

**Imperial College of Science and  
Technology  
University of London**

**A list of the second series of the papers  
and correspondence of**

**Dennis Gabor FRS**

**1900-1979**

**Imperial College Archives  
1998**

## INTRODUCTORY NOTE

Dennis Gabor was born in Hungary on 5<sup>th</sup> June 1900. In 1918 he attended the Technical University, Budapest to study a four year course in Mechanical Engineering, he followed this with a course from 1921-24 in Electrical Engineering at the Technische Hochschule, Berlin. He was awarded the Diplom-Arbeit in 1924. In 1927 he was awarded his doctorate and was then employed at Siemens and Halske, Siemenstadt.

In 1934 Gabor travelled to England where he became employed by the British Thomson Houston Company (BTH) in Rugby, he was married in 1936 to Majorie Butler. Gabor became a permanent resident and in 1938 persuaded his brother Andre Gabor to become one too, because of the threat of war in Europe. Dennis Gabor registered as an Alien with a special qualification in 1939 due to the outbreak of the Second World War.

Gabor was appointed Reader in Electron Physics at Imperial College in 1948. His appointment to the personal Chair of Applied Electron Physics at Imperial was made in 1958. He retired from this Chair in 1967 and was then appointed Research Fellow and Professor Emeritus. He was elected a Fellow of the Royal Society in 1956 and was awarded the Nobel Prize in Physics in December 1971. He died on 9<sup>th</sup> February 1979.

These papers are from the second series of Gabor papers, which, over a five year period were transferred from his former office in the Imperial College Electrical Engineering Department to the Electrical Engineering Library and finally to the College Archives. This second series of papers consists of seven boxes of various material. The list which follows covers the majority of the contents of the first box. It includes mainly work related correspondence with only the occasional piece of personal correspondence. All of Gabor's papers are held at the Imperial College Archives. This list was compiled bearing in mind the fact that research is about to commence on a Dennis Gabor biography.

I have listed these papers in alphabetical order as unfortunately the original order has long since been destroyed. After discussion with the Archivist it was clear that an alphabetical arrangement suited the users as it is more common for people to request material by name rather than by date. This arrangement is used in lists of other papers held in the Archives.

The first series of Gabor's papers was listed in 1986 and fills 40 boxes, it is hoped in time that the two series can be cross referenced and fully indexed.

Many of Gabor's notes are typewritten, as is the great majority of his outgoing correspondence. All material is in English unless otherwise stated. The use of [ ] denotes a query over the information given.

## A

- 1960 **ACZEL, G**  
From DG: picture restoration
- 1960-61 **ADORIAN, P**  
(Television House)  
Correspondence: television compression,  
television bandwidth reduction, a visit  
and general views on inventions  
7 letters
- 1945 **ADRIAN, E D**  
From Adrian with his article  
*The Electric Reactions of the cochlea  
and auditory nerve* (1943)  
1 letter, 1 item
- 1960 **ALLEN, J E**  
(Comitato Nazionale Ricerche Nucleari  
Roma)  
Letter and reply: plasma sheath
- 1959 **AMBROSE, E J**  
(Royal Cancer Hospital, London)  
To DG: DGs report on  
interference microscope  
1 letter
- 1954-59 **ANDRADE, E N DA C**  
5 articles to DG 6/10/59, with note  
*The flow of polycrystalline metals under  
simple shear II*  
*The viscosity of liquids*  
*The history of the vacuum pump*  
*The early history of the permanent  
magnet*  
Short note from John [no surname]  
thanking DG for  
loan of Professor Andrade's papers  
2 letters, 5 items

1959

**ARGYRIS, J H**

To DG: thanking DG for his interest in Keiser Aircraft and Mr. Clay Bedford in particular, attached is a letter for DG from Bedford: flat tube  
2 letters

**B**

1955-56

**BARON & WARREN**

(Chartered Patent Agents, London)  
British Patent Applns: Nos:  
15053/53, 28367/53, 28368/53  
5 letters, 1 compliment slip

1974-77

**BARTELL, L S**

(Department of Chemistry, The University of Michigan, USA)  
Electron - Wave holography  
15 letters

1958-59

**BISACRE, G H**

(Blackie & Son Ltd, Publishers)  
Becker - Theorie der Electricitat Band II  
2 letters

1962

**BLUM, H**

(Office of Aerospace Research, USA)  
Blum's report on *An Associative Machine for dealing with the visual field and some of its biological implications*  
2 letters, 1 item

1971

**BOHME, G**

2 letters in German, one from DG

1953

**BORN, M**

From DG: asking for help with a patent search he is undertaking for an American firm: welded contacts in germanium rectifiers/detectors

Born's Reply

2 letters

1966

**BRIEN, A**

From DG: Brien's article in the New Statesman -

*A Word of Four Letters* (work)

1 letter, 1 item

**C**

1959-60

**CHICK, D R**

(A.E.I. Research Laboratory, Berks.)

DG visiting Chick, Chick receiving his D.Sc. and Chick sending Read to DG (a collaborator for DG)

7 letters

1959

**CLIFFORD, G D**

(The British Institution of Radio Engineers)

To DG: Clifford thanking DG for giving a lecture at the Institution

1 letter

1958

**COCKCROFT, J D**

(United Kingdom Atomic Energy Authority)

Discussions at the Royal Society

2 letters

- 1959 **COSSLETT, V E**  
(Department of Physics, University of Cambridge)  
DGs electron interference microscope project  
2 letters
- 1958 **COWAN, J**  
From DG: discussing the possibility of employing Cowan  
1 letter
- 1948 **CSEPELY, J A**  
From Csepely: his US patent:  
2,014,081 - Wave Transmission System  
also discussion of some of his work:  
*Very Narrow Band AFM for Amateur Phone Transmitters* (1947); *Narrow-Band Carrier Teleplay* (1940); *Wave Transmission System* (1935); *An Analysis of a New Wave Transmission System*; n.d. *Theory of Operation of the Condex System of AFM Modulation as applied to amateur phone transmitters*  
7 items
- 1944 **CUNYNGHAME, Sir David**  
(Metro-Goldwyn-Mayer, London Films Ltd)  
From DG: telling him about his Stereoscopic Film System  
1 letter
- D**
- 1960 **DAVIES, H**  
(Queen Mary College, London)  
From DG: appraisal of the work of R E Burgess  
1 letter



1959 **DRACOTT, E D**  
(Royal Naval Scientific Service)  
From Dracott: thanking DG for sending a  
copy of a lecture  
1 letter

1960 **DUNSMUIR, R**  
(Associated Electrical Industries (Rugby)  
Ltd)  
Lasers  
3 letters

## **E**

1953 **ECCLES, W H**  
From DG: asking him a question about  
germanium rectifiers  
1 letter

1960 **ELLESWORTH, G**  
Correspondence between DG, The Royal  
Society and Ellesworth in Adelaide,  
Australia concerning Ellesworth's  
readership in Australia, The Royal  
Society and Nuffield Foundation  
Commonwealth Bursaries Scheme,  
Ellesworth's CV and a travel grant for  
study in the USA  
8 items

## **F**

1958 **FARAGO, P**  
*Focusing properties of a certain  
inhomogeneous 'crossed' field* by DG  
1 report

1957

**FEATHER, N**

(Edinburgh University)

To DG: informing him that he should approach Dacos about measuring the departures from rectilinearity DG replies to Dacos in French

3 letters

1959

**FRAULO, J P**

From DG: thanking Dr. Fraulo for all he had done for his mother when she was ill  
1 letter

**G**

1947

**GALAMBOS**

(School of Medicine, Emory University, USA)

From DG: one about his interest in acoustical matters the other about future experiments with article attached:

*Reflections on the subject of interaction of auditory nerve fibres*

Also an article by Galambos:

*Flight in the Dark: A Study of Bats*  
(1943)

2 letters, 2 items

1973

**GAL-OR, B**

(Technion - Israel Institute of Technology)

To DG: about his book and DG replies (2 copies), also a foreword by DG for Gal-Or's paper - *Modern Developments in Thermodynamics*

3 letters, 1 item



1960

**GOMBRICH, E H J**  
(The Warburg Institute, London)  
Discussions on a study group on  
symbolism for postgraduates and  
Gombrich's admiration for DGs  
Inaugural lecture  
3 letters

1958

**GRIVET, P**  
From Grivet in French  
1 letter

1948

**GUNANELLA, G**  
From L J Davies to Guanella; letter to  
DG from Guanella about his publication:  
*New possibilities in Speech Transmission*  
Copy of Guanella's patent for the Speech  
Transmission System  
Article by Guanella from The Brown  
Boveri Review,  
*Methods for the Automatic Scrambling of*  
*Speech* (1941)  
2 letters, 2 items

1953

**GUNTHERSCHULTZE, G**  
From DG in German  
1 letter

## **H**

1959-60

**HALDANE, J B S**  
(Indian Statistical Institution, Calcutta)  
The future of the human race  
4 letters

1959

**HAMPTON, B F**  
The publication of one of Hampton's  
articles, also an article by DG and  
Hampton, *A Wilson Cloud Chamber with*  
*Time-Marking of Particle Tracks* (1957)

- 1953 3 letters  
**HILSCH, R**  
From DG in German  
1 letter
- 1959-60  
**HODGKINSON, J F N**  
Discussing Dr. D K C Mac Donald as suitable candidate for the Granada Chair in Communication at the University of North Staffordshire, includes a description of the post  
2 letters, 1 item
- 1960  
**HORNER, P W M**  
Carpeting the hall and stairs of DG's house (two copies of DG's reply)  
3 letters
- 1963-64  
**HOWARD, R L**  
(Vectron Electro-Physics Ltd.)  
Discussions between Howard and DG: DG's Adlisting attachment for a chemical analyser; discussions of mechanical equipment; copy of a letter from Salgo (General Electrodynamics Corp. Texas) to Howard which is mentioned by DG in one of his letters to Howard ; also an Inter Office Memo to Salgo from a Bob Maupin: Preliminary Recording Head Specification  
6 letters and a compliment slip
- 1965  
**HUXLEY, Sir Julian**  
To DG: with article by Huxley from *Playboy - The Age of Overbreed*  
1 letter, 1 item

## I

1960

### **IGNOTUS, P**

(Hungarian Writers Abroad)

All correspondence in Hungarian except one letter from DG discussing having lunch, 8 letters

1956

### **INGLESTAM, E**

(Institute of Optical Research, Sweden)

From DG: discussing publication of research, article by Inglestam, *Different Forms of Optical Information and some Interrelations between them*  
1 letter, 1 item

## J

1960

### **JACKSON, W**

(A.E.I. (Manchester) Ltd.)

From DG: Ion Beam Source (Thermonuclear Project)  
2 letters

1959-60

### **JAEGAR, J-F**

Discussions on Jaegar's future M.Sc. and PhD including a summary of his practical results  
5 items

1959

### **JONES, D S**

Discussion of a senior post in Communication Theory at the University College of North Staffordshire  
2 letters

1960

### **JONES, H**

From DG asking for advice on a peculiar gas discharge phenomenon

1 letter

1959

**JOSEPHS, H J**

(Post Office Research Station)

The case of Heaviside v. Preece

5 letters

1973

**JUNGK, R**

From DG in German

1 letter

1953

**JUSTI, E**

From DG in German

1 letter

**K**

1960

**KATZ, B**

(Biophysics, University College London)

Discussions on the candidature of

Dr. A.M.. Uttley for a Fellowship

5 letters

1959

**KATZ, L**

(Epsilon Research & Development Co.  
Ltd.)

From DG: Katz's inquiries about

Alphenol and the evaporation of  
permalloy

1 letter

1953

**KINMAN, T H**

(British Thomson-Houston Co.)

From DG:

The doped germanium rectifier

1 letter

1959

**KNOTT, G**

Knott's work on the general theory of relatively and what DG thinks of it  
3 letters

1973

**KURTZ, R L**

(Marshall Space Flight Centre, Alabama, USA)

3-D Holographic movie camera and article from The Huntsville Times  
*Laureate Hails 3-D Camera System*  
(28/1/73) - a newspaper cutting  
2 items

**L**

1986

(DG deceased 1979)

**LASZLO, M**

From Laszlo [in Yugoslavian]  
1 letter

1951

**LOOMIS, W F**

(The Rockefeller Foundation)  
Present Interest in Mechanical Translation; a list of men working in the field; a list of men actively interested in the field  
2 letters, 2 items

**M**

1959

**MACDONALD, D K C**

Discussions about the Granada Chair of Communication; an outline Memorandum by MacDonald  
2 letters, 1 item

1953

**MALSCH, J**  
(Telefunken)  
3 letters in German, 2 from DG

1953

**MEISSNER, A**  
From DG in German  
1 letter

1960

**MELTZER, B**  
Meltzer's official fellowship in  
Engineering Science  
9 letters, job description

1983  
(DG deceased 1979)

**MENDES, S M G F**  
From Mendes: asking Imperial College  
about ordering a book written by DG  
1 letter

1947

**MOIR, J**  
From Moir: returning papers by  
Galambos  
1 letter

1960

**MYERSON, F T**  
Ordering equipment/parts  
from, Messrs. F.T. Myerson Ltd.  
and having jobs done  
3 letters

N

1963

**NAGY, F**  
(Vectron Electro-Physics Ltd.)  
Bimorph Bender Crystals  
2 letters

1953

**NESPER, E**  
From Nesper in German  
DG's reply in German  
2 letters

1959-60

**NEVILLE, R**  
(Epsilon Industries Ltd.)  
Conveyor belt scheme  
3 letters

1947

**NILSON, P**  
(The British Broadcasting Corporation)  
From Nilson: a lecture which DG had  
given  
1 letter

**P**

1957

**PARSONS, D**  
(National Research Development  
Corporation)  
3-D Projection  
2 letters

1980  
(DG deceased 1979)

**PERTILE, F**  
From Pertile: requesting information  
(a photocopy)  
1 letter

1960

**PHIPPS, I M**  
(The Tilley Lamp Company Ltd.)  
Printed Circuits  
3 letters



1960

**POLANYI, M**

Polanyi's book -*Personal Knowledge*;  
DG thanks Polanyi for bringing  
Alexander Wittenberg to his notice;  
discussions about Polanyi's paper;  
*Towards a Theory of Conspicuous  
Production*; copy of the paper  
6 items

1959-60

**PORTER, A**

(University of Saskatchewan, Canada)  
Discussions on DG's paper on the  
multiplier; and Porter's plans for a  
colossal programme at his university;  
DG tells Porter about the various  
standards he has and then about the  
Athlone Fellows, Nilson and Barber  
5 letters

1953

**PUNGS, L**

Mention of crystal detectors and welding  
between metal wire and crystal,  
in German (1 with an English  
translation)  
4 letters, 1 item

**R**

1960

**ROWE, E G**

(Standard Telephones and Cables Ltd.  
Kent)  
Requests for parts and discussions of  
Rowe's new job with Brimar  
7 letters

1953

**RUKOP, H**

(Telefunken)  
From DG in German  
1 letter

1953

**RYDE, W**

(The General Electric Company Ltd.)  
From DG: doped germanium rectifier  
1 letter

**S**

1953

**SALOW**

From DG in German  
1 letter

1985

(DG deceased 1979)

**SENSINI, R**

From Sensini: request for an autograph  
1 postcard

1958-59

**SHARP, F W**

(The British Institution of Radio  
Engineers)

From Sharp: asking DG to give a lecture  
before the institution; then discussions  
on what the lecture should be; DG  
suggests, *Elements of Communication  
Theory* Further discussions on what the  
lecture should be called and when it will  
happen  
10 letters

1964

**SNOW, C P**

From Snow: DG's writing on:  
*Future Possibilities of Science*  
(a photocopy)  
1 letter

1960

**STACEY, N A H**

(The General Electric Company Ltd.)  
*Implications of the Commercial  
Revolution* (Stacey)  
*G.E.C. Export Guide* (Stacey)  
2 letters, 2 items

1958

**STANWORTH, J E**

(The British Thomson-Houston, Co.  
Ltd.)

From Stanworth: with an article from  
The New York Herald Tribune

*Ceramic Pills Generate Electricity When  
Heated*

1 letter, 1 item

1960

**STUBBS, J**

(Steatite & Porcelain Product Ltd.)

From DG: to confirm that he had  
received Faradox H from Stubbs and  
asking for some advice, includes  
engineering drawing of -

*Faradox H cylinder and parts of Ion Gun  
Project*

1 letter, 1 item

**T**

1960

**TAHAIS, J**

From Tahais in Hungarian

1 letter

1960

**TAYLOR, G RATRAY**

20 minute documentary film Taylor is  
making - presenting some of the  
achievements of British chemical  
research

4 letters

1960

**THOMSON, G**

Discussions over DG's paper -

*Communication Theory and Physics*

4 letters

1963

**TOULMIN, S**

(The Nuffield Foundation)

Papers by Toulmin -

*Foundations of Scientific Policy;*

*The Academic Foundations of Science Policy;*

List of recent books and papers on

foundations of Scientific Policy;

information about a meeting on the

above; general discussions between DG and Toulmin

8 letters

V

1960

**VERMES, P**

(Department of Mathematics, Birkbeck College, London)

To DG in Hungarian

1 letter

W

1953

**WAGNER, K W**

In German, 2 from DG

3 letters

1960

**WALKER**

(Walker (Enfield) Ltd. Engineers)

From DG: Walker tackling urgent jobs;

a drawing of - *Welded Steel Frames*

1 letter, 1 item

1959

**WARE, A A**

(Associated Electrical Industries Ltd.)

From Ware: DG's paper -

*Collective phenomena and also hybrid oscillations*  
1 letter

1956

**WEAVER, W**  
(The Rockefeller Foundation)  
From Weaver: thanking DG for sending copies of his papers and looks forward to reading them  
1 letter

1960

**WEAVER, W R G**  
Between DG, Weaver and Julien Loeb: sending Loeb's son to England; one letter from Mrs. Joy Weaver to Mrs. Majorie Gabor  
5 letters

1958-59

**WELLS, R W**  
Various papers by Wells -  
*A Microsecond Detector for 9 to 14 Micron Radiation;*  
*A Polarisation Modulated Communication system for use in the near infra-red;*  
*A New Approach to Photo-Conductor Multiple Switching;*  
(all with figures and drawings)  
DG's responses; copy of a letter from a Dr. Babits to Wells, which Wells sent to DG  
7 items

1984  
(DG deceased 1979)

**WIGNER, E P**  
(Princeton University, USA)  
From Wigner: asking DG to write to Kremlin about disappearance of Andrei Sakharov  
1 letter

1958

**WERNIKOFF, R E**  
From DG: comments on Wernikoff's paper -  
*A Theory of Signals*

1 letter

1960

**WILBY, W P L**

From DG: questions about the analogue multiplier low frequency response previously talked about by R S Mackay at the 4<sup>th</sup> Symposium on Information Theory

Wilby's Reply

2 letters

1956

**WILSON, S (or T)**

(University College, Oxford)

From DG: Wilson's paper on - *Electronics Industry*;

Wilson poses some more questions - *Technical Change in the Electronics Industry*;

DG replies

3 letters

1960

**WRIGHT, G T**

(Electrical Engineering Department, The University of Birmingham)

DG's visit to Edgbaston to discuss their work on space-charge-limited current in solids

2 letters

1965

**WOLF, E**

(The University of Rochester, New York)

Discussing the exchange of papers/reports and the illness of Wolf's wife

2 letters

