THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS

Report on papers of

LANCELOT THOMAS HOGBEN, FRS

(1895-1975)

zoologist

deposited in

Birmingham University Library

Reproduced for the Contemporary Scientific Archives Centre

(CSAC 78/2/81)

by

THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS Quality House, Quality Court, Chancery Lane, London WC2A 1HP

All rights reserved

CONTEMPORARY SCIENTIFIC ARCHIVES CENTRE

under the guidance of the Royal Society's British National Committee for the History of Science, Medicine and Technology

> Catalogue of the papers and correspondence of LANCELOT THOMAS HOGBEN, FRS, (1895 – 1975)

> > Compiled by: Jeannine Alton Julia Latham-Jackson

Deposited in the Library of the University of Birmingham, 1981

LIST OF CONTENTS

		Items	Page
GENERAL INTRO	DDUCTION		2
SECTION A	BIOGRAPHICAL AND PERSONAL	A.1 - A.34	4
SECTION B	NOTES AND WORKING PAPERS	B.1 - B.25	9
SECTION C	DRAFTS AND PUBLICATIONS	C.1 - C.13	11
SECTION D	CORRESPONDENCE	D.1 - D.10	13

INDEX OF CORRESPONDENTS

14

GENERAL INTRODUCTION

The material was received from Mrs. K.A. Lloyd and from Professor G.P. Wells, author of the Memoir of Hogben prepared for the Royal Society (<u>Biographical Memoirs</u> of Fellows of the Royal Society, <u>24</u>, 1978) and editor of <u>Look Back with Laughter</u>, the autobiography left uncompleted at Hogben's death (see A.3 - A.20).

Partly through temperament, and partly through external factors and the vicissitudes of war, Hogben led a peripatetic life and left few records other than his prolific and diverse publications. His scientific research was in various aspects of biology, vertebrate and invertebrate zoology, genetics, and related disciplines of social biology, medical and applied statistics; he also contributed to the founding of two scientific journals, the Journal of Experimental Biology and the British Journal of Social Medicine. To the general public he was internationally known as a brilliant expositor of science in his two most famous books, Mathematics for the Million and Science for the Citizen; these and other works reflect his 'scientific humanism' and the wish to improve, through education and clear thinking, the general condition of mankind. This urge to 'provide a sufficient equipment for the constructive tasks of the Society in which we live' underlay the second main strand in his popular writings: the historical and comparative study of languages. In his later years, his linguistic interest focussed on the culture and speech of Wales where he had had several holiday retreats since 1947 and where he retired.

The diversity of Hogben's interests is reflected in the changing locations in which he pursued his career. Starting in 1917 at two of the Colleges of London University (Birkbeck and then the Imperial College of Science and Technology), he moved to the Universities of Edinburgh (1922), Montreal (1925) and Cape Town (1927) before returning to Britain and the London School of Economics (1930). In 1937 he moved to Aberdeen, and finally to Birmingham (1942) where he remained, with secondment to the War Office 1944 - 46, until he retired to Wales in 1961. These movements testify and also contributed to a restlessness, not to say an impatience of temperament, and certainly do much to explain the unfortunate paucity of the remaining records. Hogben kept no diary; for several periods in his life he had no home and lived with friends or relations, or in hostels; and his research or writing took precedence over administrative paperwork.

Thus, although several of his interests (mathematics, statistics, popular education, language) are represented in the collection, there is little substantial scientific material, and virtually no correspondence despite Hogben's known long acquaintance with many leading figures in scientific and political life. Of interest are the 'Interglossa Dictionary' (C.7), the autobiographical writings in Section A, and several items which show his gifts as a teacher for simple, striking, easily memorable methods and examples. There are also the manuscripts of various unpublished projects (C.8, C.9).

A collection of Hogben's scientific papers, in five bound volumes arranged by subject, is included at A.30 - A.34.

L.T. Hogben CSAC 78/2/81

SECTION A BIOGRAPHICAL AND PERSONAL A.1 - A.34

- A.1, A.2 Obituaries and tributes.
 - A.1 'Lancelot Thomas Hogben', by G.P. Wells (Biographical Memoirs of Fellows of the Royal Society, 24, 1978, 183-221).
 - A.2 'A Professor Retires', article by 'R.H.C.' on the occasion of Hogben's retirement (The Queen's Medical Magazine, Journal of the Birmingham Medical School, <u>54</u>, March 1962).

A.3 - A.20

'Look Back with Laughter'

This is the title of Hogben's autobiography, left incomplete at his death. It was collated and edited by G.P. Wells, but remains unpublished.

Several drafts, all with ms. corrections and variations, were received from G.P. Wells. They include 'Draft H' (A.3 – A.5) and 'Draft S' (A.6 – A.8), and the final version as prepared for publication and with an introduction (A.9, A.10). An explanatory note by Wells (quoted below with permission), and information on copyright from Hogben's literary agent, appear at A.11. Other early, partial or incomplete drafts found among Hogben's papers, are at A.12 – A.20.

In his 'Notes on my edited version of Look Back with Laughter' (see A.11), Wells writes:

'Hogben's family was not eager to see his autobiography published because there was too much in it of the cynicism which he often assumed as a mask, and not enough about his real faith and his positive achievements. This is why I wrote the Introduction.

Unhappily, this work was finished when publishers everywhere were finding it increasingly difficult to sell books, and they did not want to take on the autobiography. Norton, his U.S. publisher, wrote to the effect that Hogben was no longer a world-famous figure, and even <u>Mathematics for the Million had ceased to move</u>. So after one or two tries, we stopped trying to find a publisher.'

Biographical and personal

An important addition to the autobiography are the 'Professional Reminiscences' at A.21. G.P. Wells, in an explanatory note included in the folder, writes:

'At one time, Hogben meant to include a chapter about his scientific achievements in his Autobiography. He did not do so. However he sent to the Royal Society (received there on 20 April 1961) a document called 'Professional Reminiscences', written in conjunction with a five-volume collection of his scientific papers.

The attached copy was sent to me by his eldest daughter, Mrs. Sylvia McCrory. It has a number of corrections in his own hand.'

The five-volume collection of scientific papers referred to above, and in Hogben's account, is included at A.30 - A.34.

A.3-A.5	Draft H, with a note by G.P. Wells, 'This is the typescript I worked on. It was made available to me by Helga Greene'.
	Three folders as follows:
A.3	Original chapters I – IX (publisher's chapters 1 – 3).
	Quarto typescript with ms. corrections.
A.4	Original chapters X - XVII (publisher's chapters 4 - 7).
	Quarto typescript with ms. corrections.
A.5	Chapters 8, 9, Epilogue and postcript. Photocopy foolscap, very heavily corrected.
A.6-A.8	Draft S, with a note by G.P. Wells 'This is a Xerox-copy of a typescript in the possession of the family in U.S.A. It was handed to me by Mrs. Sylvia McCrory EHogben's daughter] shortly before the end of my 1979 visit'.
	Three folders as follows:
A.6	Original chapters I – IX.
A.7	Original chapters X – XVII.
A.8	Original chapters XVIII – XXIV, Epilogue.

Biographical and personal

A.9, A.10	Final typescript as prepared by G.P. Wells, who has con- tributed an introduction, 'The faith of a scientific humanist'.
	Two folders as follows:
A.9	Introduction, Chapters 1 - 4 (pp.1-132).
A.10	Chapters 5 - 10, Epilogue (pp.133-307).
A.11	'Notes on my edited version of <u>Look Back with Laughter</u> ', by G.P. Wells.
	Note on copyright by Helga Greene (Hogben's literary agent).
A.12, A.13	First draft.
	Foolscap typescript, with a few ms. corrections. This is the first draft from which later mss. were compiled; it ends at 1937.
A.12	Chapters 1 – 3 (Chapter 4 missing).
A.13	Chapters 5 – 7.
A.14-A.19	Typescript drafts, all with ms. corrections and variations.
A.14	Chapters I – IV.
A.14 A.15	Chapters I - IV. Chapters V - VII (2 copies of each).
A.15	Chapters V – VII (2 copies of each).
A.15 A.16	Chapters V – VII (2 copies of each). Chapters VIII – X (2 copies of each).
A.15 A.16 A.17	Chapters V - VII (2 copies of each). Chapters VIII - X (2 copies of each). Chapters XI - XIV (1 copy of each, no corrections).
A.15 A.16 A.17 A.18	Chapters V - VII (2 copies of each). Chapters VIII - X (2 copies of each). Chapters XI - XIV (1 copy of each, no corrections). Chapters XV - XVII (1 copy of each, no corrections). Chapter XXIV (1 copy, no corrections). Epilogue (3 copies, all with ms. corrections, expanded
A.15 A.16 A.17 A.18 A.19	 Chapters V - VII (2 copies of each). Chapters VIII - X (2 copies of each). Chapters XI - XIV (1 copy of each, no corrections). Chapters XV - XVII (1 copy of each, no corrections). Chapter XXIV (1 copy, no corrections). Epilogue (3 copies, all with ms. corrections, expanded versions of above).

Copies of 'Publisher's note' for insertion in book.

Biographical and personal

A.21

'Professional Reminiscences.'

Hogben's account of his scientific achievements.

37 pp. typescript with ms. corrections, plus 7 pp. bibliography.

With an explanatory note by G.P. Wells.

See introduction to A.3 - A.20 above, and also A.30 - A.34.

A.22

'Journey Through Ghana.'

286 pp. negative photostat copy of typescript original, bound.

With a ms. note, 1979, by G.P. Wells inside front cover, identifying item as the 'descriptive book commissioned by the Colonial Office to celebrate the country's independence' (in 1956).

A.23

Shorter autobiographical writings (on verso of proofs):

Poem 'At seventy'

Draft 'At the end of the day ...'

2 pp. ms. reflections on his life; Hogben concludes: 'I am with Belloc all the way that to look back with laughter is well worth the winning. I could wish that I learned to do so earlier'.

Draft, 'Brighter British'.

3 pp. ms., on developments in the English language.

A.24 Hogben's address book.

A.25

'Lloches y Fwyalchen.'

(Hogben's bungalow at Glyn Ceiriog.)

Miscellaneous correspondence, 1970-72, with planning authorities, solicitors and builders re above.

Includes some of Hogben's plans and specifications, accounts and receipts. Not indexed.

A.26

.26 Miscellaneous receipts, etc. 1950-73.

Includes material re other properties owned by Hogben in Wales.

A.27 Miscellaneous receipts, etc. 1974-75.

Biographical and personal A.28 Ms. verses by Hogben. Drafts for two humorous alphabets. A.29 Small notebook, c.1942, analysing songs and pieces of music in a numerical notation. A.30-A.34 A collection of Hogben's published scientific papers, arranged by subject; references given in his own 'Professional Reminiscences' (A.21) are to this set, which does not follow chronological order. There is a typed list of contents inside each volume. 5 volumes as follows: A.30 Vol. 1. The chromatic function. A.31 Vol. 2. Internal secretion. A.32 Vol. 3. Biophysical and biochemical. A.33 Vol. 4. Genetics and cytology. A.34 Vol. 5. Statistics medical and theoretical.

SECTION B	NOTES AND WORKING PAPERS B.1 - B.25	
B.1-B.14	Work on Mathematics and Physics	
B.1-B.3	Three examination answer-books, McGill University.	
	n.d. but c.1926-27. Labelled by Hogben as follows:	
B.1	'Fourier Series and Integrals.'	
	(Includes another sequence of notes in another hand.)	
B.2	'Cylindrical and Spherical Harmonics.'	
B.3	'Differential Equations II. Partial Differential equations involving Fourier series, Bessel's and Legendre functions.'	
B.4	Examination answer-book, University of Cape Town, dated 'Dec. 1928' and labelled 'Generalised Coordinates'.	
B.5-B.11	Sequences of ms. notes.	
B.5	'Linear Difference Equations.'	
B.6	'Non-Linear Difference Equations.'	
B.7	'Factorial Notation.'	
B.8	'General Expansion based on the operators \bigtriangleup and E.'	
B.9	'Finite differences and Interpolation Formulae.'	
B.10	'Stirling's Theorem.'	
B.11	Shorter notes.	
B.12	Folder labelled 'The Ordered Tetrad'.	
	Ms. draft on sets and subsets, and some loose pages of notes.	
B.13	Folder labelled 'Relativity'.	
	2 typescript sets of notes, 'Relativity 1', 'Relativity 2'.	
B.14	Ms. notes on 'The Lorenz Transformation'.	
-	Copy of printed booklet on Relativity.	

Notes and working papers

B.15-B.24	Work on language.
B.15	Work on English. Includes notes on English patronymics, syntax, rhymes.
	Errata lists for <u>The Mother Tongue</u> (London 1964).
B.16-B.23	Work on Welsh.
B.16	Miscellaneous ms. notes on Welsh syntax and accidence, some on writing-paper of Lloches y Fwalchen and therefore after 1971.
B.17-B.19	Three stapled folders labelled 'Welsh Syntax', 'Essential Welsh Verbs', 'Welsh Semantics'.
B.20	Typescript drafts on various aspects of Welsh, 'Interrogation', 'Infixed pronouns', 'Additional notes on Welsh', etc.
B.21	'Gwlad heb Genhadwr' (Country without a Missionary).
	33 pp. typescript narrative by Hogben. 3 copies.
B.22	'Guinness yn Gymraeg A Guinness i Gymru.'
	Stapled folder of advertising slogans for Guinness, in Welsh, with English translations.
B.23	Printed matter in Welsh, mainly hymns in tonic sol fa notation.
B.24	'A reformed Oggam.'
	Ms. and typed versions of diagram of rationalised orthography.

B.25 Mathematical diagram.

SECTION C DRAFTS AND PUBLICATIONS C.1 - C.13

C.1	'Science for the Citizen' (first published 1938).
	Hand-drawn and coloured diagrams.
	Letter and related material from D.L. Simms, 1960, correcting error in 4th edition.
C.2	'Analytical Thermodynamics (based on Planck).'
	27 pp. typescript. 3 copies.
C.3	'Bedside Reflections on Thermodynamics.'
	11 pp. typescript. 3 copies.
C.4-C.6	Papers on statistics, n.d.
C.4	'A type of series of special interest to biologists."
	12 pp. typescript and ms.
C.5	'The extraction of square roots by use of continued fractions as an exercise in machine tabulation.'
	14 pp. typescript and ms., 2 copies, one marked 'corrected'.
C.6	'Two exercises in use of recurrent series.'
	3 pp. + 2 pp. addendum, types cript.
C.7	'Interglossa Dictionary.' c.1943
	381 pp. typescript in folder.
	This was probably intended as the companion volume to Interglossa (Penguin Books, 1943) in which Hogben

to Interglossa (Penguin Books, 1943) in which Hogben attempted to construct an auxiliary language, based on Latin and Greek roots, as a tool for international communication. In the 'Foreword with instructions for use' to the 'Dictionary', he refers to an 'introductory volume' which had previously appeared, and says 'The introductory volume provided the tools and raw materials. The dictionary gives Interglossa a gestalt'.

See Wells, Memoir, p.204.

N.B. The folder, which had been sent direct by post (addressee unidentifiable), is postmarked Llangollen, April 1971. C.9

Drafts and publications

C.8 'Figurate series and related functions.'

23 pp.ms. draft + 2 tables.

Includes letter from Russell Parker re suitable placements for publication of a proposed monograph by Hogben on 'Figurate Numbers', October 1971.

'Mathematics with the machine.'

Photocopy of ms. draft for projected work with this title, 68 pp.

Foreword.

- 1. Powers and roots.
- 2. Common logarithms.
- 3. Trigonometrical ratios.
- 4. The binomial theorem.
- 5. Natural logarithms.
- 6. Trigonometrical and allied series.
- 7. Some statistical series.

Appendix 1 Stirling's formula.

Appendix II Square roots by continuous fractions.

Included here is correspondence, 1971-72, with Addo Limited re possible publication of the work.

- C.10 Miscellaneous pages of 'Astronomer, priest and ancient mariner' (London 1972), some with ms. corrections and notes.
- C.11 Miscellaneous drafts for 'Columbus, the cannon ball and the common pump' (London 1974), Chapters 6 and 7, heavily-corrected typescript.

Draft, probably for 'Maps, mirrors and mechanics' (London, 1973), Chapter 5.

- C.12 Miscellaneous copies of publications by Hogben.
- C.13 Miscellaneous printed matter.

SECTION D	CORRESPONDENCE D.1 - D.10	
D.1	Letters from readers of <u>The Mother Tongue</u> . 196	64-66
D.2-D.9	Correspondence with literary agents and publishing houses re contracts, publications, reprints, royalties, work in hand or projected.	
	Mainly with Hogben's literary agent, Helga Green but also with others. 190	e, 64-71
D.2	1964-66. Includes correspondence with Jonathan Cape Limited.	
D.3	1964	
D.4	1965. Includes correspondence with Allen & Unwin Limited, with W.W. Norton and Company (Hogben's publishers in America), and arrangements for assign- ment of royalties.	
D.5	1966	
D.6	1967	
D.7	1968. Includes correspondence with William Heinemann Limited.	
D.8	1969	
D.9	1970-71. Includes royalty statements.	
D.10	Miscellaneous royalty statements. 196	64-69

INDEX OF CORRESPONDENTS

BURHOP, Eric Henry Stoneley	D.1
GANT, Roland	D.7
GREENE, Graham Carleton	D.2
GREENE, Helga	D.2-D.9
LOHMAN, Tanya	D.1
LOMICKA, Helen	D.1
NEUBACH, Meir	D.1
PARKER, Russell	C.8
SIMMS, D. L.	C.1
UNWIN, Philip	D.4, D.6