until now I do not know whether or not some University offer mathematical course through correspondence. Because some of the subjects which are recent development are very difficult to find in books. I also do not know what is the procedure in order to study them. So, I guess that perhaps can get some knowledge after taking correspondent course from University.

Perhaps you forgot to tell me something about Cybernetics. I am very anxious to know the prerequisite subjects of Cybernetics. Are there any books of Cybernetics published by publishers? I like to buy the books of Cybernetics but I do not know from where I can buy them.

My knowledge of mathematics development is limited at the period before 1893 A.D. when Heaviside discovered Operational Calculus. I surprise to learn that Hua doo Keng (華羅庚) is one of the leading mathematicians. He is well-known in Chinese newspapers of Orient. I am very glad to learn that he is your former student. Because he is now at Peiping not at Taipei. So in order to avoid trouble, I do not mail him. I do not know what is his work to ~~mathematics~~ mathematics development.

Thanking you very much for your kind help, I am
Yours very sincerely
Douglas Chuan.

AMERICAN SOCIETY OF PLANNING OFFICIALS

Planning Advisory Service - News Letter - Zoning Digest

1313 EAST SIXTIETH STREET • CHICAGO 37, ILLINOIS • TELEPHONE FAIRFAX 4-3400

PRESIDENT

FRANCIS A. PITKIN
Executive Director,
Pennsylvania State
Planning Board

April 28, 1954

VICE-PRESIDENT

HENRY J. SULLIVAN
Chairman, Detroit
Metropolitan Area Regional
Planning Commission

Professor Norbert Wiener
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

TREASURER

FERD KRAMER
President, Chicago
Metropolitan Housing
and Planning Council

Dear Professor Wiener:

CONSULTANT

WALTER H. BLUCHER

The American Society of Planning Officials will hold its 1954 National Planning Conference in the city of Philadelphia during the week beginning September 26. The ASPO Conference is attended by planning officials from all levels of government, by city managers, mayors and other municipal executives, and by representatives of business groups and citizens' organizations from all over the United States, as well as from a number of foreign countries. We had more than one thousand people at our conference in Detroit last year, and we expect to have as many as twelve hundred at the Philadelphia meeting. To give you some idea of the type of meeting we hold, we enclose a copy of the program from last year's conference.

BOARD OF DIRECTORS

HUMPHREY CARVER
Chairman, Research
Committee, Central
Mortgage & Housing
Corporation of Canada

CARL FEISS
Chief, Planning and
Engineering Branch
D.S.C.U.R.—H.H.F.A.

JOHN C. HOULIHAN
Chairman, Oakland City
Planning Commission

HAYDEN B. JOHNSON
City Manager,
Poughkeepsie, New York

PARK H. MARTIN
Executive Director,
Allegheny Conference on
Community Development

THOMAS F. McDONOUGH
Chairman, Boston City
Planning Board

HAROLD V. MILLER
Executive Director,
Tennessee State
Planning Commission

We would very much like you to give the keynote address for the conference. We suggest, tentatively, the title "A Long Look Ahead." As city planners, we are particularly interested in the effects of scientific and technological advances on society, on urban design, on increased leisure, on automation of industry, etc. We know that you are well qualified to talk on this subject, and I sincerely hope that you will be willing to make this important address.

LAWRENCE M. ORTON
Commissioner, New York
City Planning Commission

RAFAEL PICÓ
Chairman, Puerto Rico
Planning Board

The keynote address is scheduled for Monday morning, September 27. We can pay your travel expenses and offer you an honorarium. I would appreciate it very much if you will write us at an early date, saying that you are able to accept this invitation.

EXECUTIVE DIRECTOR

DENNIS O'HARROW

Sincerely yours,

Dennis O'Harrow
Executive Director

DO'H:gs
Enclosure

1934

1954

National Planning Conference Philadelphia Sept. 26 - 30, 1954

THE BENJAMIN FRANKLIN HOTEL

Mathematics Department
The Institute of Science
Bombay 1, India

April 28, 1954

The Secretary
Department of Mathematics
M. I. T.
Cambridge, Mass.
U. S. A.

Dear Madam :

Sometime back I wrote to Prof. Wiener asking for reprints, etc. I have received a packet of reprints for which I am thankful.

I have not, however, received what I especially wanted, viz. Prof. Wiener's lectures on Multiple Time Series (mimeographed). Would you be kind enough to mail me a copy of these as early as possible? I will of course bear the necessary charges. To enable me to do so please enclose a voucher.

I am writing to you directly so as not to bother Prof. Wiener. If necessary, you may refer this letter to him, and convey my thanks for the reprints already sent.

Faithfully yours

P. Masani

Dr. P. R. Masani
Professor of Mathematics

[ans 5/6/54]

BY AIR MAIL

हवाई पत्र

AEROGRAMME

NO ENCLOSURES
ALLOWED



THE SECRETARY
DEPARTMENT OF MATHEMATICS
M. I. T.
CAMBRIDGE, MASS.
U. S. A.

CORR - 66

Second fold here

Sender's name and address:—

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

To open cut here

To open cut here

April 28th 1954.

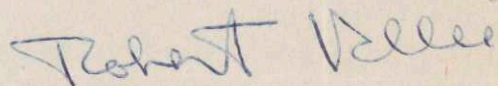
Monsieur le Professeur,

As you announced it to me a month ago I have obtained a scholarship ~~on~~ the Foreign Student Summer Project of the M.I.T and I am very glad . I shall be very much pleased to be your collaborator in your summer house of the New Hampshire. Your lectures and those of Mr. Shannon, Mr. Lee and Mr. Fano will interest me very much.

I shall leave France by plane on June 1st (or 2nd) and be in Cambridge during the first week of June.

I thank you very much for your kindness.

Veillez croire, Monsieur le Professeur, à l'assurance de mes sentiments les plus respectueux.



Robert Vallée.

PAUL LAURENCE
DUNBAR JUNIOR COLLEGE

Office Phone 4-6342

LITTLE ROCK, ARKANSAS
1811 Ringo Street

4/29/'54

Dept. of Math.
~~Office of the~~

My dear Professor:

Please forgive this perhaps presumptuous attempt to intrude upon your manifold and weighty responsibilities. However, if you find time I would appreciate your assistance in two matters which cause me some concern at this time. One stems from my teaching duties here at the college and the other from my progress to date in your treatise on Cybernetics.

It may seem quite unlikely (or perhaps not) that no person in all of Little Rock, as far as I have been able to determine, can supply the assistance which I seek. Nevertheless it is so. The one person with the mathematical training necessary speaks poor English and I speak only mediocre German; we could not get en-rapport. My next thought was to write to the University of Arkansas, seeking assistance from some departmental representative there. "However", I said to myself, "If I must leave the immediate locale, ^{at all} I had just as well go to a top authority regardless of how far distant he may be". That and the fact that one question stems from your own work has prompted me to pen this letter.

Let me say in passing that my own contributions to the founding of an "oasis" in this mathematico-philosophical "desert" are limited by only two summers of graduate training; in analysis, in New York City. (My B. A. ^{'51} is from a small southern college: Talladega in Alabama.)

PAUL LAURENCE
DUNBAR JUNIOR COLLEGE

Office Phone 4-6342

LITTLE ROCK, ARKANSAS
1811 Ringo Street

-2-

In my Analysis III class (selected topics in higher algebra, fused with topics in ordinary differential equations involving Riemann integrals) a student* asked me to solve a ^{more} generalized form of a problem which in its more restricted form admits of easy solution in terms of elementary functions. I recognize the problem as one depending upon the properties of elliptic integrals (a subject with which I have at best a sketchy acquaintance). The integral principally involved is:

$$\int_0^{\gamma_1} \sqrt{(\phi^2 - \gamma_1^2)(\phi^2 - \gamma_2^2)} d\phi; \quad \text{with } \gamma_2 > \gamma_1.$$

Can you suggest a textbook (besides: Differential and Integral Calculus, in two volumes, by Richard Courant) which would be instructive to me in the matter of elliptic integrals.

The entire problem is:

to determine the area of the surface generated when the centre of the volume common to two circular cylinders, whose axes intersect orthogonally, of radii γ_1 and γ_2 , with $\gamma_2 > \gamma_1$, moves a distance S along a helix given by: $x = a \cos \theta$, $y = a \sin \theta$, $z = m\theta$ — with a and γ_2 so related that the common volume never overlaps itself as it twists.

As for the question stemming from your treatise on Cybernetics, it comes from chapter two, which I have only this morning completed.

* There are only two, both with college degrees and whom I regard more as colleagues than genuine students.

PAUL LAURENCE
DUNBAR JUNIOR COLLEGE

Office Phone 4-6342

LITTLE ROCK, ARKANSAS
1811 Ringo Street

-3-

I have only a single question to ask at this point in my reading.

At the bottom of page 64 there occurs:

$$h(x) = \sum A_k f_k(x) \quad (2.04)$$

which, when x goes into Tx , yields

$$h(Tx) = \sum A_k \phi_k(T) f_k(x). \quad (2.05)$$

What I want to know is this (my own answer is in the affirmative).

Is the Zermelo axiom required to assure one that when $x \rightarrow Tx$ the expression (2.04) necessitates that $h(Tx) = \sum A_k f_k(Tx)$; from which (2.05) follows algebraically from (2.03)?

The question arises when I attempt to see just wherein (2.05) is a consequence of (2.04).

Yours very truly,

L. M. Christophe Jr.

L. M. Christophe, Jr.
Chairman: Dept. of Math.

[ans 6/18/54]

DOUBLEDAY & COMPANY, INC., 575 MADISON AVENUE, NEW YORK 22



MURRAY HILL 8-5300

April 29, 1954

Dear Professor Wiener:

Thank you very much for agreeing to make an index for the Anchor edition of THE HUMAN USE OF HUMAN BEINGS. Here are the page proofs. The index should not be longer than six pages (540 lines - 9 lines to a page), and there should be 30 characters in a line.

Thank you again for your help.

Sincerely yours,

Natahe Rosin
Natalie Rosin

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

[ans 5/5/54]