The Google Library Project in Oxford

Running a 21st Century Library from an Historic Monument

David Perrow
Acting Deputy Director, OULS

david.perrow@ouls.ox.ac.uk
Dramatis Personae

- Reg Carr
  Director, Oxford University
  Library Services & Bodley’s Librarian

- Ronald Milne
  Acting Director, OULS & Acting Bodley’s Librarian
The Founder
Thomas Bodley’s Vision

- Bodleian founded 1602
- Universal library
- Bodley’s “Republic of Letters”
- Legal deposit privilege since 1610
- 60% of Bodleian readers not members of Oxford University
The Heritage
Bodleian Library

- 400 staff
- Budget of £14m
- Stock 8 million items
- 45,000 registered users
- 120 Miles (192km) of shelving
- 123,000 monograph items and 194,000 serial items added each year
Some numbers (Year 2000)

► Total libraries in Oxford University: 119

► Of which:
  - 40 Oxford University Library Services (OULS) libraries, including Bodleian
  - 40 non-OULS departmental libraries
  - 39 college libraries
Oxford University Library Services

- Total bookstock: 11 million items
- 156 miles (250km) of shelving, including depository space
- > 700 staff (600 fte)
- Budget > £25m (60% Univ/40% other)
- Capital Campaign to raise £40m in 5 years
Integration of libraries into a single management structure

- The aim: to enhance services to users
- The objective: to use resources more effectively
- The task: to create a unified central library system for the University
Integration = Rationalisation

- Rationalisation of collections – deduplication, best possible location of stock
- Investment in e-resources and digitisation
- Rationalisation of staff structures, grades
- Rationalisation of estate
- Integration achieved through extensive consultation with academic community and with staff! (Oxford University is a very consultative institution)
Estates Strategy

General

- High-use stock on central Oxford sites
- Low-use stock in the depository
- Greatly increase the available electronic resource
- Consolidate the physical estate to provide an improved, more efficient and cost-effective service (reduction from 45 physical locations to 12?)
Major estates developments

► New Social Science Library completed 2004

► Automated Depository at Osney Mead (8m. vol)

► Redevelopment of the Radcliffe Science Library

► New Medical Research and Information Centre

► Redevelopment of the New Bodleian Library

► Construction of a Humanities Lending Library on the Radcliffe Infirmary site
New Oxford Libraries
Classic Oxford Libraries
Google

New Images for Old Books
The Google Agreement

► Signed 13 December 2004

► For an initial period of three years

► Digitising Oxford’s 19\textsuperscript{th} century out-of-copyright collections

► 1m – 1.5m items

► Possibility of extending contract
From the Google perspective

► Google’s mission:
  - “to organize the world’s information and make it universally accessible and useful”.

► Library digitization programme formulated in early 2003 as a means of tapping into ‘Deep Web’ materials

► Conversations with publishers and major libraries during 2003-2004

► Library programme under the umbrella of GooglePrint

► Consistent with constant enhancement programme for its search engine services
From the Oxford perspective

► Integral part of hybrid library project to create as much local electronic content as possible: ‘The Oxford Digital Library’

► Direct discussions with Google 2002 onwards

► Oxford’s extensive collections of 19th century materials identified and offered to Google for digitisation

► Win/Win situation quickly identified
Google Library Project in outline

► To digitise materials from five major research libraries: Harvard, Michigan, New York Public, Oxford, Stanford

► To create OCR’d text, with indexes for search and retrieval via Google search services and Google Print Services

► To provide online searching and access to hitherto inaccessible printed materials for the public worldwide
Principal outcomes for Oxford

► Free provision of > 1 Million digitised items, with OCR’d text, links to online catalogue, barcodes. (RFID tags?)
► Oxford digital content made available for scholarly and public benefit
► Google will host the ‘Oxford digital copy’ until Oxford infrastructure is in place
► Sharing technology innovation with one of the world’s leading Internet companies
Two frequently asked questions about the Oxford project

► **Why 19th century materials?**

- Out of copyright and out of print
- Oxford already a principal partner in Early English Books Online (EEBO) and Eighteenth Century Collections (ECCO) projects

► **When does the project start?**

- Lot of preparatory work is currently taking place (planning for scanning area/logistics)
- Google Manager on site from 1 August
- Scan stations will be delivered later in 2005 and work will start then
Some terms and conditions

- Digitisation will take place on University premises
- Virtually all costs met by Google
- Oxford costs: seconding local project manager and selection of materials
- Two digital copies to be made: Google and Oxford free to exploit non-exclusively
- English Law if there are issues relating to contract
THE ART OF MONEY-GETTING
HINTS AND HELPS TO MAKE A FORTUNE
BY P. T. BARNUM.

WARD, LOCK, & CO. LONDON & NEW YORK
THE COLLEGIAN'S GUIDE;
OR,
RECOLLECTIONS OF COLLEGE DAYS,
SETTING FORTH
THE ADVANTAGES AND TEMPTATIONS
OF A
UNIVERSITY EDUCATION.

BY
THE REV. ***** ** *, M.A.
--- COLLEGE, OXFORD.

Shakespeare. — "I dare say my cousin William is become a good scholar: he is at Oxford still, is he not?"
Silence. — "Indeed, sir; to my cost."

LONDON:
PRINTED FOR
LONGMAN, BROWN, GREEN, AND LONGMANS,
PATERNOSTER-ROW.
1845.
THE HISTORY OF FASHION IN FRANCE;

or,

THE DRESS OF WOMEN FROM THE GALLO-ROMAN PERIOD TO THE PRESENT TIME.

FROM THE FRENCH OF

M. AUGUSTIN CHALLAMEL.

BY

MRS. CASHEL HOEY AND MR. JOHN LILLIE.

London:
SAMPSON LOW, MARSTON, SEARLE, & RIVINGTON,
CROWN BUILDINGS, 38, FLEET STREET.
1882.
[All rights reserved.]
A TREATISE
ON THE
PHYSIOLOGY AND DISEASES
OF
THE EYE:
CONTAINING
A NEW MODE OF CURING CATARACT WITHOUT AN OPERATION;
EXPERIMENTS AND OBSERVATIONS ON VISION, ALSO ON THE
INFLECTION, REFLECTION, AND COLOURS OF LIGHT;
TOGETHER WITH
REMARKS ON THE PRESERVATION OF SIGHT, AND ON SPECTACLES,
READING-Glasses, &c.

By JOHN HARRISON CURTIS, Esq.

LONDON:
PRINTED FOR
LONGMAN, REES, ORME, BROWN, GREEN, AND LONGMAN,
PATERNOSTER ROW.
M.DCCC.XXXIII.
Fig. 1.

The connexion of the Organs of SIGHT & HEARING illustrated.

ENGRAVED FOR McGRITIE'S TREATISE ON THE EYES.

DESCRIPTION OF THE PLATE.

Fig. 1.

1. The globe of the eye and the lacrimal gland.
2. External auditory canal.
4. Internal jugular vein, and its divers ramifications.
5. Third pair of nerves within the cranium.
6. Its superior branch.
7. Its inferior branch.
8. Branch of communication with the ophthalmic ganglion.
9. The pathetic nerve.
10. Sixth pair of nerves.
11. Pharyngeal nerve.
12. Trunk of the trigeminal nerve.
13. Its ganglionic part.
15. Frontal branch.
16. Lacrimal branch.
17. Nasal nerve.
18. Ophthalmic ganglion, with the ciliary nerves.
19. Sphenopalatine ganglion.
20. Vidian nerve in its canal, which is laid open.
23. External carotid artery.
24. Trunk of the lingual, or hypoglossal nerve.
25. Occipital artery.
26. Its descending branch, with its distribution and anastomoses.
ILIOS:
THE CITY AND COUNTRY
OF
THE TROJANS:
THE RESULTS OF RESEARCHES AND DISCOVERIES ON THE SITE OF
TROY AND THROUGHOUT THE TROAD IN THE
YEARS 1871-72-73-78-79.
INCLUDING AN AUTOBIOGRAPHY OF THE AUTHOR.

BY DR. HENRY SCHLIEDEMANN,
F.S.A., F.R.I. BRITISH ARCHITECTS,
AUTHOR OF "TROY AND ITS REMAINS," "MYCENAE," ETC.

WITH A PREFACE, APPENDICES, AND NOTES
BY PROFESSORS RUDOLF VIREHOU, MAX MÜLLER, A. H. SATUCE, J. P. MAIÁFFY,
H. BRUGSCH-BEI, P. ASCHEHOS, M. A. POSTOLOCCAS, M. E. BURNOUT,
MR. F. CALVERT, AND MR. A. J. DUFFIELD.

WITH MAPS, PLANS, AND ABOUT 1000 ILLUSTRATIONS.

LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1880.
MANNERS AND CUSTOMS
OF
THE ANCIENT EGYPTIANS,
INCLUDING
THEIR PRIVATE LIFE,
GOVERNMENT, LAWS, ARTS, MANUFACTURES,
RELIGION, AND EARLY HISTORY;
DERIVED FROM A COMPARISON OF
THE PAINTINGS, SCULPTURES, AND MONUMENTS STILL EXISTING,
WITH THE ACCOUNTS OF ANCIENT AUTHORS.
Illustrated by Drawings of those Subjects.

AUTHOR OF "A GENERAL VIEW OF EGYPT, AND
TOPOGRAPHY OF THEMES," &c.

IN THREE VOLUMES.
VOL. I.

LONDON:
JOHN MURRAY, ALBEMARLE STREET.
MDCCXXXVII.
Little Songs For Me To Sing.

The Illustrations by
J. E. MILLAIS, R.A.
(Engraved by Joseph Swain.)

With Music
Composed by
HENRY LESLIE.

London: Cassell, Petter & Galpin
Our English Lakes,
MOUNTAINS, AND WATERFALLS,
AS SEEN BY
WILLIAM WORDSWORTH.

With Photographic Illustrations,
BY THOMAS OGLE.

FOURTH EDITION.

London:
PROVOST & Co., 5 BISHOPSGATE WITHOUT, E.C.
1870.
GRASMERE,
FROM RED BANK,
p. 65.
THE

OCEAN, ATMOSPHERE
AND LIFE

Being the Second Series of
A DESCRIPTIVE HISTORY OF THE
PHENOMENA OF THE LIFE OF THE GLOBE

BY ÉLISÉE RECLUS

Translated by the late B. B. Woodward, M.A.
and
Edited by Henry Woodward, F.R.S., of the British Museum

Illustrated by
TWO HUNDRED MAPS OR FIGURES INTERCALATED IN THE TEXT
AND TWENTY-SEVEN MAPS PRINTED IN COLOURS

SECTION I.

LONDON
CHAPMAN AND HALL, 193, PICCADILLY
1873

198. c. 92.
AN ACCOUNT
OF
THE PIRATES
EXECUTED AT ST. CHRISTOPHER'S, IN THE
WEST INDIES, IN 1826.

BY Enoch Wood.

LONDON:
PUBLISHED BY JOHN MASON, 14, CITY-ROAD,
AND 66, PATERNOSTER-ROW.
1830.
356.
ASKJA.

ICELAND'S LARGEST VOLCANO:

WITH A DESCRIPTION OF THE

GREAT LAVA DESERT IN THE INTERIOR:

AND A

CHAPTER ON THE GENESIS OF THE ISLAND.

BY

W. G. LOCK, F.R.G.S.,

TRANSLATOR OF "SPORTING LIFE ON THE NORWEGIAN FIELDS," AND
AUTHOR OF "NOTINGS ON SPORT IN NORWAY."

Published by the Author at 16, Kingston Terrace,
Charlton, Kent.

1881.
THE

DESCENT OF MAN,

AND

SELECTION IN RELATION TO SEX.

BY CHARLES DARWIN, M.A., F.R.S., &C.

IN TWO VOLUMES.—Vol. I.

WITH ILLUSTRATIONS.

LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1871.
A JOURNAL
OF THE
DISASTERS IN AFGHANISTAN,
1841–2.
BY
LADY SALE.

LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1843.
HISTORY

of

THE WAR IN AFGHANISTAN.

FROM

THE UNPUBLISHED LETTERS AND JOURNALS
OF POLITICAL AND MILITARY OFFICERS EMPLOYED IN AFGHANISTAN
THROUGHOUT THE ENTIRE PERIOD OF BRITISH CONNEXION
WITH THAT COUNTRY.

BY JOHN WILLIAM KAYE.

IN TWO VOLUMES.

VOL. I.

LONDON:
RICHARD BENTLEY, NEW BURLINGTON STREET.
Publisher in Ordinary to Her Majesty.
1851.
A JOURNEY
THROUGH THE
KINGDOM OF OUIDE,
IN 1849-1850;
BY DIRECTION OF THE RIGHT HON. THE EARL OF BALRANNISH,
GOVERNOR-GENERAL
WITH PRIVATE CORRESPONDENCE RELATIVE TO THE
ANNEXATION OF OUIDE TO BRITISH INDIA, &c.
BY MAJOR-GENERAL SIR W. H. SLEEMAN, K.C.B.
Resident at the Court of Faizabad.
IN TWO VOLUMES.
Vol. I.

LONDON:
RICHARD BENTLEY,
Publisher in Ordinary to Her Majesty.
1855.

203. L. #47. 370.
A

FEW WORDS

OF

ADVICE TO CADETS,

AND OTHER

Young Persons proceeding to India,

By HENRY KERR,

A RETIRED OFFICER IN THE M. E. I. COMPANY'S MILITARY SERVICE; AND
FORMERLY COMMANDANT OF GENTLEMEN CADETS,
IN FORT WILLIAM, CALCUTTA.

"FORTI ET FIDEI NIL DIFFICILE."


LONDON:

W. H. ALLEN & Co., 7, LEADENHALL STREET.

1842.
A DICTIONARY
OF THE
TELOOGOOD LANGUAGE,
COMMONLY TERMED THE GENTOO,
PECULIAR TO THE HABITANTS OF THE NORTH EASTERN PROVINCES
OF THE
INDIAN PENINSULA.

By A. D. CAMPBELL,
OF THE
MADRAS CIVIL SERVICE,
LATE MEMBER, AND SECRETARY,
OF THE
BOARD OF SUPERINTENDENCE
FOR THE
COLLEGE OF FORT ST. GEORGE.

Madras:
PRINTED AT THE COLLEGE PRESS.
1821.

306. W. 42.
WANDERINGS BY THE SEINE.

BY

LEITCH RITCHIE, ESQ.

AUTHOR OF

HEATH'S PICTURESQUE ANNUAL, SCHINDERHANDES, ROMANCE OF FRENCH HISTORY, &c.

WITH

TWENTY ENGRAVINGS

From Drawings

BY

J. M. W. TURNER, ESQ. R.A.

LONDON:

PUBLISHED FOR THE PROPRIETOR, BY
LONGMAN, REES, ORME, BROWN, GREEN, AND LONGMAN;
RITTNER & GAUPIL, PARIS; AND A. ASHER, BERLIN.

1834.
TWO ON A TOWER.

A Romance.

BY

THOMAS HARDY,

AUTHOR OF "FAR FROM THE MADDING CROWD," "THE TRUMPET MAJOR," ETC.

IN THREE VOLUMES.

VOL. I.

London:
SAMPSON LOW, MARSTON, SEARLE, & RIVINGTON,
CROWN BUILDINGS, 186, FLEET STREET.
1882.
[All rights reserved.]
LIFE
OF
THE RIGHT HONOURABLE
WILLIAM PITT.

BY
EARL STANHOPE,
AUTHOR OF THE HISTORY OF ENGLAND FROM THE PEACE OF Utrecht.

VOLUME I.

LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1861.
THE RAVEN

AND

OTHER POEMS.

BY

EDGAR A. POE.

LONDON:

WILEY & PUTNAM, 6, WATERLOO PLACE.

1846.

1342.
THE PATHFINDER;

OR,

THE INLAND SEA.

BY THE AUTHOR OF

IN THREE VOLUMES.

VOL. I.

LONDON:
RICHARD BENTLEY, NEW BURLINGTON STREET.
1840.

483.
THE OFFICIAL ILLUSTRATED GUIDE TO THE GREAT WESTERN RAILWAY, INCLUDING THE OXFORD, WORCESTER AND WOLVERHAMPTON, AND CHESTER AND HOLYHEAD LINES, AND ISLE OF MAN. WITH DESCRIPTIONS OF THE MOST IMPORTANT MANUFACTURERIES IN THE SEVERAL TOWNS ON THE LINES.

BY GEORGE MEASOM,

AUTHOR OF THE OFFICIAL ILLUSTRATED GUIDES TO THE NORTH WESTERN, GREAT NORTHEIN, BRIGHTON, SOUTH WESTERN, SOUTH EASTERN, CALEDONIAN, LANCASTER AND CARLISLE, EDINBURGH AND GLASGOW, BRISTOL AND EXETER, SOUTH DEVON, SOUTH WALES, CORNWALL, AND NORTHERN OF FRANCE, RAILWAYS.

EMBELLISHED WITH 350 ENGRAVINGS.

LONDON:
Published under the Special Authority of the Directors, by RICHARD GRIFFIN AND CO., STATIONERS' HALL COURT; NAPPER & WRIGHT, NEW STREET, BIRMINGHAM; AND SOLD BY THE PRINCIPAL BOOKSELLERS IN THE SEVERAL TOWNS ON THE LINES, AND AT ALL THE RAILWAY STATIONS.

ONE SHILLING.
Crockford's

Clerical Directory

for

1860:

Being a Biographical and Statistical Book of Reference

For

Facts Relating to the Clergy and the Church.

Published Annually.

London:

Crockford's Clerical Journal and Directory Offices,
18, Wellington Street North, Strand, W.C.

1860.
HOUSEHOLD CHEMISTRY;

OR,

RUDIMENTS OF THE SCIENCE

APPLIED TO

EVERY-DAY LIFE.

BY

ALBERT J. BERNAYS, F.C.S.,

LECTURER ON CHEMISTRY, AND CONDUCTOR OF THE CHEMICAL LABORATORY, DERBY.

LONDON:
SAMPSON LOW, FLEET STREET.

1853.
On the
ECONOMY OF MACHINERY
AND MANUFACTURES

In

CHARLES BABBAGE, ESQ FR. A.M.
Lecturer on the History of Mathematics in the University of Cambridge,
and Member of several Academies.

LONDON:
CHARLES KNIGHT, PALL-MALL EAST.
1832.

853.
The present volume may be considered as one of the consequences that have resulted from the Calculating-Engine, the construction of which I have been so long superintending. Having been induced during the last ten years to visit a considerable number of workshops and factories, both in England and on the Continent, for the purpose of endeavouring to make myself acquainted with the various resources of mechanical art, I was insensibly led to apply to them those principles of generalization to which my other pursuits had naturally given rise. The increased number of curious processes and interesting facts which thus came under my attention, as well as of the reflections which they suggested,
THE

BIBLICAL

REASON WHY

A

FAMILY GUIDE TO SCRIPTURE READINGS,

AND A

HAND-BOOK FOR BIBLICAL STUDENTS.

BY THE AUTHOR OF

"THE REASON WHY—GENERAL SCIENCE," "THE REASON WHY—
NATURAL HISTORY," "THE HOUSEWIFE'S REASON WHY,"
"THE HISTORICAL REASON WHY," ETC. ETC.

With an Introduction

by

A CLERGYMAN OF THE CHURCH OF ENGLAND.

LONDON:

HOULSTON & WRIGHT, 65, PATERNOSTER ROW.

[The Author Reserves the Right of Translation.]
THE PRINCIPLES
OF
CATHOLIC REFORM
OR
The Harmony of Catholicism and Civilization

CONFERENCEs OF 1878 IN THE CIRQUE D'HIVER, PARIS

BY
M. HYACINTHE LOYSON
PRIEST

Translated by Lady Durand

WITH A PREFACE BY THE BISHOP OF EDINBURGH

"I believe one Holy, Catholic, and Apostolic Church"
Nicene Creed

"Popery makes the weakness of Catholicism, and Catholicism the strength of Popery"
Blair

RIVINGTONS
WATERLOO PLACE, LONDON
Oxford and Cambridge
MDCCCLXXIX
Some issues

- Conservation
- Logistics
- Workflow
- Delivery of the ‘Oxford Digital Copy’
Conservation

► Conservation: Oxford has the absolute right to say that particular items may not be digitised

► 19th-century material – acidity of paper; but Google scanning non-invasive; ‘slow track’ for fragile material

► Any book that can be read likely to be in a fit state to be digitised

► Newspapers and large format material excluded at this stage
Logistics

- Books transferred by van from the new Bodleian stack to the digitisation centre

- Space requirement – depends on number of scanning stations

- 24 x 7 working – a possibility: need for a ‘buffer zone’

- ‘Selection’ of books: – sucked up rather than ‘cherry-picked’

- English and FIGS stock; Google working towards the digitisation of other material using roman character set
Workflow

► Workflow tested in May over a three-day period

► Identification of stock, pulling the stock, appraisal (conservation checking etc), barcoding of stock, associated bibliographic work, movement to the scanning site and return

► Trial allowed us to test methodologies and configure the project profile

► The real challenge is the associated bibliographic/barcoding work (Unlike other libraries, Oxford has many unbarcoded items)

► Survey revealed that circa 20% of 19th century stock is uncut...

Oxford Digital Copy

- Page images likely to be JPEG 2000
- OCR’d text
- Linked to Oxford catalogue record
- Will be able to navigate the digitised book
- Oxford and other libraries’ material will be hosted on a Google server, in the first instance
- Oxford may sub-license the rights grants to all or any of the other UK deposit libraries, subject to them covenanting individually with Google
Questions and Discussion

David Perrow, Acting Deputy Director, Oxford University Library Services
Bodleian Library
Broad Street
Oxford
OX 1 3BG

Tel  +44 (0)1865 277183
Fax +44 (0) 1865 277187

Email: david.perrow@ouls.ox.ac.uk