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CORRESPONDENCE

March, 1957

N. WIENER MC 22

[Ca March, 1957]

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ASST. VICE-PRESIDENT

Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Professor Wiener:

ON HUMAN COMMUNICATION by Colin Cherry has just been published and a copy is on its way to you with the author's compliments and ours.

We are aware of your interest in this field and feel that this book will prove useful to you. Should you care to make any comments upon examining the volume, they would be most welcome.

Yours very truly,

*Andrew H. Neilly, Jr.*  
Andrew H. Neilly, Jr.  
Assistant Vice President

AHN:bb

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[ans 3/22/57]

CONFERENCE BOARD OF ASSOCIATED RESEARCH COUNCILS  
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Mailing address: 2101 Constitution Avenue, N.W., Washington 25, D. C.

Office address: 1785 Massachusetts Avenue, N.W., Washington 6, D. C.

March 1, 1957

Prof. Norbert Weiner  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Re: Shin-ichi IZUMI

Dear Prof. Weiner:

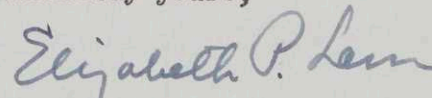
The Conference Board Committee has been asked by the United States Educational Commission in Japan to bring to the attention of American university officials the availability of the above Japanese scholar for a teaching or research position. The Committee has been informed by the Commission in Tokyo that you may wish to consider him for a remunerative position at your institution or that you may be able to bring his availability to the attention of colleagues in other institutions.

Brief information regarding his educational background and research interests is outlined on the enclosure. As you will note, he is one of twenty Japanese scholars who wish to secure remunerative positions in the United States. These were selected in Tokyo from a much larger number of applicants by a distinguished reviewing committee composed of both American and Japanese professors and are highly recommended for their professional competence and the importance of their proposed research. Each scholar on the list is eligible for a Fulbright travel grant covering the cost of round-trip transportation to his final destination in the United States provided he is able to secure dollar support sufficient to cover his living expenses in the United States. A limited number on the list may be given some supplementary Smith-Mundt dollar aid to cover their maintenance expenses in the United States. This fact may be of interest to you in case your institution could offer the above scholar only a part-time position.

The Committee would appreciate knowing whether there is a possibility of a remunerative position for him at your institution. His application and supporting papers will be sent to you upon request. If you are not considering him for a position, any advice or help which you can give in obtaining other sources of support for him will be appreciated.

You may be interested to know that for the first time last year, at the request of the Educational Commission in Japan, the Conference Board Committee explored the possibility of remunerative research positions for a similarly well chosen group of Japanese scholars. The effort was sufficiently successful to prompt the Commission to request that it be attempted again. We hope that a considerable number on the list this year will also be offered remunerative positions.

Sincerely yours,



Elizabeth P. Lam  
Executive Associate

CONFERENCE BOARD OF ASSOCIATED RESEARCH COUNCILS  
COMMITTEE ON INTERNATIONAL EXCHANGE OF PERSONS  
2101 Constitution Avenue, N.W.  
Washington 25, D.C.

JAPANESE SCHOLARS WISHING TO UNDERTAKE RESEARCH IN AMERICAN UNIVERSITIES  
DURING THE ACADEMIC YEAR 1957-58

HUMANITIES AND SOCIAL SCIENCES

ISHIKAWA, Shigetoshi (41 yrs.)

AMERICAN LITERATURE

Assistant Professor of English Literature, Faculty of Literature and Science, Ehime University, 1951 --. B.A., English Literature, Kyushu U., 1942. Publications: Reports concerning the study on T.S. Eliot, 1953-56; Treatise concerning Shelley study, 1955. PROPOSED PROJECT: Study of modern literary criticism and of T.S. Eliot. Commission comments: "He has an important place in the promotion of English and American Literature study in his region . . . Young scholars in Japan are deeply interested in Eliot. Mr. Ishikawa's approach is thoughtful, responsive, and aware of student's problems in trying to understand Eliot. He handles English very well and could lecture entertainingly on Japanese Literature."

SHIMIZU, Mamoru (48 yrs.)

ENGLISH TEACHING METHOD

Professor of English, International Christian University, 1956 --. B.A., English Philology, Tokyo U., 1931. Publications include: "Biblical Expressions in Modern English", the Studies of English Lit., Vol.1, 1932; "The Dictionary of English Quotations", edited in collaboration with Dr. S. Ichikawa, et al, 1952. PROPOSED PROJECT: Research in the method of teaching English as a foreign language from a philological and structural approach, also study of learner's problems. Comments of his president: "His scholarship is well attested in the well-known 'Dictionary of English Quotations' . . . reviewed with high commendation in London Times and New York Times (1952). . . member of Committee . . . responsible to bring to Japan Dr. Fries .. and Dr. Hornby of London this summer. ICU counts heavily on his contribution as a member of the proposed Graduate School of Education . . ." Commission comments: "A fluent speaker, outgoing, has a strong sense of vocation. . . Competent also to teach Japanese language."

KADOTA, Tadashi (48 yrs.)

APPLIED LINGUISTICS

Professor of Linguistics, Teachers College, Kagoshima University, 1953 --. B.A., English Language and Literature, Hiroshima U., 1939. Publications include: "New Type of Objective Test", 1950; "Structural Approach to English", Eigo Kyoiku, 1953-54; (Forthcoming monograph), "Prescriptivism and Descriptivism", 1956. PROPOSED PROJECT: Research on structural, descriptive linguistics and English teaching method. Commission comments: "Professor Kadota has a very responsible position and unusual opportunities for effective leadership. . . He is firm, independent .. and intends .. making his specialty broadly interesting. Competent to teach Japanese language."

KITAGAWA, Tokusuke (40 yrs.)

COMMERCIAL LAW

Assistant Professor of Law, Metropolitan University of Tokyo, 1952 --. B.S., Law, Tokyo U., 1941. Publications include: "Commentaries on the Joint Stock Companies Act of Japan"; "Legal problems of 'Gefahrgemeinschaft'", Vol.13, Private Law; "A study on law of contract of carriage by air", Vol.I, II, Journal of Air Law. PROPOSED PROJECT: Pursuit of legal problems in present-day complex society. Basic principles in legal theories. Comments of senior professor: ". . . He finished an excellent thesis on corporate personality .. presently member of a study group in commercial law . . . is studying mortgaged debenture, transportation contract, etc., and has published partial findings which struck us as very excellent . . . steady and deep thinker. . . someday will be a top-ranking scholar in commercial law in this country." Commission comments: "Mr. Kitagawa comes well recommended as a careful, serious scholar. Liability insurance, accounting standards, and air law are all very important subjects in Japan."

KAWADA, Kaneo (45 yrs.)

ENGLISH LITERATURE

Assistant Professor of English Literature, Kyoto University, 1949 --. B.A., English Literature, Kyoto U., 1937. Publications include: "Nature in Arnold's poetry", The Albion, No.2, March, 1953; "Dualism in Shaftesbury's thought", The Review of Eng. Lit., Vol.I, March 1954. PROPOSED PROJECT: Matthew Arnold. Comments of senior professor: "He is gifted with a keen intellect and an energetic mind, and his wide as well as deep knowledge of British and American literature has been shown in quite a good number of essays and treatises as well as translations . . . his sincerity and firmness of purpose has earned him high esteem among his colleagues." Commission comments: "The committee felt that his approach to Matthew Arnold will interest and challenge American colleagues. If he can go to America and have access to the material there, it will be useful to his career and he can be expected to contribute a great deal to the cultural world of Japan. Handles English well."

UCHIDA, Tadatoshi (38 yrs.)

ECONOMICS

Professor of Economics; Gakushuin University, 1955 --. B.A., Economics, Tokyo U., 1941. Publications include: (translation), J.R. Hick's "Theory of Wages", Tokyo, 1952; "Wages", Encyclopaedia of Economics, Vol. I, Tokyo, 1955. PROPOSED PROJECT: An intensive study of the policies and philosophy of American labor unions. Comments of his president: "He is a conscientious and industrious scholar and much is expected of him as a young professor at this university." His Dean states: "It is my belief that his research and inspection in the United States would without fail bring vast results which .. would be beneficial to the academic and practical circles of Japan." Commission comments: "He is very hopeful and ambitious about the practical usefulness his researches will have for the Japanese labor movement. . . He has a good grasp of a useful field and belongs to a non-doctrinaire economics group of high reputation." An American visiting lecturer states: "He seems to know where the information lies and how to reach it."

YAMANE, Tsuneo (39 yrs.)

SOCIOLOGY

Assistant Professor of Sociology, Nanzan University, 1951 --. B.A., Sociology, Tokyo U., 1940. Publications include: "Problems in the study of human relationship in the family", Problems in Japan's Sociology, Tokyo, 1956; "The function of the family in city life", Municipal Problems, Tokyo, 1956.

PROPOSED PROJECT: Research in the study of the family pattern of Japanese-Americans and comparison of it with that of the Japanese. Acting President of his University comments: "Professor Yamane has been noted .. as a young scholar enthusiastically devoted to the pursuit of serious research in his professional field. His scholarly interests have, in particular, shown a marked willingness for cooperation in team-projects, and a ready understanding for wider angles to his work, national and international. Through his participation in the study of culture and personality now being carried on by the ((Rockefeller financed)) Human Relations Interdisciplinary Research Group of Nagoya University .. he is becoming known among researchers abroad."

Commission comments: "Assistant Professor Yamane's field is a progressive one in Japan and the Group in Nagoya to which he belongs is doing much ground breaking. Mr. Yamane's plan to do a study on Japanese-Americans is .. a very timely, useful problem certain to receive support and cooperation in America .. His manner is competent and his English good."

NATURAL SCIENCES

TOKUNAGA, Chiyoko (woman - 41 yrs.)

GENETICS

Professor of Animal Genetics, Kobe College, 1951 →. B.S., Zoology, Hiroshima U., 1939. Ph.D., Genetics, Kyoto U., 1951. Publications: "Albino frogs produced by artificial parthenogenesis", J. of Heredity, Wash., D.C., Vol. XI, No.10, 279-81, 1949; "Genetic studies on Aphiochaeta xanthina speiser", 7 papers in Jap. J. of Genetics, 5 in Studies, Kobe College Press, 1946-56.

PROPOSED PROJECT: Research in genetics, especially on problems of complicated genetic behavior and also of the sex determination mechanism in Aphiochaeta. Comments of her senior: "I have been deeply impressed by the indomitable devotion to and perseverance in her research work . . . She has steadily continued to add yearly to the impressive data she has accumulated from her research of Aphiochaeta. . . also brought out several original working hypotheses." Commission comments: "Her systematic scholarship and workmanlike research have won her a very respectable position among Japanese male scholars . . . Her confident, straightforward and friendly personality should make an excellent impression on American colleagues . . ."

TERAO, Mitsuru (38 yrs.)

ELECTRONICS - INDUSTRIAL INSTRUMENTATION  
AND AUTOMATIC CONTROL

Chief, Instrumentation Section, Electrotechnical Laboratory, Ministry of International Trade and Industry, 1954 --. B.S., Electrical Engineering, Osaka U., 1941. Ph.D., Tokyo U., 1956. Publications include: "Industrial Electronic Instruments", Denki-shoin, Kyoto, 1951; "Characteristics of magnetic fluid servo actuators", Bull. of Electrotechnical Lab., Vol. 15, No.8, pp. 613-616, 1951. PROPOSED PROJECT: Research on: Development of industrial data logging system; multi-channel digital process control system; industrial process control in conjunction with electronic computers; and development of synthesizer for automatic control system design. Comments of his colleague: "He is a man of versatile abilities ranging from the design of an automatic factory to the mending of his automobile . . . cooperative as well as capable of taking leadership . . . serious in pursuing objectives and attaining responsibilities . . ." His superior states: "He is excellent in system engineering and developing many new devices on industrial process control . . . The Ministry of International Trade and Industry is now planning to promote electronics industry in Japan, and his research work and other activities will surely play an important role for it." Commission comments: "His approach is practical and experimental . . . he is personally mechanically inclined and apt . . . His prolific publications and inventions .. together with his very good English and responsive personality impressed a committee of older academic scientists that he has promise of materially advancing Japan's electronic industry."

IZUMI, Shin-ichi (51 yrs.)

MATHEMATICS

Professor of Mathematics, Hokkaido University, 1956 --. B.S., Mathematics, Tohoku U., 1927. Ph.D., Mathematics, Tohoku U., 1938. Publications include: "On an approximation problem in the theory of probability", Tohoku Math. J.,

5, 1953; "On the strong summability of the derived Fourier series II", Proc. Japan Acad., 31, 1955. PROPOSED PROJECT: Research in Real Analysis, especially Fourier Analysis. Comments of a colleague: "Professor Izumi is a noted researcher of Fourier Analysis and the theory of functions of real variables and is well known not only in Japan but also in many foreign countries . . . Professor Wiener of M.I.T. recognized his work as what might be called the "Izumi School". Commission comments: "The authority in Japan on **F**ourier analysis, some of his papers are internationally known . . . is a leader of the "Tohoku School of the Theory of Function of Real Variables" . . ."

TSUYA, Akira (42 yrs.)

RADIOLOGY

Professor of Radiology, Yokohama Municipal University, 1956 —. M.D., Tokyo U., 1940. D.M.S., Radiology, Tokyo U., 1954. Publications include: "Effect of irradiation on minute vessels", Nippon Acta Radiologica, 1955-56; "Roentgen-therapy of breast cancer late 10 years", Cancer Clinic, 1955. PROPOSED PROJECT: Research in the medical use of radioisotopes and radiobiology. Comments of an American medical doctor: "Dr. Tsuya is a very pleasant, highly capable doctor, well trained in the field of Radiology." Dean of his University states: "Since his appointment as Professor of Radiology, he has not only been leading his students .. into deep researches on subjects regarding isotopes which contributed much to the field of medical science. He also engaged in the investigation of atomic bomb casualties as a member of ((Atomic Bomb Casualty Commission)) with remarkable results." Commission comments: ". . . He is well established in his field . . . expresses himself well . . . His work on occupational radiation hazards, radiation effects on the minute blood vessels of atomic bomb patients, and cancer therapy are in important, practical-application areas . . . He devised a simple and useful instrument of value to equipment-poor Japanese radiology researchers . . ."

MAEKAWA, Tsutomu (46 yrs.)

AERODYNAMICS

Professor of Aerodynamics, Hiroshima University, 1950 —. B.S., Physics, Hiroshima U., 1932. Ph.D., Aerodynamics, Hiroshima U., 1949. Publications include: "One method of solving a compressible laminar boundary layer", Journ. Sci. Hiroshima U., Ser. A, Vol. 17, 83-110, 1952. PROPOSED PROJECT: Advanced experiments on the boundary layer and transition in wind-tunnels. Comments of the Dean of his University: "His excellent ability in his professional research field has been recognized by fellow aerodynamicians in Japan". A colleague states: "Dr. Maekawa has already published a number of interesting papers on aerodynamics. His main interest is with the viscosity effects in subsonic airflow." Commission comments: ". . . He is interested in measuring pressure fluctuation in boundary layer. It was noted that one of his papers was published by the U. S. National Advisory Committee for Aeronautics. . . The committee was much impressed with his grasp of aerodynamic fundamentals and with his very clear exposition of his planned research."



HITOTUMATU, Sin (30 yrs.)

MATHEMATICS

Assistant Professor of Mathematics, Tokyo University, 1955 --. B.S., Math., Tokyo U., 1947. Ph.D., Mathematics, Tokyo U., 1954. Publications include: "Note on Levi's conjecture", Comm. Math. Univ. St. Paul's, 1955; "Theory of functions of several variables", Kyoritsu-shuppan, Tokyo, 1956. PROPOSED PROJECT: Research in the field of the theory of functions of several complex variables. Comments of his superior: "I can appreciate the scientific value of his work, which shows both his vast knowledge and his originality." An American mathematician writes: "In my opinion Prof. Hitotumatu has excellent basic training in mathematical analysis, especially in the theory of functions of several variables and is a very able and gifted research mathematician." Commission comments: ". . . A very young and a very able scholar at Japan's top university . . . an assistant professor at 30, he has shown real promise . . . the committee was impressed with his sharp mind and with the recognition accorded him by some American mathematicians. . ."

SATO, Kensuke (42 yrs.)

PHYSIOLOGY

Professor of Physiology, Nagasaki University School of Medicine, 1954 --. M.D., Niigata Medical U., 1940. D.M.S., Niigata Medical U., 1945. Publications include: "On the effect of photic stimuli upon the constituent component of EEG", Jap. Journ. Physiol., Vol.6, 1956; "Statistical study on the generating mechanisms of the brain wave", in press, 1956. PROPOSED PROJECT: Research on the nervous control of the respiratory function. Comments of his president: "Dr. Sato is well prepared academically to study in the area of brain physiology. Dr. Sato is a wholesome person, well liked and highly regarded by his colleagues." Commission comments: ". . . Dr. Sato's professional history, education, and publications add up to a very respectable standing . . . his field is unusually interesting. . . He is one of very few Japanese working with this approach in neurophysiology and electroencephalography. ."

NISHIDA, Shoki (35 yrs.)

MICROBIOLOGY

Assistant Professor of Microbiology, Kanazawa University, 1950 --. M.D., Kanazawa U., 1945. D.M.S., Microbiology, Kanazawa U., 1955. Publications include: "Potent diphtheria toxin within the cells of *C.diphtheriae*", Nature, 174, 970, 1954; "Studies on the metabolism of *H.pertussis*, specially on its oxidative assimilation", Jap. J. Med. Sci. & Biol., in press, 1956. PROPOSED PROJECT: Study on the relation between the structural instability and the depolymerizing system in bacillus group; and study on the same relation of intermediary groups of microorganisms between spore bearing bacilli and non-spore bearing microorganisms. Comments of a colleague: "With his excellent ability, Dr. Nishida has accomplished many distinguished works in the field of microbial toxin. I believe that his strong intentions of carrying fundamental investigation, his sense of responsibility and perseverance will bring beneficial results." Commission comments: "Dr. Nishida's research has been original and promising . . . is very significant for the promotion of public health in Japan . . . He is very enthusiastic about his work with microbial toxins and has a program of research in America worked out in some detail."

YAMANOUCHI, Yasufumi (37 yrs.)

NAVAL ARCHITECTURE

Head, Oscillation Section, Transportation Technical Research Institute, Ministry of Transportation, 1950 --. B.S., Engineering, Tokyo U., 1943. Publications include: "On the effect of the restricted water upon the resistance and propulsive performance of ships", J. of Soc. of Naval Architects of Japan, Vol. 86, 1949; "On a method of measuring a ship's oscillations", ibid., Vol. 99, 1956. PROPOSED PROJECT: Model experimental and statistical research on the motion of ships at sea. Comments of his superior: "He has studied earnestly the field of ship motion, particularly regarding stability and oscillations of ships in waves and has done great deal of research and is now considered as the most excellent researcher in our country concerning the statistical research of ship motion among waves." Commission comments: "As Section head in the laboratory of the Ministry of Transportation he holds an important position. . . education is first rate and in spite of his relative youth, he has made a good record . . . His navy and civilian experience is considerable and his personality and English conversational ability impressed the reviewing committee very favorably. . ."

KIYONO, Takeshi (43 yrs.)

ELECTRICAL ENGINEERING & APPLIED GEOPHYSICS

Professor of Electrical Engineering, Kyoto University, 1955 --. B.S., Electrical Engineering, Kyoto U., 1937. Ph.D., Electrical Engineering, Kyoto U., 1946. Publications include: "Electrical Prospecting", Denki-shoin, Kyoto, 1947; "Electrical Units and Dimensions", Denki-shoin, Kyoto, 1956. PROPOSED PROJECT: To perform advanced research in the field of electrical prospecting, especially by the electromagnetic induction method. Marine prospecting. Comments of a colleague: "Dr. Kiyono is one of our most distinguished professors and is recognized as an authority of electromagnetic theory, particularly in the field of applied geophysics." Commission comments: ". . . Professor Kiyono is an established scholar . . . He has developed a theory for the interpretation of his data and his work generally has .. practical application . . . sober and communicative . . ."

ITAKURA, Chuzo (48 yrs.)

HIGHWAY ENGINEERING

Professor of Engineering, Hokkaido University, 1944 --. B.S., Engineering, Hokkaido U., 1932. Ph.D., Engineering, Hokkaido U., 1946. In the States for 5 months in 1952 for observational purpose. Publications include: "Electric heating of concrete in cold weather construction", J. of American Concrete Institute, May, 1952. PROPOSED PROJECT: To perform research on cold weather highway engineering, especially on bituminous materials and mixtures. Comments of the President: "Professor Itakura is very active and is now recognized as eminent in his fields of specialization." Commission comments: ". . . He is well established as a full professor . . . He is evidently the principal mentor ((of government and private engineers in Hokkaido)) in the matter of material and construction method of highways . . . his English is good."

NAKAMURA, Tsuneo (45 yrs.)

PEDIATRICS & VITAMINOLOGY

Professor of Pediatrics, Kyoto Prefectural Medical School, 1951 ---. M.D. Kyoto Prefectural Medical School, 1935. D.M.S., Pediatrics and Vitaminology, Kyoto Prefectural Medical School, 1940. Publications include: "Biochemical study on whooping cough, especially upon Ca and K metabolism", J. Kyoto Pref. Med. School, 55, 639, 1954. PROPOSED PROJECT: Researches in pertussis and vitamin metabolism in childhood. President of his University comments: "Dr. Nakamura is one of the most promising and youngest professors in Japan who has a brilliant prospect." Senior professor states: "Thus far his untiring researches and experiments are being recognized as being exact and excellent by the pediatric committee of the Academic Society." Commission comments: "... He has been very productive and has many publications ... the medical school at which he is the professor of pediatrics has been well established for many years ..."

ONO, Katuzi (47 yrs.)

MATHEMATICS

Professor of Mathematics, Nagoya University, 1943 ---. B.S., Mathematics, Tokyo U., 1933. Ph.D., Mathematics, Tokyo U., 1939. Publications: "Logical studies on the foundation of mathematics", in German, Fac. of Science, Tokyo U., 1938; "Problems in the philosophy of mathematics, I, II, III", Philosophical Magazine, Japan Association for Philosophy, 1941. PROPOSED PROJECT: Mathematics and computing mechanics. Comments of a colleague: "Originally he studied mathematics from a philosophical standpoint, later developing his theory on the relation between mathematics and engineering ... He proved to be an earnest and intelligent researcher." "His scientific ability is highly estimated by outstanding mathematicians." Commission comments: "... The reviewing committee was very impressed with his breadth and depth. ... his inventions (a binary computer) and his wide interests made him very interesting to talk to ..."

Mathematics Department  
The Institute of Science  
Bombay 1, India

March 2, 1957

Dear Professor Wiener :

Thank you for your letter of February 5, regarding the receipt of our paper by Acta Mathematica. I hope the question of its acceptance will soon be settled.

I write this letter to ask whether the question of my being invited to Tech has been settled one way or other, or is still pending. I will be on vacation from March 15 to June 20. Our first semester is from June 20 to October 15. If I am to come over, I would like to apply for a year's leave from June 20, so as to avoid having to depart in the middle of the semester. It is time I began moving in this matter, but I naturally would not like to take any such steps until I have some definite information. I would therefore be very grateful for an immediate reply.

I am longing for a real exchange of ideas, and do hope that in some way I can come over and work with you. Professor Yosida of Japan was here the last few months, and lectured on partial differential equations. I had an interesting discussion with him.

With kind regards to you and Mrs. Wiener.

Sincerely yours

*P. Masani*

P. Masani

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

[ans. 3/15/57]

BY AIR MAIL

हवाई पत्र

AEROGRAMME

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ALLOWED



PROFESSOR NORBERT WIENER  
DEPARTMENT OF MATHEMATICS  
MASS. INSTITUTE OF TECHNOLOGY  
CAMBRIDGE 39, Mass.  
U. S. A.

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Corr - 66

Third fold here

Second fold here

Sender's name and address :-

P. Masani  
Institute of Science  
Bombay 1, India

HARVARD UNIVERSITY  
CAMBRIDGE 38, MASS.

DEPARTMENT OF  
MATHEMATICS

March 4, 1957

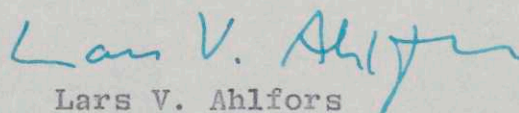
Prof. Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts

Dear Professor Wiener:

Professor Katuzi Ono of Nagoya University will write to you about his plans for next year. He has obtained a Fulbright travel grant, but he must still secure support in this country. He has worked on logic and computing machines and was awarded a prize for the construction of what I think amounted to a hydraulic differential analyzer.

I cannot appraise his work, but I do know him personally, and I can testify that he gives a strong impression of a highly intelligent person whose mind moves in a quite original circle. From my conversations with him I am convinced that he will bring considerable intellectual power to whatever he decides to do. Therefore, I am sure that any support that can be given to him would not be wasted.

Sincerely,

  
Lars V. Ahlfors

LVA/lbs

[replied corr. 1/35/57]

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Editorial Office:

550 Fifth Avenue, New York 36, N. Y.  
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March 4, 1957

Dear Biographee:

As one whose biography appears in the new volume, *JEWS IN THE WORLD OF SCIENCE*, we feel sure you will want to own a copy of this outstanding reference work for your own library. As you may have overlooked our first letter of January 17, we should like to make our special offer to you again.

Your biography, along with such eminent scientists as Dr. Albert B. Sabin, Dr. Fritz A. Lipmann, Dr. Joseph Kaplan, Dr. Edward Teller, Dr. Isador I. Rabi, Dr. Jones E. Salk, Dr. David B. Allman, and Dr. Sydney Goldstein, appears in this unique compendium, *JEWS IN THE WORLD OF SCIENCE*. It is fittingly dedicated to the memory of Albert Einstein, the greatest scientist of our times.

The preface presents a broad survey of the achievements of Jewish men of science over the last 100 years and the book is generously illustrated with photographs of Jewish Nobel prize winners, as well as other world-renowned scientists. Of the 3000 biographies from 35 countries contained in this volume, approximately half are American. *JEWS IN THE WORLD OF SCIENCE*, produced by the publishers of "Who's Who in World Jewry," contains 288 pages in large format, printed in clear, easily-read type. It is beautifully bound in vellum cloth and gold stamped, and printed on paper of superior quality.

The book retails for \$18.00, but as a biographee you are entitled to a 20% discount, which brings down the price to \$14.40. We suggest that you place your order promptly! A reply envelope is enclosed for your convenience.

May we extend our sincere appreciation for your cooperation in making this book possible, and thank you for your friendly consideration of this letter.

Sincerely,

I. J. Karpman, President  
MONDE PUBLISHERS, INC.

ijk;kwl

[and 3/20/57]

March 5, 1937

Professor Leonard M. Blumenthal  
University of Missouri  
Columbia  
Missouri

Dear Professor Blumenthal,

I have just shown your letter to the authorities of the Mathematics Department. As most of the students who expect to finish this year have already made fairly definite plans for next year, they do not know of any candidates suitable for the job you mentioned in your letter, and I certainly do not know of any out of my own knowledge.

Wishing you better luck elsewhere, I am

sincerely yours,

Norbert Wiener.

NW/ls



March 5, 1957

Mr. Lester L. Coppick  
Personnel Director  
U.S. Naval Ordnance Laboratory  
Corona  
California

Dear Mr. Coppick,

Mr. Alfred G. Pikler has been bombarding me with letters for the last few years, and I believe that on some occasion or other I have met him. I have no very clear impression of his personality and I am certainly far from able to fill out the sort of statement which you request of me. I find myself in an embarrassing position, and there is nothing whatever that I can do about it.

Sincerely yours,

Norbert Wiener.

NW/ls

March 5, 1957

Dr. John C. Sherry  
Pace College  
41 Park Row  
New York 38  
N. Y.

Dear Dr. Sherry,

The invitation which you extend to me to be a principal speaker at a luncheon meeting of your conference is very tempting, but it comes at a time when I find myself heavily loaded with other invitations, and therefore find myself regretfully unable to accept your invitation. As I get older I find it imperative to put a stringent limit on my lecture engagements and on other engagements of similar character. I hope you will understand my position.

Sincerely yours,

Norbert Wiener.

NW/ls

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DEPARTMENT

JLB

6285 Airport Way  
Seattle 8, Washington  
March 6, 1957

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

Dear Dr. Wiener:

Your opinion of which pioneering niche in Cybernetics properly belongs to my brother, Thomas Ross, now almost forgotten, would be appreciated. It may happen that circumstances improving after many years of struggle will bring my brother fresh opportunities to be heard in scientific circles. He has long been intensely interested in social and economic challenges of the Cybernetics field which you have given its label. Just how he should be introduced for talks to various organizations is a matter of consequence. As nearly as I can formulate his pioneering role, he is apparently the first person to construct a conditioned-reflex mechanism having moving parts and being independent of push-button operation.

The late Dr. Clark L. Hull encouraged Thomas to undertake construction of the mechanism described in "Machines That Think" in SCIENTIFIC AMERICAN for April 1933. Thomas and I had been considering problems involved in attempting to construct a logic machine for assimilating huge amounts of information in legislative and other fields becoming confusing thru sheer complexity and mass of material. We had also been thinking of such devices as typewriters capable of enabling a stenographer ignorant of a foreign language to correspond in good idiomatic German, for example, simply by writing the English equivalent of a desired letter in German. Realization of complexities involved soon brought admiration for the brain mechanisms of even "stupid" animals. Thomas began seeking insight into thought processes on levels basic enough to offer some hope of comprehension. When we read of Dr. Hull's conditioned reflex experiments with lights, push-buttons, and small storage batteries, we were fascinated. Thomas wrote to him; received much encouragement; was invited to submit a device such as Thomas had in mind after, I believe, further correspondence.

In 1932 we spent many hours turning junk-box parts into solenoids and other components of a maze-learning device. A derrick-like boom was given a sensitive tip which "liked" to be bent upward; "disliked" downward bending. Beginning at the bottom of a maze comb-like in design, the tip swung into each slot in turn, sometimes encountering "reward" at bottom of a slot, and sometimes "dislike" in encountering a downward slant. "Good" slots were returned to directly the next time, and "bad" ones passed by, due to automatic settings of "memory switches" which little electromagnets actuated.

Dr. W. Grey Walter, on Page 122 of Norton's 1953 edition of THE LIVING BRAIN mentions Thomas as having separated attempt to simulate animal appearance from animal-like action, but refers to a mechanism using small tracks as the maze. Primary credit for this belongs to the late Dr. Stevenson Smith of the University of Washington, whom Thomas assisted in turning a cherished dream into reality. I believe, however, that Dr. Walter's appraisal becomes correct by substituting the 1932 derrick-like device.

Though the first mechanism and the "Robot Rat" attracted considerable attention, work actually much more significant from a practical standpoint was finally driven to the Patent Office as the only avenue for even proper publication. Somehow, the tide was lost when Thomas abandoned the field of clicking mechanisms, feeling that they were too slow and bulky, and secluded himself for several years on a poorly-paid weather observing job which gave time to work upon a cathode-ray memory tube and associated circuitry which he believed would find widespread use very quickly. Before World War II he had detailed plans for a memory tube which would reproduce a characteristic frequency associated with a set of circumstances existing whenever it was desired to condition the impressionable screen. Fantastically, editors seemed unable to comprehend the new device's workability. For the time being, we were unable to make a working model. Then, though we might have made a "tube" by obtaining a bell jar and vacuum pump, I was called to Army duty, breaking up an experimental team. Rather recently, the tube and attendant circuitry, which might have shortened the war in weather forecasting and other roles, were re-created in essential detail by the Bell Telephone Laboratories, the Patent Office evidently having overlooked the Ross patents obtained for publication which created no evident interest. Thomas was evidently too far in advance of thinking for his time.

Interest in automation has remained intense thru the years, for we have seen new challenges and opportunities. We have long felt vital necessity for our Nation's understanding nature of the New Industrial Revolution lest the social entropy you so frequently mention engulf our progress, now that the physical Frontier is virtually closed. New opportunities have been opening recently for Thomas, and there may be various opportunities to be heard. Your opinion of his proper place as a Cybernetics pioneer might be very helpful in this age when every shoulder at the wheel of Understanding is so important. Thomas would wish to be introduced accurately---if given undue credit by some master of ceremonies, he might even mar atmosphere of an important talk by blunt corrections---but at the same time, I believe that his early role should be formulated in justice to his efforts, and in justice to the cause of vital understanding of Automation's challenge.

Thomas admires your THE HUMAN USE OF HUMAN BEINGS and is doubtless influenced considerably by it.

Incidentally, we have conducted some experiments giving rise to hope there may be "blind" Maxwell's Demons giving way to pushes coming from one direction more readily than from the other direction. The Second Law of Thermodynamics may eventually, we believe, stand in need of refinement to account for apparatus in which air may be shown to compress itself slightly. Fantastically, seeking extremely minute particles for a "molecular check-valve" we bought a tube of graphite particles at random from a display---later to discover to our chagrin that that tube, used carelessly because of its apparent commonness, possessed properties lacking in even other tubes of the same display; properties long searching has not obtained again---probably particles much smaller than usual.

We are especially glad that you say executives of some of the large corporations are apparently awake to challenges of Cybernetics. President Price of Westinghouse gave what is perhaps the most enlightened address on the subject I have ever encountered, in Chicago last year.

Appreciatively,

*Donald S. Ross*

Donald S. Ross

ret env

March 6, 1957

Dr. J. Wiener  
2. Shder. Hanadiv  
Mt. Carmel  
Haifa  
Israel

Dear Dr. Wiener,

My father was born in Byelostock, my father's father was born in Krotoschin. Beyond that my knowledge of my Wiener relatives is vague in the extreme. I have heard that we are descended from Aqiba Eger who was Grand Rabbi of Posen in the earlier part of the 19th century. I have heard that Max Logdau (Sudfeld) was a distant kinsman of his.

As you know very well, city names like Wiener are so common among the Jews that they scarcely give a basis for establishing relationship.

Sincerely yours,

Norbert Wiener.

NW/lis

# THE ENCYCLOPEDIA AMERICANA

2 WEST 45<sup>TH</sup> STREET, NEW YORK 36, NEW YORK

Office of the Editor

March 7, 1957

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

Dear Professor Wiener:

We would be delighted if you should agree to write a 500-word article on the GOLDEN SECTION, treating both mathematical and aesthetic aspects.

If you could let us have your account by April 1, that would be in good time to schedule it for the 1958 edition. The honorarium, payable on its receipt, would be \$20.

Looking forward to hearing from you in the matter,

Sincerely yours,

*Drake de Kay*  
Drake de Kay  
Senior Editor

P.S. As you will note from the enclosed tear sheet the 125-word note on the subject now in our text is very old and otherwise inadequate.

DdK:mb  
Encl.

[aw 3/20/57]



V allowed a red ribbon to be substituted, and the chain is now worn only by the grand-master. The Spanish decoration differs slightly from the Austrian. The costume consists of a long robe of deep red velvet, lined with white taffetas, and a long mantle of purple velvet lined with white satin, and richly trimmed with embroidery containing fire-stones and steels emitting flames and sparks. On the hem, which is of white satin, is embroidered in gold, *Je l'ay empris* ("I have captured it"). There is also a cap of purple velvet embroidered in gold, with a hood, and the shoes and stockings are red.

Consult de Lettenhove, *La Toison d'Or* (Brussels 1907); Terlinden, C., "The Order of the Golden Fleece" in *Edinburgh Review*, v. 232 (1920).

**GOLDEN GATE**, a channel at the entrance to San Francisco Bay, between the peninsula upon which is located San Francisco and the one upon which Sausalito stands. The average width is two miles, and the depth is sufficient for ocean steamers. It was so named by Gen. J. C. Frémont in 1846. For the Golden Gate Bridge spanning it see the article **BRIDGE**.

**GOLDEN HIND**, *The*. (1) A ship of Sir Francis Drake completing the first English circumnavigation of the world (1577-1580).

(2) A ship of Sir Humphrey Gilbert's squadron, Edward Hales master; Hales reported Gilbert's death aboard the *Squirrel* which foundered south of the Azores (1583).

**GOLDEN HORDE**, a body of Tatars who overran eastern Europe in the middle of the 13th century and founded in Russia the Empire of the Golden Horde, or Western Kipchaks. Their leader was Batu Khan, son of Juji Khan and grandson of Genghis Khan, and the invasion, which began about 1237, was characterized by merciless slaughter and destruction. The Golden Horde conquered and burned everything in their path through Russia and into Silesia, Poland and Hungary. At Liegnitz they defeated Henry II, duke of Silesia, on April 9, 1241, but the cost of this victory was so heavy that Batu Khan found himself unable to conquer Neustadt, and turning back upon his path established himself at Sarai, east of the lower Volga, his gorgeous tent giving rise to the name of the empire and its followers, the Golden Horde. Here he summoned the Russian princes to render fealty, and rapidly established a power unbroken in the hands of his direct descendants until 1359, when the empire was ruled under various heads of the old house of Juji, none of them governing the entire empire. In 1378, however, Toktamish of the Eastern Kipchaks made himself emperor of both Eastern and Western Kipchaks, and for a time maintained something of the old glory of the Golden Horde, but was overcome by Tamerlane in 1395.

Consult Howorth, Sir H., *History of the Mongols* (1876-1885); Lane-Poole, S., *Mohammedan Dynasties* (1894).

**GOLDEN HORN**, the harbor of Constantinople, an inlet of the Bosphorus; so called from its shape and beauty. See **CONSTANTINOPLE**; **ISTANBUL**.

**GOLDEN HOUSE OF NERO**, a palace which Nero erected for himself at Rome after the disastrous fire of 64 A.D. This palace

stretched from the Palatine across the level area on which the Flavian amphitheater was afterward built to the foot of the Esquiline. According to Tacitus, whose virulence is often unjust, Italy and the provinces were plundered to gratify the emperor's love of magnificence in the erection of his *domus aurea*. Gold and precious stones blazed on its walls; the grounds around it were variegated with meadows, lakes and shady woods, and it was considered one of the wonders of the Roman Empire.

**GOLDEN HUMMER** (**BLACK-EARED FAIRY**), Peruvian humming bird (*Heliothrix aurita*). It has a sheen of gold over its plumage which is green and heliotrope above and white below, with golden shading at the throat.

**GOLDEN LEGEND**, collection of legendary lives of saints, written by Jacobus de Voragine, archbishop of Genoa. The work was entitled *Legenda Sanctorum* by the author but was popularly christened *Legenda Aurea* or *Golden Legend* because of its estimated worth. It was called *Lombardica Historia* in some early editions, due to the fact that a short history of the Lombards down to 1250 is added to the life of Pope Pelagius which forms next to the last chapter in the book. The work contains 177 chapters, or, by some estimates, 183, and is divided into five parts, from Advent to Christmas, to Septuagesima, to Easter, to the Octave of Pentecost, to Advent, and gives the lives of the saints in the order of their festivals. The book was written with devotional rather than historical purpose and was not only widely popular in its day but exercised considerable influence on the religious prose and poetry of later times. In 1500 it had run through 74 editions in Latin, besides three translations into English, five French, eight Italian, 14 Low German and three Bohemian. The first English edition was printed by William Caxton for the earl of Arundel (1483), which edition was revised by Ellis (New York and London 1900). The best Latin edition is that of Grasse (Dresden and Leipzig 1846, 1850; Breslau 1890); the first French edition was that of Jean Batallier (Lyon 1476), and recent French editions are those of Brunil (1843, 1908) and Roze (1902). The author, James of Viraggio, or Jacobus, or Jacopo de Voragine, was born at Viraggio (now Varazze), near Genoa about 1230 and died July 13, 1298. He entered the Order of Saint Dominic, was provincial of Lombardy in 1267-1286 and held other high offices in the church until 1292, when he became archbishop of Genoa.

**GOLDEN LEGEND**, *The*, a lyric drama by Longfellow, one of the trilogy entitled *Christus*, published in 1851. It has a mediæval setting and is of a religious character. While some critics find in it a suggestion of *Faust*, others ascribe its title and conception as coming from the *Golden Legend* of Jacobus de Voragine. It is also thought to be based on Hartman von Aue's *Der Arme Heinrich*.

**GOLDEN MOLE**, or **CAPE MOLE**, a South African insectivore with fur showing golden iridescence. It has the habits of a mole, no external ears or tail and the eyes covered with skin; but a greater structural resemblance to the potamogale (q.v.). Five species consti-

tute the family *Chrysochloridæ*, differing from moles (q.v.) most markedly in the fact that the forefeet are adapted for digging by the development of the middle toe into a powerful tool, and by a hollowing inward of the chest. The best-known species is *Chrysochloris trevelyani*, about six inches long.

**GOLDEN NUMBERS, Cycle of, Metonic** lunar cycle, a period of 19 solar months, or 235 lunations, after which time the new moon falls again on the same days as in the preceding cycle. The discovery was made by Meton, the Athenian astronomer, 423 B.C., who divided the calendar into periods of 19 years, numbering from 1 to 19, in which the new moons would come on the same days in the years designated by the same numbers. The Athenians welcomed the system and it was ordered that the years of the Metonic cycle should be written in gold on marble pillars in the temple, hence the name, Golden Numbers. The 19 years of the Metonic cycle were purely lunar, which obviously made it impossible that all the years should be of the same length, a difficulty overcome by assigning to 12 of the 19 years 12 lunations, while the remaining seven had 13. The 13th lunation was designated as the embolismic or intercalary month. The Metonic reckoning by the Gregorian calendar is from 1 B.C., as by the Metonic system the new moon beginning the cycle fell on 1 January every 19th year. As in the Julian calendar the months had no reference to the moon, the early Christians used the Metonic lunar cycle to fix the date for Easter. The cycle was used as originally devised by Meton until 1582, when it was revised and incorporated as a part of the Gregorian calendar.

**GOLDEN ORIOLE**, commonly known as the Baltimore oriole, an American bird (*Icterus galbula*), closely allied to the *Ploceidæ*, weaving birds of Asia. Its nest is skilfully constructed so as to hang in the form of a long slender pouch from the extremity of a bough. Its plumage is brilliantly contrasted in color, and as black and yellow were the armorial colors of Lord Baltimore it was named in early colonial days after that nobleman. It is found in the hot months as far north as the coast of New Brunswick, and westward from the Saskatchewan River to Texas and northern Louisiana. In winter it migrates to Panama and the West Indian Islands. It is a powerful and delightful songster. Its eggs are from four to six in number and hatch in 14 days. The golden oriole is the farmer's friend and destroys many insect pests which are destructive to vegetation.

**GOLDEN ROSE**, a rose of gold, or gilded, blessed by the Pope on the fourth Sunday of Lent and sent to some sovereign or other person who is known for his or her loyalty to the Holy See. It is sometimes sent to noted churches or sanctuaries.

**GOLDEN RULE**, the rule laid down by Jesus in the Sermon on the Mount and stated by him to be the law and the prophets — that is, a summary of their teaching: "Therefore all things whatsoever ye would that men should do to you, do ye even so to them" (Matt. vii, 12). This rule had already been "examined and adopted as a standard of ethics by westerns like Socrates and easterns like Theng-

tsen, the disciple and friend of Confucius, some centuries before the birth of Christ."

**GOLDEN SEAL**, Order of the, fraternal organization incorporated in New York State in 1902. Membership includes life insurance, as well as covering losses through accident and illness. It is organized with a mutual sharing of profits clause, dividends being declared every six years. It is governed from a supreme court and distributes about \$1,000,000 in benefits annually. Membership (1918) 10,000.

**GOLDEN SEAL, ORANGE-ROOT, YELLOW PUCCOON, or YELLOW INDIAN PAINT**, a ranunculaceous perennial plant (*Hydrastis canadensis*) of wooded regions throughout the eastern United States, which sends up in early spring a hairy stem about a foot high, with large, deeply-lobed leaves and a single greenish-white flower, followed by a head of crimson berries which resemble a raspberry. The root-stock is gathered by country people, especially in the South, for the sake of its thick orange-yellow bark from which a drastic and tonic medicine is made.

**GOLDEN SECTION (SECTIO AUREA)**, division of a line in extreme and mean ratio, solved by Euclid II, and originally known as "divine proportion." The Pythagoreans used it in the construction of the regular pentagon, and Eudoxus perfected various theorems relating to it. Fra Luca Pacioli treated the subject at some length in 'Divina Proportione' (Venice 1509; German translation, Vienna 1889); and his ideas were embodied in Zeising's 'Neue Lehre von den Proportionen des menschlichen Körpers' (Leipzig 1854) and 'Der goldene Schnitt' (1884). Consult Bochenek, 'Kanon aller menschlichen Gestalten und der Viere' (1885); Neikes, H., 'Der Goldene Schnitt, und die Geheimnisse der Cheopsyramide' (1907).

**GOLDEN SPUR**, Order of the, a papal order of knighthood, whose foundation has a legendary origin in Constantine the Great, or Pope Sylvester. Its institution can be traced historically to Pope Paul IV, 1559. The title of the members is "Count Hospitalers of the Lateran." The right of bestowing the order is vested in other prelates and kings beside the Pope. When it languished, Gregory XVI revived it in 1841. It is intended to be bestowed as a recognition of conspicuous merit in personal character, science and art, and for services done to humanity and the Holy See. The badge is a gold Maltese cross with white enameled surface, to which a pendant spur is attached. On one face of the cross is a bust of Sylvester, with the inscription, *Sanctus Sylvester Pont. Max.* (Saint Sylvester, Pope). On the reverse is engraved "MDCCCXLI Gregorius XVI. restituit" (Gregory XVI restored it in 1841). The order has three grades; the ribbon is red with black stripes.

**GOLDEN STATE**, California, so named on account of its gold deposits.

**GOLDEN TREASURY**, The, a collection of English poetry published in 1861. The book was dedicated to Tennyson, with whom Palgrave had long discussed his plan. In the course of 30 years the original form was en-

To-day, March 7th, 1957, I was driving along Belmont Street on the border of Belmont and Watertown in the direction of Cambridge about one block before reaching the Cambridge line. I had passed a streetcar going in my direction when I suddenly felt a slight collision on my left side. The car immediately veered to the left and there was a second collision. I pulled off to the right and parked at the first free parking space. I then stopped the streetcar and made myself known to the operator. The operator's name was Paul D. McPhail of 305 Rindge Ave., Cambridge. His operator's number was 3116 and the number of the car was 3214. Mr. McPhail claimed that I had been passing the streetcar and that I went into him. This does not accord with my recollection which is that the accident occurred while the streetcar was behind me and that the first collision was one in which the streetcar run into me. As to the second collision, I may well have been speeding up a little bit to get control of my car after it first veered. There was damage to the body of my car at the level of the rear left door and the steering apparatus did not seem to work as well as it usually does. I could observe no damage whatever to the streetcar, nor did the operator complain of such damage. My speed at the time was moderate. Although I did not observe it, I believe it was less than 30 miles an hour. Road conditions were normal and traffic was not excessive. As far as I could tell, the original collision was one in which the streetcar run into me, rather than one in which I run into the streetcar. In any case, no part of the streetcar was in advance of me just before the collision, nor did I see anything to warn me.

March 8, 1957

Rudolf Virchow Medical Society in the City of New York  
c/o Dr. Wolf Elkan  
120 Central Park South  
New York

Gentlemen,

I shall be glad to accept your request to give the  
Annual Rudolf Virchow lecture on November 4, 1957.

I suggest that I take as a subject the state of rhythms  
in physiology with particular reference to electro-  
encephalography.

Sincerely yours,

Norbert Wiener.

NW/ls

[ans 3/25/57]

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

Dear Professor Wiener:

We have submitted the enclosed two papers to REVIEWS OF MODERN PHYSICS for publication with the Proceedings of the recent Chapel Hill Conference. We would welcome any comments or criticisms that occur to you, especially if we could receive them before May 1.

Hugh Everett, III

John A. Wheeler

Address:

c/o Professor John A. Wheeler  
Palmer Physical Laboratory  
Princeton, New Jersey

March 10, 1957

# PERSPECTIVES IN BIOLOGY AND MEDICINE

---

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D. J. INGLE  
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## Editorial Office:

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March 11, 1957

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Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts

Dear Professor Wiener:

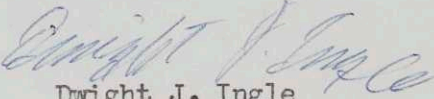
It has been suggested by other members of our boards that you be invited to write for PERSPECTIVES. We would be pleased to have an essay from you on any subject which you feel may fit the objectives of the journal (see statement of editorial policy.)

We hope that you will accept this invitation to write for PERSPECTIVES. We would especially like to have something for the first year of its publication. The first issue is now filled and is to appear in September, 1957.

The deadline for the second issue is September 1, 1957; the third issue, December 15, 1957; the fourth issue, March 15, 1958; etc.

With cordial regards, I am

Sincerely yours,

  
Dwight J. Ingle  
Co-Editor

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[ans 3/20/55]

## EDITORIAL POLICY

The purpose of this journal is to communicate new ideas and to stimulate original thought in the biological and medical sciences. The orientation is toward man and his diseases, but with appreciation of the fact that the roots of medical theory reach into all fields of biology and all processes of life. The objective is to publish papers dealing with concepts that enlarge biological horizons and to bring the specific medical problems into perspective with investigative work on life processes.

The journal consists of original essays, editorials, letters to the editor, and book reviews. The original essays include the following:

1. New hypotheses and concepts representing informed thinking. (Voluntary and by invitation.)
2. Interpretative essays which take stock of the implications of recent and current research and indicate strategy for the future. (Voluntary and by invitation.)
3. Autobiographical sketches (by invitation only) of great men in biology and medicine.

The "Letters to the Editor" section (voluntary only) is to serve for the brief presentation of ideas and for debate.

The acceptance of voluntary contributions will be based upon recommendations by the Editorial Board. Papers should be written with the greatest concision compatible with clarity and accuracy. The highest literary and scientific standards will be maintained, but the right of the author to individuality of style will be respected.

March 11, 1967

Professor William E. Gordon  
School of Electrical Engineering  
Cornell University  
Ithaca  
New York

Dear Professor Gordon,

Professor Wiener asked me to write to you concerning your letter of February 26, in which you inform him of Professor Atsushi Kimpara's desire to visit the Laboratories of MIT. Professor Wiener showed your letter to the authorities of the Mathematics Department who told him regretfully that no funds are available to cover Professor Kimpara's extra expense for travel and subsistence. However, it is possible that the necessary funds might be obtained from some other department at MIT. Therefore it would be desirable to have more information as to what laboratories Professor Kimpara would be especially interested in. Moreover, I would like to draw your attention to the fact that most staff members are on vacation part or all of this summer.

Sincerely yours,

Lucie H. Schaub

ls



March 11, 1957

Mr. Mathieu  
11bis Avenue Leopold II  
Paris XVI  
France

My dear Mr. Mathieu,

I have received your letter and the de luxe prospectus of the meeting you are planning on non-Aristotelian logic. The spurious character of this document needs no comment. However, the lack of skill and wit you showed and the heavy-handed way in which you carry out this adolescent practical joke do not conform to the standards of intelligence which I always associate with the French mind. I assure you, you are doing your country and your civilization no service by broadcasting this piece of trifling and you will find that your attempt to make fools, not merely of the Church which I take to be your main target, but also of those who will be inclined to accept your good faith merely on the basis of the ordinary instincts of decency which hold in intellectual matters, - I repeat - will do no good either to you or to any cause you have taken up. Those to whom I have shown your documents are disposed to laugh not with you but at you, - at your overweening

conceit, at your disregard for decencies and, above all,  
at your great clumsiness.

Meanwhile, I do not choose to receive any further  
correspondence from you.

Very truly yours,

Norbert Wiener.

NW/l<sup>s</sup>

Tokyo Institute of Technology  
Oh-okayama, Meguroku  
Tokyo , Japan

March 12, 1957

Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge 39, Mass. , U.S.A.

Dear Norbert,

At present I am still reading page proofs of the translation of Cybernetics. I have find it necessary to ask you the following questions.

(1) Page 13, line 9 from below. " For example, one form of steering engine of a ship carries the reading of the wheel to an offset from the tiller in such a way as to turn these valves off."

We cannot find a good word for offset. Would you give me some equivalent word or words to discover a good translation.

(2) Page 30, line 11 from below. " This confirmation -- which naturally might amount to a refutation -- we are now seeking in the summer and autumn of 1947".

Because of the publication date of 1948 a better wording seems desirable.

(3) I should like to get your permission to use my collaborators's names along with mine on the title page as the translators. One of them is Shokichi IYANAGA, who represents the Japanese mathematics and the other is Saburo MUROGA of the Corporation of Telegraph and Telephone, who was once research assistant at MIT and also at the University of Illinois.

Asako and I are remembering that your visit was nearly one year ago, and are hoping that you and Margaret are in a relaxed mood to ride on the train of memories from Tokyo to Fukuoka, and up to Hokkaido and down to Tokyo.

With our best wishes to you both,

Sincerely,

*Shikao*

Shikao Ikehara

[ans 3/19/57]

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WHIPPANY, NEW JERSEY

TUCKER 7-1000

March 12, 1957

Professor Norbert Wiener  
The Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Professor Wiener:

In "Cybernetics," you wrote of "devising, for people wishing to go into this new field, a scheme of training . . . . ."

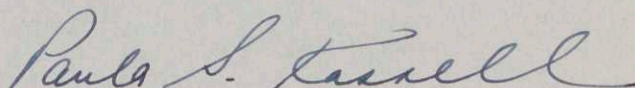
Would you be kind enough to share with me whatever lists of suggested studies and/or bibliographies you may have .

My readings in the field started about a year ago with, "The Human Use of Human Beings." Since that time I have devoured Ashby, Walter, von Neumann, and Shannon, among others. The more I read, the more anxious I am to prepare myself for entering the field.

I have a B.A. in Psychology (Barnard College, 1939). At present I am a technical editor concerned with radio communications and radar. My mathematics background is very limited (so that I cannot fully understand all I have read), but I am tentatively planning to take the Laboratories courses in calculus and engineering statistics next year.

Many thanks for your writings. They open a whole new world.

Respectfully,



Paula S. Kassell

f

[and 3/20/57]

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IN REPLY REFER TO:

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ADDRESS REPLY TO:

Commanding General

MAR 12 1957

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

Dear Professor Wiener:

Inclosed herewith is a copy of a paper given at the recent  
National Biophysics Conference in which you may be interested.

Very truly yours,



1 Incl  
Paper by J. Rothstein

JEROME ROTHSTEIN  
Consultant, Solid State Devices Branch  
Evans Signal Laboratory



March 12, 1957

Dear Prof. Wiener

It was a great pleasure to have had an opportunity to visit you again yesterday. Your valuable hints given to me is highly appreciated with heartily thanks.

I enclosed herewith my itinerary, according to your suggestion given yesterday. I would like to appreciate your information if given to the following temporary address prior to my departure for London.

Yours very faithfully,

Hideo Seki

c/o The Sanwa Bank, Ltd.  
26 Broadway, New York 4, N. Y.

THREE  
DIAMONDS [ans 3/22/57]

1318 North 16th Street  
Lafayette, Indiana  
March 12, 1957

Dr. Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge 36, Massachusetts

Dear Dr. Wiener:

I have a report entitled "Communication by Vibratory Tactile Stimuli" that was prepared by Mr. Joseph Hirsch (Ramo-Wooldridge Corporation) and presented to the WESCON Symposium on 22 August 1956. This report outlines the nature of a device that would permit people to communicate by means of vibrations presented to the fingertips. I have become interested in doing some research with such a device for my doctoral dissertation in psychology at Purdue University and am trying to gather pertinent information on the subject of information transmission by means of vibrations presented to the fingertips.

Mr. Hirsch's report refers to pages 195-203 of your book The Human Use of Human Beings which contains a discussion of a device that separates human speech into five frequency bands. Frequencies falling in these bands would be transmitted to the fingers through vibrators upon which the fingers are placed. Page 202 of your book contains a diagram of such a "Hearing aid for the totally deaf."

Page 196 mentions that Professor Wiesner first discussed with you the possibility of constructing such a device and that the design and development of the apparatus was eventually placed in the hands of Mr. Leon Levine, then a graduate student in the Electronics Laboratory. It is also mentioned that Dr. Alexander Bavelas of your Department of Psychology was called upon for advise concerning the training problems that would have to be dealt with in bringing such a device into actual use.

I have been unable to find any mention of your work along these lines in the psychological literature and the directory of the American Psychological Association fails to indicate that Dr. Bavelas is still on the staff at MIT. Therefore, I have no recourse but to ask if you will arrange to have sent to me any information that may be available concerning the results of your group's work with the hearing aid for the deaf. I am sure that such information will be of considerable help to me in arriving at a specific problem upon which research can be undertaken.

Thank you very much for your help.

Sincerely yours,

*John D. Vandenberg*  
John D. Vandenberg

[ans 3/20/57]



UNIVERSITY OF VIRGINIA  
SCHOOL OF MATHEMATICS

CHARLOTTESVILLE, VA.

March 13, 1957

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

Dear Professor Wiener:

I am beginning a Master's thesis, under Professor E. J. McShane, on the Wiener integral, and I am greatly handicapped by the fact that none of the following of your papers are available to me except on inter-library loan:

(1) "Differential Space", Journal of Mathematics and Physics, vol. 2 (1923), pp. 131-174;

(2) "The Average Value of a Functional", Proceedings of the London Mathematical Society, Series 2, vol. 22 (1924), pp. 454-467;

(3) "Generalized Harmonic Analysis", Acta Mathematica, vol. 55 (1930), pp. 117-258;

(4) (with Paley and Zygmund) "Notes on Random Functions", Mathematische Zeitschrift, vol. 37 (1933), pp. 647-668.

I realize that there is little chance that reprints of these papers are still available, and I would appreciate any help you could give me in obtaining them, if not available, on loan for at least a month.

As I intend to use the Daniell approach in an exposition of, at least, the known results on Wiener integrals, I am particularly interested in obtaining (1).

Sincerely yours,

*S. H. Coleman*

S. H. Coleman

[ms 3/15/57]

Cambridge, le 13 mars 1957

Monsieur le Professeur Kampe de Fériet  
Universite de Lille  
Lille  
France

Monsieur et cher collegue,

J'aimerais aider mon ami, Monsieur Benoit Mandelbrot, qui cherche une position academique dans le domaine ou les mathematiques et la linguistique se rencontrent. Il a travaille pendant plusieurs annees aupres de nous, au Massachusetts Institute of Technology, et je le considere comme le plus important des jeunes hommes de science qui appliquent les theories stochastiques et probabilistes aux problemes de la communication humaine. Le feu Professeur von Neumann avait egalement une opinion tres elevee de Monsieur Mandelbrot et de son travail. Si je puis faire quelque chose pour l'aider a trouver une position definitive dans la vie academique, je suis toujours a sa disposition.

Veillez agreer, Monsieur et cher collegue, mes sentiments les plus devoues.

Norbert Wiener.

NW/lis

March 13, 1957

Professor Benoit Mandelbrot  
Satigny  
Geneve  
Switzerland

Dear Mandelbrot,

I am delighted that you have turned to me for the recommendations. I have written to Dr. Kampe de Ferieť, and in addition I am sending you copies of a "to whom it may concern" letter which you may use as you see fit.

With best wishes I am

sincerely yours,

Norbert Wiener.

NW/lb

March 13, 1957

To whom it may concern.

Mr. Benoit Mandelbrot has been known to me for several years as a leader in the field of applying information theory to linguistics. He is well informed both mathematically and linguistically and has done much valuable work. I look upon him as the leader in this field in France and in the French speaking countries. I know him very well personally and have a high opinion of him, both as a man and as a scientist. He can look forward to a first-rate future of significance.

Norbert Wiener

NW/lb

# David Karten

3032 Brighton 5th St.

Brooklyn 35, N.Y. U. S. A.

March 14, 1957

Prof. Norbert Wiener  
53 Cedar Road  
Belmont, Mass

Dear Sir:

I have the honor and the pleasure to invite you to participate in the edition of a new kind of abbreviated encyclopedia which is concerned with essential and comprehensive knowledge.

We have developed a method of relating and designating the various areas of knowledge, which is similar to the geographical co-ordinate system of longitudes and latitudes. What we are trying to do is to concentrate the essential knowledge of our time in a comprehensive edition, where every part is written by the authority of the respective realm.

Our ambition is to combine in this edition the contributions of the contemporary spiritual and intellectual leaders. I can find no way of expression, to make it clear, how much the successful performance of our task depends upon your kind participation.

You, Sir, can see from the enclosed fragments of the planned introduction to this unique book, that the system which we have chosen, guarantees non-commitment, sovereignty, and freedom of the ways of expression of our distinguished authors.

It depends entirely upon your own judgment, Sir, in what form you would like to write your quintessence and evaluation of the realm of higher mathematics. The volume of your valued treatise is also left to your own estimation. Because of the tremendous scope of our task, we would suggest a limit of about 50 to 75 definitions for each area of knowledge (your choice of the definitions and your appreciated connotation to each definition).

It depends entirely upon your choice to order the definitions or explanations alphabetically or according to their importance for the understanding of the whole faculty. If you would prefer the form of an essential essay, we would like to connect, with your permission, its key words or key concepts with our all-embracing system. We have developed special methods for this task, but would appreciate your remarks and suggestions.

If you have any questions you would like answered before reaching a decision, I shall be happy to be of service. We would be very thankful, in fact, it would help us enormously, if you would inform us, as soon as possible, of your highly appreciated decision to consider our invitation.

Sincerely yours,

David Karten

[ans 3/21/57]

# SIGNPOSTS TO ESSENTIAL AND COMPREHENSIVE KNOWLEDGE

## INTRODUCTION

This volume is unprecedented in the history of printed matter in form and in method, in scope and in content. It is a revolutionary innovation. The presented "indexopedia" or reference book of essential and comprehensive knowledge, represents an entirely new branch of printed matter. It is a new genre in the same sense as a magazine differs from a book.

This book is written and compiled by the most distinguished authors of our time. Its purpose and its aim is to instigate and to promote the striving for vitalized knowledge. It is written for everybody who is concerned with such information, including the expert who is a master only in his own field.

Our manual is meant especially for the educator, the librarian, the physician, the lawyer, the social worker, and the man in administration. It leads to essentials and completes the picture. It has the great advantages of an unique reference system and of comprehensiveness. But its biggest asset is the fact that it combines the thoughts of the greatest thinkers of our time in a sort of nuclear form.

The presented book is our attempt to summarize (to amass extracted information), concentrate (select), compress and comprehend the essential knowledge of our time. It is not, despite the fact, that it has an alphabetically ordered part, a dictionary, because it is concerned with proper knowledge. It is not an encyclopedia in the strict sense, because it is concerned solely with specific information, which is intimately connected. Neither is it a statistical handbook, nor just a reference book of any kind, nor merely a plain nonfictional volume, nor even an ordinary symposium.

It differs from all above mentioned kinds, since it is not concerned only with statistical or general references alone. It is not just an ordinary book by one author or many. This book combines the characteristics of all of them. It has the unity of a uniform volume and has simultaneously the essential features of the above described literary genres.

This new styled study help book covers the main areas of science, culture, politics, religion, and other branches of human endeavor. It is indeed a distinguished edition created with the help of the most distinguished authors. It is the first indexopedia.

I propose this nomenclature for our study book..the term study must here be understood in its widest sense..because this name indicates the relationship to encyclopedia, as well as to the index which accompanies most of the scientific and serious literature.

In order to facilitate the understanding and the consequent usage of the book, with its novel and therefore unusual structure, we feel obliged to outline and clarify the main idea and principles in a more detailed manner.

The striving for vitalized or essential and comprehensive knowledge is the underlying central idea which permeates every word of this book, as salt permeates the water of the ocean, or as the blood is conditioned, or as the spirit of a constitution reveals itself in every single paragraph. It is this "omnitransparent"

idea, which connects all the isolated key words or signposts of this book.

This governing and uniting idea connects every word in the book and determines the position and the significance of every concept in its relation to the whole organism of knowledge.

An entirely new unprecedented approach created this work. The new approach required new methods. The method which we employ to cope with the gigantic task of embracing the essential knowledge of our time may best be compared with the human nervous system or an ingenious system of interconnected push-buttons and relays. A dominating and penetrating idea, a certain set of principles and signs make it possible to link every concept or notion with every other term of this book, which represents or reflects the organism of comprehensive knowledge.

This volume is arranged alphabetically and according to subject matter. These are the two distinct parts, domains or orders. The mastering of just a few simple rules, whose specific descriptions will follow, gives us the tremendous advantage of being able to switch at any time from one domain or system to the other and vice versa.

It is this advantage which makes it possible to convert information first into organized, and at a later phase into comprehensive, knowledge. Information is merely the raw material for knowledge. Of course, information is fundamental and important, but information, even science, is only a stage in knowledge.

This advantage makes it possible to combine the fruits of years of observation, research and thinking of many outstanding men, recognized authorities, in one single edition. Truly, this is a splendid "review" of great personalities, a "concert" of the minds. This has been done without any evaluating or influencing interference into the creative activity or the intellectual freedom of our great authors. This could be achieved because the developed method provided the neutral stage and frame for independent writing of independent thinkers. The given definitions and conclusions are compared and set in relation only on an overall, neutral or "indexopedic" level.

The encyclopedical part of this book has an order, namely the mechanical alphabetical order. The part, which is arranged according to subject matter also required a certain method. I was concerned whether I should arrange the subjects in an alphabetical order. I decided not to do so. This system, which is my personal approach and contribution to the tremendous problem is open for further discussion. It can be widened and can be transformed. It is the system of vitalized knowledge.

We arranged the subjects not according to their importance, but according to their comprehensiveness. This makes the position of every area neutral, but gives them, nevertheless, a definite position in the hierarchical system, which could best be described as the tree of knowledge.

At another occasion, when we shall be concerned with the more technical explanations of the usage of this book, we shall return to this analogy.

It is self evident that a system of knowledge, which we call comprehensive, and which could also approximately be described as integrative or synoptic, synthetic would not be adequate at all, is superior to any other approach, which must be inherently limited. This limitation is structural or inherent, because no amount of information and accuracy in a limited area or sector or even in a group of sciences can replace the overall or bird's-eye view.

We have chosen and prefer the expression "comprehensive", because it has the meaning of a full understanding from within, an insight into organic and mental connections and connotes the universality of this experience, whereas integration, despite its meaning of wholeness, still has the underlying connotation of an organized, not an organic unity. Synoptic is, in my opinion, a more abstract concept, which also means an overall approach from the position of the whole in relation to its parts, but refers more to the viewpoint alone and is less embracing than the term "comprehensive".

A further advantage of the developed method of switching from an encyclopedical system to a particular faculty or area and vice versa is that it enables us to give the author the full freedom of choice of expression. The author has not only the full independence in respect to the position he occupies in the book and in presenting his views..but also in the way of presenting his definitions..since he is the sovereign authority in his realm.

Some of our distinguished authors have preferred to present their contribution in the form of definitions and accompanying connotations of the most important concepts and data in their realm. The order or succession of these definitions or paragraphs is alphabetical. Many of our distinguished authors preferred to arrange their paragraphs according to their scope and importance for the understanding of the whole realm.

Several of our revered thinkers resented the encyclopedical approach entirely and presented their contribution in the coherent form of essential essays.

Our specific system enables us in any case to relate the given data and explanations with other parts of the book by using specially developed methods, which will concern us in the technical part at the end of this introductory essay.

We mentioned that this book is an attempt to summarize, concentrate, compress, and comprehend the essential knowledge of our time. In a sense it is true only in relation to the activities of compressing and comprehending of essential knowledge.

It is valid only in a restricted manner, in relation to concentrating, but it is not exactly the case concerning the activity of summarizing, which was done almost exclusively outside the range of this book. The summarizing was done in the schools, laboratories and study rooms and especially by the giants in mind, whose conclusions we have the honor and the pleasure to unite here in this volume. It is a volume of summits.

The concentrating was also largely done outside the range of this book, but this volume is in a way an attempt to concentrate, already selected knowledge on a higher level.

The compressing of the accumulated information is the next to the last step in the task of achieving organic connected knowledge. By compressing we mean the task of the choice of the proper content of knowledge, of limiting and governing the direction and scope of study and observation. Compressing is carried out by eliminating information not absolutely necessary and by placing the emphasis on the most important or essential concepts and data. This is exactly what we have in mind when we are referring to the signposts to vitalized knowledge.

It is the main purpose of this study help book to facilitate the acquisition of a knowledge, which is not mechanically acquired and remembered, which is not organized merely in alphabetical order, and which is not partial (limited in scope).



Comprehensive knowledge is more qualitative than quantitative. It heightens and sharpens the memory to an unbelievable degree. It is organic rather than organized. In short, this knowledge is all-embracing, with the proper limitations, which are inherently set by the demand for the concentration on essential features, without which no comprehension is possible.

Thanks to the cooperation of the most distinguished authors of our time, we are in the favorable position of presenting a unique and outstanding book, which, we hope, will contribute to the real understanding of the world we live in. May it function as a symbol of how many of the greatest contemporary personalities, living and thinking in different parts of the world, find a way to unite themselves on a neutral higher level, to combine their efforts in the achieving of essential knowledge, without giving up an iota of their dignity or originality.

## II

We are now approaching the more technical part of our introductory essay.....

New York  
December 1956

Our symposium stimulates, informs and integrates, but does not replace, and has no intention of replacing an intensive study which is absolutely necessary for the acquirement of comprehensive knowledge. On the contrary, it promotes genuine study. We concentrate on essential realms, but we do not minimize scholarly virtues. We try to be as short as possible, but at the same time, we are also precise. As already mentioned, a real study requires years of hard work and concentration.

Our book functions simultaneously as a directory, switchboard, and map of the "universe" of knowledge (designated and divided by longitudes and latitudes, and equipped with signposts). It is a new type of abbreviated encyclopedia, concerned with vitalized knowledge, and cannot as such compete with alphabetically ordered encyclopedias, which are broader and more encompassing in scope and in content, but are by their very nature neither essential nor comprehensive. Attempts have been made to compile encyclopedias which are abbreviated and concerned with essential knowledge. I am referring to the UNIVERSAL STANDARD ENCYCLOPEDIA. It is a splendid idea, which is being carried out excellently. It would be of no use to try to duplicate or imitate what is already being so well done.

Our book completes such standard works as it will be used in conjunction with and as a guide to them. Our relationship to them is like that of television to the cinema theatre or of the cinema theatre to the legitimate theatre. Every kind of institution fills a certain need and functions in its own right.

Because we are primarily concerned with essential knowledge and limited in our writing space, we shall refer for a broader and more detailed information to first class comprehensive reference books of particular fields, as for instance, to the recently published ENCYCLOPEDIA OF CHEMISTRY, edited by Dr. G.L. Clark of the University of Illinois.

A gigantic job has been done by the staff of the ENCYCLOPAEDIA BRITANNICA, in conjunction with the UNIVERSITY OF CHICAGO. The edition of what they call the "SYNTOPICON" is a tremendous step forward in the direction of the integration of our knowledge. I am familiar with the ideas in the above mentioned work, because I have independently of them developed and used for years similar methods in the attempt of compiling an encyclopedia for my own study purposes. This work consisting of 2 volumes, is a treasure indispensable to everyone who appreciates the comprehensive method applied to the explanation of ideas. It is a milestone on the way to the integration of what we know.

\*

Attempts to approach one of our two main goals (the achievement of essential and of comprehensive knowledge) have been made from another angle. Dr. Mortimer J. Adler's "COMPENDIUM OF BASIC KNOWLEDGE" is an attempt to encompass knowledge in a non-encyclopedical way. It is a work which is basic and therefore a prerequisite for the understanding of more complicated essential structures. The same statement which we made in reference to our relationship to the alphabetically ordered reference books applies to this compendium. It applies also to similar symposia and to Dagobert D. Runes' anthologies, as well as to many other standard works. It is even valid in respect to individually written essential works, such as published by our participating authors. It is a relationship of mutual completion. Our distinguished authors refer in the proper context to their own writings, to general editions, symposia, as well as to classic books in their respective realms.

As we function as the "reference book to reference books", let us mention also certain kinds of books which contain a wealth of information. This kind of information is excluded from our "indexopedia" because of our insistence upon the principle of selecting and relating exclusively essential and comprehensive knowledge. But, such books are - when properly used - treasures of knowledge. I am referring to statistical reference books, almanacs (Information Please) and related publications. We shall refer to them for further information regarding subjects which, because of the nature of our book, are not at all or only in a very short manner, touched (for instance...geographical, historical, and administrative data.)

In conclusion, our encyclopedical symposium has many novel and unique characteristics and advantages. It is a comprehensively related survey of the essential knowledge of our time. It is a highly efficient alphabetically ordered reference book, compiled by outstanding authorities and serves, at the same time, as a special kind of abbreviated encyclopedia. Our book has the advantages and the opportunities to win its place and rank alongside the encyclopedia and the dictionary.

New York  
February, 1957

March 14, 1957

Miss Elizabeth P. Lam  
Conference Board of Associated Research Councils  
2101 Constitution Ave., N.W.  
Washington 25  
D. C.

Dear Miss Lam,

Professor Wiener asked me to write to you concerning your letter of March 1. He has shown your letter to the authorities of the Mathematics Department of M. I. T. who regretfully informed him that, at present, they do not see any possibility of offering a full- or part-time position to Professor Shin-ichi Izumi.

Sincerely yours,

Lucie H. Schaub  
Secretary to Professor Wiener

ls

# Religion and Labor Foundation, Inc.



Religion and Labor  
Walking Together

3494½ North High Street Columbus 14, Ohio AMherst 8-6683

NEW YORK OFFICE: 242 E. 14th St.  
OR 4-7867 New York 3, N.Y.

March 15, 1957

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*Financial Secretary*

Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Dr. Wiener:

Enclosed is an outline of the conference on automation which the Religion and Labor Foundation will hold on Wednesday, April 24, at the Sheraton Astor Hotel here in New York in conjunction with presentation of our Social Justice Award at a luncheon on that day. The Award, in the field of civil rights, will be given this year to Senator Herbert Lehman, Father John La Farge and Rev. Martin Luther King, Jr., all of whom will be with us.

For the automation conference, we have secured Jim Carey, a member of our executive board, for consideration of the in-plant and specifically labor aspects. There is a real probability that Walter Reuther will also be with us; his schedule is presently clear and he has said he will try to be here for the luncheon and conference, but we are not free to announce him. He is also a member of our board, which as you will note includes distinguished clergymen of all faiths as well as major labor leaders.

While we anticipate attendance of about a thousand at the luncheon, we do not expect more than 75 to 100 at the morning conference, but we believe it will be an important group and will include clergymen and others outside the ranks of the labor movement. An insert yet to be printed will announce the program on automation as well as specific luncheon program details; this is going to 8500 individuals and organizations in the New York area.

You were the unanimous first choice of the committee for someone to lead us in the consideration of broad social aspects of automation's impact on our culture. Although our funds are very limited, we will of course be happy to furnish expenses and an honorarium. Because of the necessity for printing, and in order to get the invitations in the mail promptly, I would greatly appreciate your response as immediately as possible---I would suggest if you can do so, phoning me on Monday at the above number collect. I will be in Washington on Tuesday, but will be here again on Wednesday.

I sincerely hope you can be with us, particularly as I read your "Human Use of Human Knowledge" with great interest and admiration a couple of years ago.

Sincerely yours,

*Clair M. Cook*  
Executive Director  
Lans 3/18/57

oeiu333af1cio

A Non-Profit Educational Corporation Supported by Memberships

*You are cordially invited to attend a*

*Luncheon Honoring*

*Senator Herbert H. Lehman*

*The Reverend Father John La Farge, S. J.*

*The Reverend Dr. Martin Luther King, Jr.*

*who will be presented with the*

1957 SOCIAL JUSTICE AWARD

OF THE

RELIGION AND LABOR FOUNDATION

SHERATON ASTOR HOTEL, GRAND BALLROOM

WEDNESDAY, APRIL 24, 1957, 12:30 P.M.

*Ticket reservation enclosed.*

*Your early reply will be appreciated.*

## SENATOR HERBERT H. LEHMAN

Senator Lehman was lieutenant governor of New York under Franklin D. Roosevelt; for ten years its governor; first director general of the United Nations Relief and Rehabilitation Administration (UNRRA); and senator from 1949 to 1957. In all his long public career he has been a consistent leader in promoting civil rights and equal opportunity. He is a director of the National Association for the Advancement of Colored People and of the National Conference of Christians and Jews. The Social Justice Award of the Religion and Labor Foundation is an appropriate acknowledgement of his leadership in race relations and other socially progressive causes.

## THE REVEREND FATHER JOHN LA FARGE, S. J.

Father La Farge, for more than fifty years a Jesuit clergyman, was founder of the Catholic Interracial Council movement, establishing the first of these influential groups in New York City. For more than thirty years he has been on the staff of *America*, in 1944-48 as editor-in-chief. His recent book, *The Catholic Viewpoint on Race Relations*, is the fourth he has written on the race question. Perhaps no person of Catholic faith so richly deserves public recognition for contributions to Social Justice in race relations as does Father La Farge.

## THE REVEREND DR. MARTIN LUTHER KING, JR.

Dr. King has become in the past year not only nationally but internationally recognized for his remarkable leadership of the Montgomery, Alabama bus boycott, recently ended by a Supreme Court integration order. The principles of "love, law and liberty" as practiced there are injecting a new factor of vital importance as they spread to other communities in areas of tension. Subject of a recent *Time* cover story, Dr. King is pastor of the Dexter Avenue Baptist Church in Montgomery. His choice for the Social Justice Award in the field of race relations for 1957 is pre-eminently fitting.

## THE SOCIAL JUSTICE AWARD

A four-sided bronze sculpture in bas-relief about two feet high, the Social Justice Award of the Religion and Labor Foundation was first presented in 1948. Among its symbols are figures of workers — a miner, a farmer, a young woman loom tender, and a longshoreman — and the religious symbols of Judaism and of Christianity, the Cross and the Star of David. On its top an open book bears name plates of its recipients, as follows:

FIGURELLO H. LAGUARDIA

SENATOR ROBERT F. WAGNER

MRS. ELEANOR ROOSEVELT

LUCY RANDOLPH MASON

WILLIAM GREEN\* AND PHILIP MURRAY\*

RABBI STEPHEN S. WISE,\* BISHOP FRANCIS J.

MCCONNELL\*, AND BISHOP FRANCIS J. HAAS\*

THURGOOD MARSHALL

GEORGE MEANY AND WALTER P. REUTHER

\*denotes posthumous presentation

## THE RELIGION AND LABOR FOUNDATION

The Religion and Labor Foundation, established in 1931, was newly chartered for inter-group education by the Regents of the State of New York in 1956. A membership organization without endowment, it invites support from persons of all faiths in promoting economic and social responsibility among religious groups and leaders, ethical and moral responsibility among labor organizations and their leaders, and mutual understanding and cooperation for social betterment.

It encourages local Religion and Labor fellowship groups; promotes study and understanding of labor in theological seminaries; participates in and sponsors conferences and studies; issues a monthly publication of news and articles in its field, ECONOMIC JUSTICE; and distributes a weekly column for the church and labor press, WALKING TOGETHER.



*Sponsored by*

## THE RELIGION AND LABOR FOUNDATION

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DR. CLAIR M. COOK  
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NEW YORK OFFICE:  
242 East 14th St.  
(Presbyterian Labor Temple)  
New York 3, N. Y.  
ORegon 4-7867

NATIONAL OFFICE:  
3494 North High St.  
Columbus 14, Ohio  
AMherst 8-6683

RELIGION-LABOR FOUNDATION CONFERENCE

Sheraton Astor Hotel, New York

Wednesday, April 24, 1957

An interchange of ideas....

on

AUTOMATION, A CHALLENGE TO THE AMERICAN WAY OF LIFE

with special reference to the role of organized  
labor and religion

- 9:30 a.m. Invocation and opening of conference  
Rabbi Jack Cohen, Society for the Advancement of Judaism; editor,  
The Reconstructionist; RLF Board Member
- 9:40 Opening Statement
- MORAL INTEGRITY: Religion and the Labor Movement in a Prospering  
America
- Dr. Algernon D. Black, Religious Leader, Ethical Culture  
Society; RLF Board Member
- 10:00 1. IMPLICATIONS OF AUTOMATION FOR PRODUCTION AND EMPLOYMENT  
(Job displacement, retraining, relocation of plants, status and  
function of workers)
- James B. Carey, President, International Union of Electrical,  
Radio and Machine Workers
- 10:30 2. IMPLICATIONS OF AUTOMATION FOR CONSUMPTION AND CULTURE  
(Living standards, family life, leisure time, suburbia, class re-  
lations, concepts of happiness, etc.)
- Dr. Norbert Wiener, Massachusetts Institute of Technology
- 11:00 Five-minute buzz sessions (in place)
- 11:05 Open forum discussion, with questions from the floor; speakers to  
serve as panel, Rabbi Cohen as moderator
- 12:00 m. Adjournment of Conference  
Luncheon,
- 12:30 p.m. Social Justice Award, Grand Ballroom

March 15, 1967

Mr. S. H. Coleman  
School of Mathematics  
University of Virginia  
Charlottesville  
Va.

Dear Mr. Coleman,

I would be very glad to send you the reprints you asked for, if they were not all long out of print. However, I don't think that you will have any difficulty in getting them from a library.

Sincerely yours,

Norbert Wiener.

NW/lb

March 15, 1957

Mr. Jason Epstein  
Doubleday and Co., Inc.  
575 Madison Ave.  
New York 22  
N. Y.

Dear Jason,

I shall be going down to New York with my wife on the 22nd or 23rd of this month. I want very much to see you and to talk over matters outstanding between us. Could my wife and myself invite your wife and yourself to a dinner at a Chinese restaurant either the 23rd or 24th -preferably the 23rd-, so that we can have a good time together and clear matters up? Many thanks for your letter and the news you give me concerning my books. I am not surprised and therefore I am not disappointed. For the present I am avoiding more literary work and going hard to work on new scientific production.

With best regards I am

sincerely yours,

Norbert Wiener.

[ans 3/26/57]

March 15, 1957

Dr. Iago Galdston  
The New York Academy of Medicine  
2 East 103rd Street  
New York 29  
N. Y.

Dear Dr. Galdston,

Margaret and I are coming down to New York on the week-end of the 23rd of this month and we would very much like to take you out to dinner. We have a lot to talk over, and I find in particular the articles that you have sent me very interesting and thought-provoking. Let us know as soon as you can what plans we can make to get together.

With best regards I am

sincerely yours,

Norbert Wiener.

NW/ls

March 15, 1957

Professor P. Masani  
Institute of Science  
Bombay 1  
India

Dear Masani,

I am afraid that my plans for you have fallen through, at least as far as the present year is concerned. While our budget is fully adequate for our normal wants, we have not been in the position I hoped to get funds for expansion. This does not mean that I have forgotten my plans, but that the matter will have to hang over.

I have had a favorable letter from the Acta Mathematica, and I hope that our article will appear there soon.

Sincerely yours,

Norbert Wiener

NW/ls

March 15, 1957

Dr. J. McKenzie Riach  
17 West 54th Street  
New York  
N. Y.

Dear Dr. Riach,

Margaret is coming along excellently, and I think we are pretty well out of the woods. We expect to be in New York Wednesday evening, 27th, and we have several things we would like to talk over with you. Could you give us an appointment for Thursday, 28th, or Wednesday evening, 27th, or, at the worst, for Friday, 29th?

Sincerely yours,

Norbert Wiener.

NW/lb

The City College

NEW YORK 31, N. Y.

DEPARTMENT OF PHILOSOPHY

March 16, 1957.

Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge 38, Mass.

Dear Professor Wiener:

On behalf of the Program Committee of the Eastern Division of the American Philosophical Association, I should like to invite you to participate in the plenary symposium on THE PRESENT STATUS OF DETERMINISM IN PHYSICS at the next annual meeting of the Association, to be held at Harvard next December. The symposium will probably be on the morning of Saturday December 28. (This indeterminate element will be resolved shortly.) We feel that in the light of the present state of philosophical controversy it is of fundamental importance to focus the full attention of the Association on this problem, and we very much hope that you will present the basic paper.

The procedure for our symposia is a rather unusual one. In the plenary symposium we plan to have the one basic paper and two papers discussing it. Instead of the three papers being read at the meeting, they are published in advance in the Journal of Philosophy some time during the fall of the year, so that members of the Association can be familiar with them by the time of the meeting. At the meeting the speakers each have up to fifteen minutes in which to bring into focus their main theses, point out any misunderstanding of them in the other papers, and comment on points in these papers. This procedure is intended to ensure a maximum time for discussion both by the panel and by the general membership of the Association.

If you find it possible to accept this invitation, we should like to have your paper (not to exceed 5000 words) early in June. This would allow time for the two philosophers writing the comments to prepare their papers by September 1, the Journal deadline being Sept. 15. Copies of these two papers would be made available to you in September.

Since the procedure envisaged makes it essential to work out our plans as rapidly as possible, we should appreciate hearing from you soon.

Sincerely yours,

*Abraham Edel*

Abraham Edel  
for the Program Committee,  
Eastern Division, American  
Philosophical Association.

[ans 3/20/57]



# CYBERNETIQUE

A. S. B. L.

*Secrétariat permanent - Secretaryship*

13. RUE BASSE MARCELLE

NAMUR (BELGIQUE)

TEL. 279.81 - 279.82

N°.....  
Dear Sir,

We thank you for the interest you have shown in the creation of the International Association for Cybernetics.

The response to our appeal has been most encouraging, and to date we have received over 1.000 applications for membership, coming from 26 different countries.

We beg to inform you that this Association has been formally constituted in Namur on January 6th, 1957. You will find herewith a copy of the statutes.

Article 3 of this document determines the aim pursued by the Association :

" The aim of the Association is to ensure a permanent and organized liaison between researchers whose work in various countries is related to different sectors of Cybernetics. It endeavours to promote the development of this science and of its practical applications, as well as the propagation of results obtained in this field. It utilizes all adequate means for the achievement of these objects."

The Board of Administration is as follows :

- President : Georges R. BOULANGER (Belgium), Professor of the Polytechnic Faculty of Mons and the University of Brussels.

- Members : René CLOSE (Belgium), Lawyer, Namur,  
Louis COUFFIGNAL (France), Inspector-General of Education, Director of the Computation Laboratory, Institut Blaise Pascal, Paris,

John DIEBOLD (U.S.A.), Management Consultant, New-York,

W. Grey WALTER (United-Kingdom), Director of the Physiological Department, Burden Neurological Institute, Bristol.

- Managing Administrator :

Josse LEMAIRE (Belgium), Director of the Economic, Social and Cultural Services of the Province of Namur.

Monsieur Norbert WIENER

.../..

BELMONT.

.../..

A permanent secretariate has been set up with offices in Namur. Over one thousand applications for membership have been received so far, coming from 26 different countries.

At the present moment a first plan of action is already well in hand. The Association is publishing the proceedings of the 1st International Congress on Cybernetics and will edit an International Cybernetics Review. Plans have been made for a second International Congress on Cybernetics (September 1958) and various other meetings will be organized, among which we might already mention an International Conference on the social and economic aspects of automation, which will be held in September 1957.

We also draw your attention to the fact that the 1st International Exhibition of Automation will be held in Namur in 1959, with the support of the Association.

The Board of Administration has set at 200 Belgian francs the fee for individual members for the year 1957.

We are convinced that you will want to encourage our efforts and to participate in our action by returning the enclosed subscription form to the Association.

We thank you in advance and remain,

Yours faithfully,

Managing Administrator,

J. LEMAIRE.

President,

G.R. BOULANGER.

INTERNATIONAL ASSOCIATION  
OF CYBERNETICS  
A.S.B.L.  
-----

Rue Basse-Marcelle No.13,  
N A M U R (Belgium).  
-----

S T A T U T E S. ‡

Part I - Denomination, Registered Office, Duration, Object.

Art. 1.- The Association's denomination is "International Association of Cybernetics". This denomination is followed by the words "Association sans but lucratif" (Association without lucrative aim), abbreviated to A.S.B.L.

Art. 2.- The Association is created without limit of duration. Its registered office is established at Namur, Rue Basse-Marcelle, No.13. It may be transferred to any other address in the City of Namur.

Art. 3.- The aim of the Association is to ensure a permanent and organized liaison between researchers whose work in various countries is related to different sectors of Cybernetics.

It endeavours to promote the development of this science and of its technical applications, as well as the propagation of results obtained in this field.

It utilizes all adequate means for the achievement of the above objects.

Part II - Members, Admission, Resignation, Exclusion.

Art. 4.- The members may be individuals or corporate bodies interested in any way in the aims of the Association. Their number is unlimited. It may never be lower than three.

Art. 5.- The admission of members is subject to approval by the Board of Administration who may delegate this power to one of its members. This admission implies the unrestricted acceptance of the Statutes and the regulations of the Association, as well as the payment of the proposed fee.

.../..

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‡ L'original français des statuts a paru aux annexes du Moniteur belge du 26 janvier 1957, conformément à la loi du 27 juin 1921 sur les Associations sans But Lucratif. Il constitue le fondement juridique de l'Association Internationale de Cybernétique.

The application for admission is to be addressed to the Board of Administration. The latter or its delegate rules within the time limit they deem opportune. The decision is made known to the individual or corporate body concerned by ordinary letter signed by the President of the Board of Administration or by the Board's delegate.

Art..6.- The alphabetical list of members is deposited at the Recorder 's Office of the Civil Court of the Seat of the Association during the month of the publication of the Statutes.

This list is completed each year by indicating, in alphabetical order, such changes as may have occurred.

Art. 7.- The quality of Member of the Association is lost :

- 1) through resignation, sent at least three months before the end of the business year, to the Board of Administration, by registered letter;
- 2) through non-payment of fees;
- 3) through exclusion pronounced by the General Assembly after the individual or corporate body concerned has been heard by the Board of Administration or its delegate who will draw up a report of his explanations;
- 4) through decease or, for corporate bodies, dissolution.

#### Part III - Administration.

Art. 8.- The Association is administered by a Board of Administration formed by three members at least.

Art. 9.- The Administrators are appointed by the General Assembly for a period of three years. They may be reelected.

In case of the decease of one of the Members of the Board of Administration or of termination of his functions during the business year, the Board shall appoint his successor. This appointment is submitted to ratification by the General Assembly at its following meeting.

The newly appointed Director finishes the mandate of his predecessor.

Art.10.- The Board of Administration selects a President amongst its Members.

It appoints the Secretary, as well as the Treasurer from among or without its Members.

Art.11.- The Board of Administration meets upon summons by the President or his Deputy at least once yearly.

The President or his Deputy must summon the Board at the request of two of its Members.

Resolutions are carried at the majority of votes. The vote of the President of the Session shall be preponderant in the case of a tie.

The vote is valid whatever the number of Members present.

Art.12.- Minutes of the Board of Administration are kept in a special ledger. The minutes are drawn up by the Secretary and signed by the President of the Session. They are submitted to the Board for ratification at its first following meeting.

Copies and excerpts of the resolutions to be shown in Court or elsewhere are signed by the President or by two Administrators.

Art.13.- The Board of Administration has the most extensive powers for the administration and management of the interests of the Association and for the achievement of its object.

It is responsible for the admission of new members and for hearing individuals or corporate bodies whose exclusion is submitted to the General Assembly; it may delegate these two powers.

All that is not expressly reserved for the General Assembly by Belgian law or by the present statutes is of its competence.

It may enter into and pass any contracts and negotiations; buy, sell, exchange, acquire, alienate, take or give on lease any personal and/or real estate necessary for the achievement of the social object; contract any short and long terms loans; concede any real rights on social properties, whether personal or real estate, such as privileges, mortgages, pawns or others; consent to certain facilities in mortgage proceedings; grant restoration of all privileges or mortgage inscriptions, as well as of any commands, transcriptions, seizures or other impediments, with or without authentication of payment; give up cancelling action; appoint and dismiss all managers or agents, fix their salaries, attributions, and, if such should be the case, their bail; draw up all inside regulations; compromise and come to terms.

It rules on any acceptance of gifts or legacies.

Legal actions, whether as plaintiff or as defendant, are brought in the name of the Association, proceedings and suits, by the President of the Board or, in his absence, by two Administrators.

Art.14.- The Board of Administration may delegate or give special powers to one or several Members or even to third parties, Members or not.

The Board appoints amongst its Members a Managing Administrator for the daily administration of the Association and for the coordination of its activities; the Board may terminate the functions of the Managing Administrator by registered letter sent by mail, without notice or justification of its decision.

Art.15.- All actions which engage the Association, other than those of current affairs or resulting from special mandates, are signed by an Administrator, in addition to the Managing Administrator who will not have to give proof towards third parties of a previous deliberation of the Board. Matters relating to current affairs are signed by the Managing Administrator or by any other person appointed to that effect by the Board.

Art.16.- The Administrators are responsible only of the execution of their mandate. By reason of their administration, they do not enter into personal liability regarding the engagements of the Association.

Art.17.- Each year, the General Assembly appoints one or several auditors whose responsibilities are to verify the accounts closed by the Board of Administration at the end of the year.

Auditors may be chosen outside of the Association.

They may examine the books, correspondance, reports and, generally, all documents of the Association without removing them.

#### Part IV - General Assembly.

Art.18.- The General Assembly, regularly constituted, represents all the members.

It has the most extensive powers.

Art.19.- A decision by the General Assembly is required for the following objects :

- 1) Amendments to the Statutes;
- 2) Appointment or dismissal of Administrators and Auditors;
- 3) Approval of the budgets and accounts;
- 4) Exclusion of members;
- 5) Dissolution of the Association.

Art.20.- The Ordinary General Assembly meets once yearly, upon summons by the Board of Administration, at the registered Office or in any other place indicated in the summons.

The Board of Administration summons the General Assembly to an extraordinary meeting, whenever this is requested by at least one fifth of the Members.

Summons to all General Assemblies are made by ordinary letters at least thirty days before the dates of the meetings. They must state the agenda.

Any proposal must be included in the agenda when it is signed by Members in numbers at least equal to one twentieth of numbers of the last list deposited with the Recorder's Office of the Civil Court.

.../..

Art.21.- Any Member may be represented at the Assembly by another Member if the latter is in possession of a regular proxy. However, one Member may not represent more than ten absent Members.

Each Member, whether present or represented, is entitled to one vote.

No decision may be taken in a matter not included in the agenda.

Art.22.- The General Assembly is presided by the President of the Board of Administration or, should he be unavailable, by a Administrator appointed by his Colleagues.

Art.23.- The decisions of the General Assembly are taken at the majority of votes of Members present or represented, whatever their number, except in the following cases :

Decisions regarding the exclusion of Members are taken at the majority of two thirds of the Members present or represented, whatever their number.

Decisions concerning amendments to the Statutes, as well as merging, division or dissolution of the Association are taken at the majority of two thirds of the Members present or represented, but they are only valid when two thirds of the Members are present or represented. Should two thirds of the Members not be present or represented, a second Assembly is summoned within two months' time which may deliberate validly, whatever the number of Members present or represented. The required majority is again that of two thirds, but, in the case of dissolution, the decisions taken must be submitted to confirmation by the Civil Court.

Art.24.- The minutes of the General Assemblies are signed by the Members of the Board of Administration.

These minutes are recorded in a special ledger kept at the registered office where all Members of the Association may examine them without removing the ledger.

The decisions of the General Assembly are made known without delay to the Members by means of letters and to third parties by insertions in the appendices of the "Moniteur belge".

Copies or excerpts to be delivered to third parties are signed by the President of the Board or by the Managing Administrator.

Art.25.- All amendments to the Statutes must be published within the month in the appendices of the " Moniteur Belge".

The same applies to any appointment, resignation or dismissal of Members of the Board of Administration, as well as to the deliberation pronouncing the dissolution of the Association.

Any Court decision pronouncing the dissolution or the appointment of liquidators must also be published, by excerpts, in the appendices of the " Moniteur Belge".

.../...

Part V - Ressources.

Art.26.- The business year begins on January 1st and ends on December 31st.

Art.27.- The Association's income is derived from :

- a) Membership fees. These are set by the Board of Administration and may not exceed 10,000 BF per annum.
- b) Subsidies, subventions, and/ or grants paid in by Members or Third Parties.
- c) Grants and/ or bequests from living or deceased persons to the benefit of the Association authorized by Royal Decree.

Art.28.- Members who have resigned or have been excluded and heirs and/or assigns of deceased Members have no rights whatsoever on the Special Fund and may not claim any account, have seals affixed, nor request the inventory.

Part VI - Liquidation.

Art.29.- In the case of liquidation of the Association, the net assets will be paid to one or several organizations of an international character pursuing similar objects to those of the Association.

Made at Namur, on January 6th, 1957.



March 18, 1957

The Reverend Dr. Clair M. Cook  
Religion and Labor Foundation, Inc.  
3494 1/2 North High Street  
Columbus 14  
Ohio

Dear Dr. Cook,

I have just looked over my schedule of lectures, and I find that I am heavily loaded up not far from the time of your own meeting of Religion and Labor which is to take place on April 24th. I find, as the time goes on, that I am more and more compelled to ration my lecture engagements. Intrinsically I should be very glad to take part in your meeting, but it is not possible.

I hope you have success with your meeting and find some adequate person to take my place.

Sincerely yours,

Norbert Wiener.

NW/ls

March 18, 1957

Mr. Richard A. Underwood  
Office of the Dean  
The Graduate School  
Drew University  
Madison  
N. J.

Dear Mr. Underwood,

Professor Wiener asked me to write to you to inquire about the time of his lecture on the Ergodic Theorem which is to take place on Monday, the 25th of March. He would prefer to have this talk during the day-time.

Moreover, Professor Wiener would be very grateful, if you could make a room-reservation for Mrs. Wiener and himself for the nights of March 25th and 26th.

I would appreciate having your answer as soon as possible.

Sincerely yours,

Lucie H. Schaub  
Secretary to Professor Wiener.

March 19, 1957

Acme Code Company, Inc.  
507 West 33rd Street  
New York 1  
N. Y.

Gentlemen,

In reply to your letter of March 6, (ACC-4428  
Istitute 15), I am writing to inform you that  
Professor Wiener has not published any book  
or article entitled ORAL COMMUNICATIONS.

Sincerely yours,

Lucie H. Schaub  
Secretary to  
Professor Wiener.

ls

March 19, 1957

Professor Shikao Ikehara  
Tokyo Institute of Technology  
Oh-okayama, Meguroku  
Tokyo  
Japan

Dear Professor Ikehara,

Professor Wiener asked me to write to you in reply  
to your letter of March 12.

- 1) Offset means "displacement" and particularly  
"relative displacement".
- 2) Professor Wiener thinks that you may change the  
date to 1948.
- 3) Professor Wiener certainly gives you the permission  
to use the names of your collaborators along with yours  
on the title page as the translators. This is entirely  
at your own option.

Hoping that this answers your questions satisfactorily  
I am

sincerely yours,

Lucie H. Schaub  
Secretary to  
Professor Wiener.

# **P.F. Collier & Son Corporation**

640 Fifth Avenue • New York 19, N. Y.

*Executive Offices*

March 20, 1957

Dear Dr. Wiener:

Enclosed are tear sheets of the article on Cybernetics which you prepared for Collier's Encyclopedia. The material appears in the current edition of the set. We hope that you are as pleased with it as we are, for we believe that our readers will find it most informative and interesting.

Thank you for your interest in Collier's Encyclopedia.

Sincerely yours,



Sandra L. Lesser  
Associate Editor

Enc.  
SLL:bs

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

Two of his important contributions to comparative studies were the exploration of the anatomy of mollusks and the systematic treatment of the huge class of fishes. He developed the doctrine of catastrophes to explain the extermination of animals. Cuvier identified and named the flying reptile, *pteroactyl*. He had a capacity for winning aid from the ruling powers, the gift of inspiring others, and united general culture to comprehensive scientific work. Cuvier was a follower of Linnaeus. He engaged in violent controversies with Lamarck and Saint-Hilaire. His famous debate with the latter on the subject of fixity of species occurred in 1830. Cuvier was wrong but he won the debate. His influence in France greatly retarded the acceptance of the theory of evolution. Cuvier died in Paris, May 13, 1832. D. D. M.

**CUXHAVEN** [kuks·hə'fən], a seaport in the state of Lower Saxony, Prussian province of Hannover, in northwestern Germany, 60 mi. northwest of Hamburg, on the west bank of the Elbe River, at the entrance to the North Sea. Formerly a fishing village, it united with Ritzebüttel in 1872 and became an important outer port on the river before a large harbor was constructed at Hamburg between 1891 and 1895. It was heavily bombed in World War II and was in the British zone of occupation after the war. Considerable North Atlantic traffic, some shipbuilding, and North Sea fishing are carried on. It is also a seaside resort. Pop. 1953, 45,300. C. C. H.

**CUYABÁ.** See CUIABÁ.

**CUYAHOGA FALLS** [kai'əho'gə], a city in Summit Co., in northeastern Ohio, situated on the Cuyahoga River, 5 mi. northeast of Akron, of which it is a suburb. It is a residential community, incorporated as a village in 1868 and as a city in 1920. It is governed by a mayor and council. Water power facilities were responsible for the first settlement, known as Manchester, in 1812. Its facilities were tested by the milling of lumber for Commodore Oliver Hazard Perry's fleet on Lake Erie in the War of 1812. Kendall State Park is 8 mi. north. The Baltimore & Ohio and the Pennsylvania railroads serve the city. Manufactures are rubber goods, tires, lumber, paper boxes, tools, metal products, molds, and dies. Pop. 1950, 29,195.

**CUYP, ALBERT** [koi'p] (1620-1691), Dutch painter and etcher, was born in October 1620 at Dordrecht. In 1658 he married Cornelia Bosman, a member of a prominent family, and thereby assumed the position of a leading citizen of Dordrecht, serving on various councils and courts. He studied painting under his father, Jacob Gerritz Cuyp, and became famous for quiet river scenes and landscapes with cattle. He also treated religious, historical, and mythological subjects and painted portraits, but his portraits are inclined to lack characterization. His painting shows the direct influence of Jan van Goyen, from whom Cuyp derived his atmospheric effects, developed in the warm golden tones of his landscapes. He was buried at Dordrecht, Nov. 15, 1691.

D. R. C.

**CUZCO.** See Cusco.

**CYBELE** [si'bəli], an ancient goddess of Asia Minor, known to the Romans as the Great Mother or the Mother of the Gods. Her orgiastic worship, directed by eunuch priests known as Corybantes, flourished in Phrygia, whence it spread to Greece and Rome. In Greece, Cybele was identified with Rhea, the mother of the Olympian gods. Her

rites were introduced into Rome in 204 B.C. and flourished in the Empire. See also ATALANTA; RHEA. G. E. D.

**CYBERNETICS**, the science of communication and control both in machines and living organisms. The word was used more than a hundred years ago by Ampere, in a more limited sociological sense, and later by other European writers. It is derived from the Greek *Kubernetes*, meaning steersman. When the term was used by Norbert Wiener in 1948, he was unaware that it had already been employed by others. His purpose was to find a convenient way of uniting the various sciences concerned with communication and control under a single name which would express their methodological unity. This unity lies in the statistical concept of information as something derived from probability. If new information changes a set of contingencies having an original total probability  $P$  into a set with a total probability  $p$ , the amount of information is something of the same nature and dimensions as entropy in statistical mechanics, but it is measured with the opposite sign. Thus, information theory becomes a branch of statistical mechanics, and the second law of thermodynamics takes the following form from the point of view of the information theory: any processing of information from already existing sources may decrease, but not increase, the numerical measure of this information. Of course, this does not mean that, because the processing of information is wasteful, it has no advantage or that there are no indications for its use. This is significant only if all the information recoverable by any process whatever, and not just by a limited specific process, is taken into consideration.

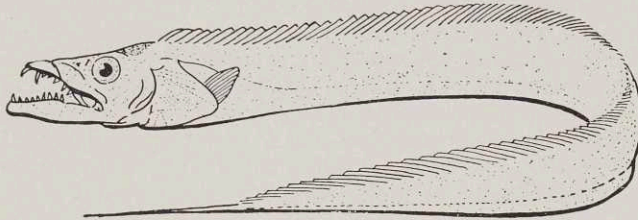
The statistical concept of information has already proved useful in the study of communication engineering, of coding problems, and, to some extent, in the study of the functioning of the nervous system. See AUTOMATION. N. W.

**CYCADS** [sai'kædz], palmlike plants in appearance, reproducing by seed-bearing cones instead of by flowers. Two characteristics, the large compound leaves and swimming male gametes, are suggestive of an alliance with the ferns; however, in the cone-bearing habit the cycads resemble conifers, with which they are often classified as Gymnospermae. The fernlike nature of the leaf of *Stangeria* is particularly impressive. This genus was originally thought to be a fern; upon the production of a cone its true nature was revealed and it was appropriately named *Stangeria paradoxa* and placed in the cycads. The cycads are generally considered to have been derived from the ferns by way of the seed ferns (Cycadofilicales). They are younger than either of these ancient groups, but their fossil record can be traced for 180 million years into the Mesozoic era, when they were worldwide in distribution and were the dominant type of vegetation in hot, dry regions. They were contemporary with the dinosaurs and paralleled them in the development of giant forms. The largest cone among living plants and probably the largest ever to have existed is found in the African cycad, *Encephalartos caffer*; well developed specimens often weigh more than 90 lb. They also possess the largest known male gametes; those of *Ceratozamia mexicana* can readily be seen with the unaided eye.

The cycads are classified in a single family of nine genera with about 100 species. All are confined to tropical or subtropical regions. Their distribution is peculiar in that three of the exclusively New World genera, *Ceratozamia*, *Dioon*, and *Microcycas*, are found north of the Equator, with the

Christmas, 686, he retired again to Farne Island, where he died in March 687. His remains, first buried at Lindisfarne, were repeatedly moved and in 1104 came, still incorrupt, to rest at Durham. His feast is March 20. W. C.

**CUTLASS FISH** or **HAIRTAIL**, *Trichiurus lepturus*, is a species found in the warmer waters of the Atlantic Coast of North America. Some twenty-five other species of the family Trichiuridae are found chiefly in tropical seas. They are a degenerate mackerel type with very large and



COURTESY OF THE U. S. FISH AND WILDLIFE SERVICE

The cutlass fish, *Trichiurus lepturus*, a long thin marine fish found in coastal waters of the southern United States and the West Indies

sharp teeth, a ribbon-shaped body topped throughout their length by a dorsal fin which tapers gradually to a hair-thin tail. They reach a length of 5 ft. and feed mostly on other fishes. The cutlass fish is a good food fish but is not found in commercial quantities. Unusually sensitive to cold, it has often been seen in a benumbed condition after a sudden and pronounced drop in water temperature. E. C. R.

**CUTLERITES.** See MORMONS.

**CUTTACK** [kʌtæk], the capital city of Orissa State and the Cuttack district, in northeastern India, is located on the south bank of the Mahanadi River, about 58 mi. west of the Bay of Bengal, at 20° 29' N. lat. and 85° 54' E. long. The city is about 220 mi. southwest of Calcutta on the delta plain north of the low Khandgiri and Udayagiri Hills. The city is situated where the Mahanadi River divides into many distributaries. Cuttack receives between 50 and 100 in. of rainfall during the hot summer, but the winter is dry and somewhat cooler. Cuttack is the center of a rice-growing area and is at the head of the local irrigation canal system. Some jute is grown in the swamp areas, and the commercial life of Cuttack is largely concerned with rice and jute processing and selling.

The city was founded about A.D. 950 and became one of the five strong cities of Orissa. In 1803 the Mahratta rulers lost Cuttack to the British. Cuttack has several schools including the Ravenshaw's Girls' School and Ravenshaw College. The city contains all the local administrative buildings of the district. Pop. 1951, 102,505. J. E. F.

**CUTTEN, GEORGE BARTON** (1874- ), American educator, was born at Amherst, Nova Scotia, Apr. 11, 1874. After graduating in 1896 from Acadia University, Nova Scotia, he studied at Yale, Colgate, and Alfred universities. Cutten was ordained a Baptist minister in 1897 and became pastor of various churches in Connecticut, New York, and Ohio. He was chosen president of Acadia University in 1910, resigning in 1922 to assume the presidency of Colgate University, where he remained until 1942. Cutten was acting president of Colgate-Rochester Divinity School from 1943 to 1944, when he retired. He wrote *Instincts and Religion* (1940), *Should Prohibition Return?* (1944), and *The Silversmiths of Virginia* (1951). M. Sr.

**CUTTER.** See COAST GUARD, UNITED STATES.

**CUTTLE FISH**, the common name for a group of cephalopod mollusks of the family Sepiidae containing approximately 30 species. They usually inhabit warm waters near the shores. The shell is internal, consisting of a broad leaf-like plate of a spongy, chalky substance. *Sepia officinalis*, the common cuttle, which measures 6 to 10 in. long, inhabits European waters. It is beautifully colored, brilliantly iridescent in the sun. The head bears two large black eyes and a crown of eight short arms, the inner rows of which are provided with four rows of suckers. In Europe it is used for food and the inky pigment is employed in preparing dyes. The shell, or cuttle fish bone, has had many uses. The ancient Romans used it in the preparation of cosmetics. It is used today in the preparation of fine abrasives and dentrifices. It is frequently placed in bird cages for the birds to peck. See also SQUID. V. L. L.

**CUVIER, BARON GEORGES** [kü'vey'] (1769-1832), French naturalist, born at Montbéliard, Doubs, Aug. 23, 1769. Christened Léopold Christian Frédéric Dagobart, he took the name Georges at his mother's request. Cuvier spent four years at the academy in Stuttgart, then took a post in Caen as tutor to the only son of Count d'Héricy. In 1795, he became an assistant at the Museum of Natural History in Paris, and in 1799, professor of natural history in the Collège de France. In 1800, Cuvier published his work on fossil elephants, comparing them with living species. Emperor Napoleon chose Cuvier to direct reform of education in France. Several times he was recalled to government service, including the offices of president of the council of public instruction, of the committee of the interior, and of

Baron Georges Cuvier, French naturalist, regarded as the founder of comparative anatomy and paleontology

FROM AN ENGRAVING BY GEORGE T. DOO OF A PAINTING BY H. W. PICK-ENGILL



COURTESY OF THE AMERICAN MUSEUM OF NATURAL HISTORY

the Council of State. At Napoleon's downfall he obtained the favor of the monarchy. He was made grand officer of the Legion of Honor in 1826 and was created baron in 1831.

Cuvier played a leading role in the development of paleontology and comparative anatomy. His *Recherches sur les ossements fossiles* (1812) is considered a classic. Influenced by Germans, he based his views of organisms on their activities as living things. His guiding conception was the principle of correlation of parts, which formed the basis of his classification of animals. Cuvier adhered to the view of fixity of species, to the old idea of the preformation of the embryo, and to the theory of spontaneous generation.

March 20, 1957

Dr. Abraham Edel  
Department of Philosophy  
The City College  
New York 31  
N. Y.

My dear Dr. Edel,

While I am cutting my lecture schedule to the bone, I am rather attracted by the request to talk at Harvard next December. It is sufficiently far ahead to make the necessary arrangements. Let me then give you my tentative acceptance conditional on the state of my health at the time.

Sincerely yours,

Norbert Wiener.

NW/ls



March 20, 1957

Mr. Dwight J. Ingle  
Perspectives in Biology and Medicine  
950 East 59th Street  
Chicago 37  
Illinois

Dear Mr. Ingle,

While I have been working in the field of brain-waves with methods grossly related to spectroscopy, I have found a considerable degree of resistance on the part of physiologists against assuming a statistical-mathematical point of view on the subject which is familiar in the related field of optics. I therefore am withdrawing from this field, and I think it is not part of the duty of a scientist to force his ideas on a group which has not the training nor the perspectives to understand them. I am convinced that my methods and ideas are valid, but I am not ready to get into the hornets nest of argument with people who are unprepared for my ideas and will only accept them when the need for accepting hits them over the head and when they are able to imagine that these ideas are their own discovery. Therefore I regret to find myself unable to write the article that you requested.

Sincerely yours,

Norbert Wiener

NW/ls

March 20, 1957

Mr. I. J. Karpman  
Monde Publishers, Inc.  
P. O. Box 209  
White Plains  
New York

My dear Mr. Karpman,

While I am a Jew by descent, I take relatively little interest in that point of view which tends to make the Jews a special enclave in intellectual work. I feel that science needs a thorough-going unity of intellectual outlook to which, as I conceive it, this sort of group propaganda contributes nothing. Therefore, I scarcely feel that further correspondence along these lines has any sort of interest to me.

Sincerely yours,

Norbert Wiener.

NW/ls

March 20, 1957

Mr. Drake de Kay  
The Encyclopedia Americana  
2 West 45th Street  
New York 36  
N. Y.

Dear Mr. de Kay,

I really have no contact of my own with the history of the GOLDEN SECTION, but I suggest that you write to Professor Dirk J. Struik at M.I.T. who is a mine of information on all matters dealing with the history of geometry.

Sincerely yours,

Norbert Wiener.

NW/ls

[enc 3/25/57]

March 20, 1957

Miss Paula S. Kassell  
Whippany Laboratory  
Bell Telephone Laboratories  
Whippany  
New Jersey

Dear Miss Kassell,

I suggest very strongly that you write to Professor Shannon of the Bell Telephone Laboratories and M.I.T. for reference for the literature on cybernetics. He has a much more complete knowledge of what has been written about it than I have. Meanwhile I think it is an important field in which to work, but I do not think it should become to too great a degree a separate field, and I believe it should always maintain its relations with electro-engineering and other kindred subjects.

Sincerely yours,

Norbert Wiener.

NW/lb

March 20, 1957

Mr. John D. Vandenberg  
1318 North 16th Street  
Lafayette  
Indiana

Dear Mr. Vandenberg,

I suggest strongly that you take this matter of communication by vibratory tactile stimuli up with Professor Wiesner at M.I.T. He is considering the idea of returning to this field of work. I myself have been out of this work for some time and think it best for you to get in touch with people who are or may be actively engaged in pursuing this research.

Sincerely yours,

Norbert Wiener.

NW/ls

March 21, 1957

Mr. Georges Dube  
80 Ave. Gaston Boissier  
Viroflay (Seine et Oise)  
France

Dear Mr. Dube,

This letter is to introduce my friend, Dr. Hideo Seki, who is an active Japanese scholar in the field of communication engineering. He is travelling in Europe and wishes to get in contact with people of similar interests.

Japan is going through an important period of rapid development in science and it is to the great interest of world science that the contact between Japanese scholars and European scholars should be facilitated.

Sincerely yours,

Norbert Wiener.

NW/ls

March 21, 1967

Professor J. B. S. Haldane  
Department of Biometry  
London University  
Gower Street  
London  
England

Dear Professor Haldane,

This letter is to introduce my friend, Dr. Hideo Seki, who is an active Japanese scholar in the field of communication engineering. He is travelling in Europe and wishes to get in contact with people of similar interests.

Japan is going through an important period of rapid development in science and it is to the great interest of world science that the contact between Japanese scholars and European scholars should be facilitated.

Sincerely yours,

Norbert Wiener.

NW/lb

March 21, 1957

Mr. David Karten  
3032 Brighton 5th Street  
Brooklyn 35  
N. Y.

Dear Mr. Karten,

I am finding it necessary to cut my outside work to the bone and regret to be unable to help you with your encyclopedia. At my age it is necessary to restrict one's activity to the few fields where one has assumed a responsibility and to try to clear up the subject. I am sure that you will understand my position.

Sincerely yours,

Norbert Wiener.

NW/lb



March 21, 1957

Dr. Benoît Mandelbrot  
Satigny  
Geneve  
Switzerland

Dear Dr. Mandelbrot,

This letter is to introduce my friend, Dr. Hideo Seki, who is an active Japanese scholar in the field of communication engineering. He is travelling in Europe and wishes to get in contact with people of similar interests.

Japan is going through an important period of rapid development in science and it is to the great interest of world science that the contact between Japanese scholars and European scholars should be facilitated.

Sincerely yours,

Norbert Wiener.

NW/ls

March 21, 1957

Professor Balth. van der Pol  
22, chemin Krieg  
Geneve  
Switzerland

Dear Professor van der Pol,

This letter is to introduce my friend, Dr. Hideo Seki, who is an active Japanese scholar in the field of communication engineering. He is travelling in Europe and wishes to get in contact with people of similar interests.

Japan is going through an important period of rapid development in science and it is to the great interest of world science that the contact between Japanese scholars and European scholars should be facilitated.

Sincerely yours,

Norbert Wiener.

MW/le

March 21, 1957

Dr. W. Grey Walter  
Burden Neurological Institute  
Stoke Lane  
Stapelton  
Bristol  
England

Dear Dr. Walter,

This letter is to introduce my friend, Dr. Hideo Seki, who is an active Japanese scholar in the field of communication engineering. He is travelling in Europe and wishes to get in contact with people of similar interests.

Japan is going through an important period of rapid development in science and it is to the great interest of world science that the contact between Japanese scholars and European scholars should be facilitated.

Sincerely yours,

Norbert Wiener.

NW/ls

March 23, 1967

Mr. Andrew H. Neilly, Jr.  
Assistant Vice President  
John Wiley and Sons, Inc.  
440 Fourth Avenue  
New York 16  
N. Y.

Dear Mr. Neilly,

Professor Wiener asked me to write to you in order to thank you for sending him a copy of ON HUMAN COMMUNICATION by Colin Cherry.

Professor Wiener is too busy at present to send you his comments on the book but, if later on he finds the necessary time, he will be glad to do so.

Sincerely yours,

Lucie H. Schaub  
Secretary to  
Professor Wiener.

March 22, 1957

Dr. Hideo Seki  
c/o The Sanwa Bank, Ltd.  
26 Broadway  
New York 4  
N. Y.

Dear Dr. Seki,

Professor Wiener asked me to send you the enclosed letters of recommendation with his best wishes for a pleasant and profitable trip.

As to the letter for Professor van der Pol: Professor Wiener is not certain that he is still living at the same address. It is possible that, at present, he is somewhere in the Netherlands, as he may have retired from his position as a director of radio-research for the United Nations.

Sincerely yours,

Lucie H. Schaub  
Secretary to Professor Wiener.

ls

March 25, 1957

Dr. Hideo Seki  
c/o The Sanwa Bank, Ltd.  
26 Broadway  
New York 4  
N. Y.

Dear Dr. Seki,

I have just been notified that Professor van der  
Pol's new address is:

Zydweg 10  
Wassenaar  
Netherlands. Phone number: 01751-8223

Sincerely yours,

Lucie H. Schaub  
Secretary to Professor Wiener.

ls

Rudolf Virchow Medical Society in the City of New York

March 25th, 1957

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ARNOLD T. BENFEY, M. D.  
50 PARK TERRACE WEST

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

Dear Dr. Wiener:

The Rudolf Virchow Medical Society wishes to thank you for the kindness with which you accepted our invitation to give the Virchow-Lecture of 1957.

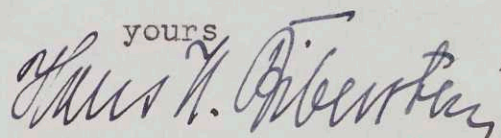
We feel honored to have you as our speaker and we are looking forward to a great evening.

Our Program Committee will keep in touch with you for further arrangement of details.

With our best wishes and kindest regards I am

sincerely

yours



(Dr. Hans H. Biberstein)

Tokyo Institute of Technology  
Oh-okayana, Meguroku  
Tokyo, Japan

March 25, 1957

Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge 39, Mass., U.S.A.

Dear Norbert:

Thank you very much for your prompt reply to my questions in my letter of March 12. I am doing my best to give the finishing touch to the translation of CYBERNETICS.

Today my eldest son, Masao is taking the entrance exams. to the Sophia University. As the days become bright and fresh, Asako and myself are hoping that Margaret is resuming her cheerful way of life.

With my hearty thanks to you,

Sincerely yours,

*Shikao*

Shikao Ikehara



This space is also for correspondence.

ここにも通信文を記載することができます

Shikao Ikehara  
Tokyo Institute of Tech.  
Oh-okayama, Meguroku  
Tokyo, Japan



AEROGRAMME

Professor Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Tech.  
Cambridge, 39, Mass.

U.S. A.

PAR AVION  
航空

この郵便物には何物も封入又は添附できません  
Nothing may be contained in or attached to this letter.

折込線

折込線

ここにも通信文を記載することができます

This space is also for correspondence.

# THE ENCYCLOPEDIA AMERICANA

2 WEST 45<sup>TH</sup> STREET, NEW YORK 36, NEW YORK

Office of the Editor

March 25, 1957

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

Dear Professor Wiener:

Thank you for your letter of March 20. It was most kind of you to recommend that we invite Professor Dirk J. Struik for the article on the GOLDEN SECTION. We are writing him. He has written a very fine history of geometry for the next edition of The Americana, among other articles.

Sincerely yours,

*Drake de Kay*  
Drake de Kay

DdK:mb

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March 25, 1957

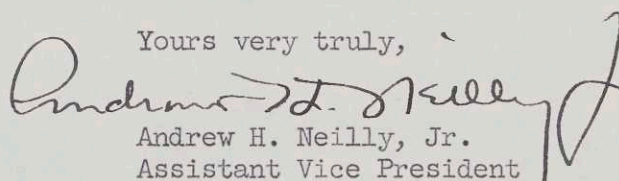
Professor Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Professor Wiener:

AUTOMATION IN BUSINESS AND INDUSTRY, by E. M. Grabbe, has just been published and a copy is on its way to you with the author's compliments and ours.

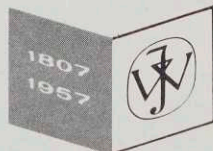
We are aware of your interest in this field and feel that this book will prove useful to you. Should you care to make any comments upon examining the volume, they would be most welcome.

Yours very truly,

  
Andrew H. Neilly, Jr.  
Assistant Vice President

AHN:bb

150 YEARS



OF PUBLISHING

[and 5/23/57]

March 26, 1957

Memorandum to Professors Giorgio D. de Santillana  
Hans Meyerhoff  
Elting E. Morison  
William D. Stahlman  
Victor F. Weisskopf  
Norbert Wiener  
Jerome E. Wiesner

From John M. Blum

Gentlemen:

At six o'clock at the Faculty Club on Tuesday, April 16, we are meeting to discuss some of the problems pertaining to the present and the future of teaching and research at M.I.T. in the fields of the history and philosophy of science and the history of technology. I hope very much that you can join us then. Would you please let me know at your earliest convenience whether you will be present? In about a week or ten days I will send you a working paper prepared by Professor de Santillana for discussion the night of the meeting.

Yours sincerely,

*John M. Blum*

jmb:mlj  
c:Professor Howard R. Bartlett



March 26, 1957

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

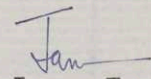
Dear Professor Weiner:

It was a great pleasure to see Mrs. Weiner and you on Sunday and, if I may say so, very moving. I think that I understand the state in which you find yourself, and as I said at the time, you are certainly not in it alone. Yet I am pleased that you have agreed not to decide finally about the book until a year from April 1. Despair may be profound without necessarily being permanent and I find it hard to conceive, knowing you as I do directly and from your books, that your present mood will last indefinitely.

What you said to me as we walked down Broadway is in itself the substance of a book. What it lacks, of course, is the positive connotation which accompanies your other works. I respect your present views and share many of them. But, for myself, I cannot admit that there are no possibilities whatever. There are some - even if they persist only from day to day and apply only, as Mrs. Weiner said, to our private lives and not to the larger life of civilization in general. And, if even such private possibilities may seem not to exist, there is always the obligation - as you yourself have pointed out - to act as if they do. The larger strategy may be hopeless, but the smaller strategy, as long as we are alive, is not.

I can't accept the possibility that you do not agree with me in this at least to some extent and thus, while I am not wholly confident of your decision a year from April 1, neither am I without strong hope.

Sincerely,

  
Jason Epstein

JE jdm

GRUMMAN AIRCRAFT ENGINEERING CORPORATION

BETHPAGE, LONG ISLAND, NEW YORK

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March 26, 1957  
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Dr. Norbert Weiner  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts

Dear Dr. Weiner:

In your position as copyright owner, permission is requested to reproduce 100 copies of pages 48-49 of the following book:

Weiner, Norbert, The Human Use of Human Beings....Cybernetics and Society. Anchor Book No. A-34 1956 (First Published by Houghton Mifflin in 1950)

Recipients: Two separate groups: Class of 50 students attending course in "Techniques of Management." Students are Grumman Employees; approximately 50 members of Grumman's Engineering Staff.

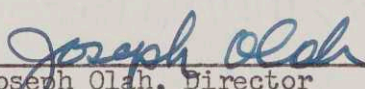
Comments: No editorial or explanatory comment will be made. Recipients will be provided with loose-leaf notebooks and additional similar quotations will be added from time to time.

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Kindly reply at your earliest convenience.

Sincerely yours,

GRUMMAN AIRCRAFT ENGINEERING CORPORATION

  
Joseph Olah, Director  
Engineering Library, Plant 5

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*- Anchor Books*

JO:am

[ans 4/16/57]

Mathematics Department  
The Institute of Science  
Bombay 1, India

March 26, 1957

Dear Professor Wiener :

I was in Baroda for a week, and have just seen your letter of the 15th.

Would you approve of my applying to the Rockefeller Foundation for a grant of about \$5000 to enable me to come and work with you this Fall? If you recall Mr. Evans, whom we had met at Calcutta, took a sympathetic interest in our work, and with strong backing from you they may be inclined to help. The project would be to clear up some of the difficulties in multiple linear prediction (the unbounded case), to extend this theory to processes with infinitely many components and to apply this to get the best possible, non-linear, prediction in the scalar case. Do kindly let me know if this idea appeals to you. Here there is no one with whom I can really discuss what I am doing, although I am trying to get a few junior colleagues interested. Progress is slow and I sometimes feel diffident.

I am glad to learn of Acta's favourable response to our paper. Has the referee made any suggestions? I feel it would be desirable to make a few changes in the light of the comments of the previous referee. Also, some typographical errors remain in the Ms. If you wish I could send you a list of these now. I hope a sheet marked "For the Printer" has been sent to Acta; otherwise they are likely to mess up the notation.

With kind regards,

Sincerely yours

*P. Masani*

P. Masani

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

[ans 9/4/57]

BY AIR MAIL

हवाई पत्र

AEROGRAMME

NO ENCLOSURES  
ALLOWED



PROFESSOR NORBERT WIENER  
DEPARTMENT OF MATHEMATICS  
MASS. INSTITUTE OF TECHNOLOGY  
CAMBRIDGE 39, MASS.  
U. S. A.

First fold here

Corr - 66

Third fold here

Second fold here

Sender's name and address :—

P. Masani  
Institute of Science  
Bombay 1, India

To open cut here



VANNEVAR BUSH  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE 39, MASSACHUSETTS  
ROOM 7-201

March 27, 1957

Dr. Norbert Wiener  
Room 2-276  
M. I. T.

Dear Norbert:

Won't you let me know what you would like to have  
me do in connection with the attached letter.

Cordially yours,



V. Bush

VB/B  
Enclosure

[ans 4/10/57]

The City College

NEW YORK 31, N. Y.

DEPARTMENT OF PHILOSOPHY

March 27, 1957.

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

Dear Professor Wiener,

Thank you for your letter of March 20. We are very happy that you have consented to prepare the basic paper for our symposium on THE PRESENT STATUS OF DETERMINISM IN PHYSICS at the December meetings of the Philosophical Association. We are especially grateful to you for undertaking this at a time when you are cutting down your lecture schedule.

I shall send you a little later on the names and addresses of the two philosophers who will write papers commenting on yours. May we set June 10 as the date when they may hope to receive copies of your paper? As I wrote you, both your paper and theirs have to be ready for the press early in September.

Sincerely yours,

*Abraham Edel*

Abraham Edel  
for the Program Committee,  
Eastern Division, American  
Philosophical Association.

Tokyo Institute of Technology  
Oh-okayama, Meguroku  
Tokyo, Japan

March 28, 1957

Professor Norbert Wiener  
M.I.T. , Cambridge  
Mass., U.S.A.

Dear Norbert:

I should like to ask another question  
on the following lines:

Page 78, line 1 down,

" ... Then the a posteriori distribution of  $u$   
is proportional to

$$(3.09) \quad e^{-\frac{x^2}{2a}} e^{-\frac{(x-w)^2}{2b}} = c_1 e^{-(x-c_2)^2 \frac{a+b}{2ab}}$$

where  $c_1$  and  $c_2$  are constants. They both  
disappear in the formula for the gain in  
information given by the fixing of  $w$ . "

Do you mean by "They both disappear" that  
 $c_1$  is 1 and  $c_2$  is, say, 0?

I shall appreciate your reply to make  
our translation of Cybernetics better.

At this moment I am remembering of your  
arrival at Maneda nearly one year ago.

With our best wishes,

Sincerely yours,

Shikao

Shikao Kehara

yes.

[and 4/17/57]

This space is also for correspondence.

ここにも通信文を記載することができます

Shikao Ikehara  
Tokyo Institute of Tech.  
Oh-okayama, Meguroku  
Tokyo, Japan



**AEROGRAMME**

Professor Norbert Wiener  
Room 2-276  
Massachusetts Institute of Tech.  
Cambridge 39, Mass.  
U. S. A.

**PAR AVION**  
**航空**

この郵便物には何物も封入又は添附できません  
Nothing may be contained in or attached to this letter.

折込線

折込線

ここにも通信文を記載することができます

This space is also for correspondence.

Boston 3/29/57

Dear Sir:

This will acknowledge your letter concerning claim for property damage. Kindly send us the following information:

1. ~~Itemized repair bill.~~ ✓
2. Names of witnesses.
3. Names of occupants.
4. Place where vehicle may be examined.
5. Name of owner and registration number of vehicle.
6. Date, time and place of accident.
7. Number of M.T.A. vehicle and operator.
8. Your phone number.

Refer to File

No. 57-66-1

METROPOLITAN TRANSIT AUTHORITY.  
Joseph M. Murphy, Chief Adjuster  
701 Park Sq. Bldg., Boston,



THIS SIDE OF CARD IS FOR ADDRESS



Professor Robert Weiner  
53 Cedar Road  
Belmont, Mass