



The Theatre of Memory  
putting Wales in print online

**Cover illustration**

Robert Fludd, *Utriusque cosmi historia ...*, Oppenheim, 1619.  
Tomus secundus, Lib. I, Cap. X, 'Ars memoriae'.

## 1 *The Theatre of Memory*

*The Theatre of Memory* will make freely available, to be searched and read by anyone on the internet, the printed record of Wales and the Welsh. Its aim is to lay bare the memory of our country as if in a theatre, so that it is seen, as it were at a glance, by anyone in the giant auditorium that is the World Wide Web.

The original Theatre of Memory was designed in Italy by Giulio Camillo (1480-1544).<sup>1</sup> It was an encyclopaedic memory aid consisting of hundreds of images arranged on the tiers of a theatre auditorium: the actor viewed them standing on the stage. The images were meant to ignite the imagination, and thereby to stimulate the memory, of the actor, enabling him or her to remember significant knowledge. In a like way our *Theatre of Memory* will reveal, stimulate and inspire the 'actor; in Welsh life, history and culture.

## 2 What is the aim of *The Theatre of Memory*?

The aim of the project is twofold:

- to translate into digital form as much as possible of the printed material published about Wales and Welsh people, and
- to make this information easily available to - and easily findable by - anyone with a connection to the world-wide internet.

## 3 What will be included?

The project will aim ultimately to encompass as much as possible of the printed record of Wales, by including material:

- on any aspect of Wales and the Welsh: on any subject, in fact and fiction, about Wales as a nation and as a geographical area, and about Welsh people, in Wales and beyond
- in all printed formats: books and pamphlets, official publications, music, ephemera, periodicals and magazines, and newspapers
- from every period, from the earliest days of printing to the present
- in English, in Welsh, and in other relevant languages
- at every level, from children's literature to advanced research, from the highly local to the international
- both in and out of copyright.

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<sup>1</sup> see <http://www.ba.infn.it/~zito/camillo.html>

Until recently a project like this would have been regarded as too ambitious: digitisation has usually been regarded as a small-scale activity. In December 2004, however, Google announced that it intended to digitise millions of printed volumes from five of the world's leading research libraries (including most of the nineteenth century works in the Bodleian Library, Oxford).<sup>2</sup> It is now possible to think seriously about 'mass digitisation' of entire collections, instead of making small selections.

There are two main advantages in treating *all* items in any given collection, rather than a selection:

- often researchers want to have the whole of a collection available to them, not some pre-selected 'treasures' or subject areas
- removing the task of selection from the digitisation process reduces its cost.

#### **4 What will not be included?**

However, though the aim will be to be as comprehensive as possible, it may be necessary to exclude certain categories of material:

- those that in their original form are rare, fragile or otherwise unsuitable for digitisation
- works where satisfactory agreements cannot be reached with copyright holders

#### **5 How much material will be made available?**

It is estimated that the numbers of volumes or items in each of the main categories are as follows:

- books and pamphlets: 200,000 volumes
- periodicals: 2,000 titles
- newspapers: 1,000 titles

Altogether between 400,000 and 500,000 volumes will be included.

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<sup>2</sup> See <http://www.bodleian.ox.ac.uk/google/>. Since 2004 other libraries have joined the programme <http://books.google.com/googlebooks/partners.html>

Since Google's announcement the Open Content Alliance (<http://www.opencontentalliance.org/>), which includes Yahoo, has announced a similar programme, and the British Library has agreed with Microsoft on the digitisation of 100,000 books from its collections (<http://www.bl.uk/news/2005/pressrelease20051104.html>).

In addition the European Union is planning a 'European Digital Library' through the digitisation of millions of items, including those in national libraries throughout Europe: <http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/06/253&type=HTML&aged=0&language=EN&guiLanguage=en>

## **6 What will be the benefit?**

*The Theatre of Memory* will open up, in a way never achieved before, a colossal reservoir of knowledge about Wales and its peoples.

Volumes long out of print and available only in research libraries will be easily accessible for the first time. With the co-operation of publishers more recent publications will also be available at the touch of a keyboard.

Finding information on a subject, a process that at present is complex and only possible at the highest levels, for example the title of a whole book or whole article, will be revolutionised, with access via keywords to the entire contents of each volume - hundreds of millions of words.

Above all, most of the printed heritage of Wales will be on tap, in a single place, and retrievable within seconds, by anyone who has the need or curiosity to use it.

Moreover, almost the entire body of published writing in the Welsh language will be within reach of everyone. This will end a period when Welsh has been all but invisible in the online world, and will help consolidate the language in a host of different areas of discourse.

All the material included is likely to be used much more frequently and much more intensively in online digital form than it would be if it remained trapped in its covers in a physical library.

## **7 Who will benefit?**

Potentially, millions of people, young and old - anyone with any interest in finding out about Wales and the Welsh people - will gain. Because the scope of the project is so wide, in subject, period, language and level, there will be something for everyone, whatever their background and interest:

- a school student pursuing a project on the Rebecca Riots will be able to locate contemporary newspaper accounts, works by later historians, even novels
- a family historian can trace mentions of her ancestors in the printed literature at a stroke, instead of following hunches and false trails
- a journalist will be able to trace a story about a sporting event hidden, and previously almost impossible to locate, in a local newspaper
- a social historian can trace the development of a village or urban community through time by using place names as keywords for searching
- a government researcher may track reports and statistics on economic development in the Valleys over the last thirty years

- a linguistic scholar or lexicographer may trace the history of a Welsh word across the centuries as it changes in the printed record
- a writer or critic will easily be able to compile an anthology of Welsh poetry, or follow the treatment of a theme such as motherhood or pacifism in Welsh fiction, or research the background for an historical novel.

## **8 How will the project be achieved?**

There are four basic steps that will be taken to build *The Theatre of Memory*:

- 1 Printed volumes will be selected, category by category. Most will be sourced within the National Library of Wales.
- 2 Each volume will be copied, in two ways. Its appearance will be captured 'photographically', as a visual file. Then the text within will automatically be translated into digital form, using optical character recognition (OCR) technology, so that each individual word is searchable.
- 3 Limited descriptive data ('metadata': usually in the form of already existing library catalogue records) will be attached to the digitised texts, to aid retrieval.
- 4 The whole corpus of digitised texts will be made available for users to explore online, using a search engine that is simple to use but sophisticated in the way it retrieves and presents search results.

## **9 What about copyright?**

Books and other printed material published before about 1900 will be out of copyright, and can be copied without permission. Their full texts will be available for viewing, downloading and printing online.

Under UK law printed works within copyright - generally those published within 70 years of the author's death - cannot be digitised without the permission of the copyright owner. It is intended to seek the permission of their publishers or other copyright owners to digitise these too.

To what extent it will be possible to view these copyright-protected texts will depend on the nature of an agreement or licence arrived at with the copyright owner. If possible the project will aim for a licence such as that offered by 'Creative Commons'<sup>3</sup>, which aims at wide online dissemination of texts while avoiding harming the essential interests of the owner. If it is not possible to offer full and free viewing of items, it may still be possible to come to agreements with publishers to digitise with limited access or time embargoes.

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<sup>3</sup> <http://creativecommons.org/>; in the UK: <http://creativecommons.org/worldwide/uk/>

## **10 What will be the cost of building *The Theatre of Memory*?**

We estimate that *The Theatre of Memory* will cost at least £10m at current prices.

This sum includes staff costs (digital capture, metadata, technical and project management) and equipment costs (digitisation, data storage, access).

## **11 How will it be built?**

It is planned to construct the *Theatre* in sections. Each main category will be treated separately: books and other single items, newspapers, and periodicals. Each category would be split into sub-sections. It would be possible to build the sections (or sub-sections) simultaneously, or in sequence.

Work will take about five years, excluding the planning and preparation stage.

The Library has recently begun a £1m project to digitise 600,000 pages of modern Welsh journals<sup>4</sup>. This project has been funded by JISC (Joint Information Systems Committee)<sup>5</sup> in partnership with HEFCW (Higher Education Funding Council for Wales)<sup>6</sup> and the Welsh Assembly Government<sup>7</sup> and will run from March 2007 to March 2009. This is regarded as the first building block in *The Theatre of Memory* and will act as an invaluable pilot for the larger programme.

## **12 Who will build *The Theatre of Memory*?**

The project will be owned and operated on behalf of a non-profit partnership, the core members of which will be:

- The National Library of Wales (as the source of most of the originals, and of metadata)
- the Welsh Books Council (as the central public body responsible for the publishing industry)
- representatives of the Welsh publishing industry and authors (representing copyright holders)
- the Welsh Assembly Government (as proxy for a wide range of beneficiaries, as stakeholder, and a possible funder)
- one or more commercial partners (as service providers, eg digitising, search engine)

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<sup>4</sup> [http://www.jisc.ac.uk/whatwedo/programmes/programme\\_digitisation/welshjournals.aspx](http://www.jisc.ac.uk/whatwedo/programmes/programme_digitisation/welshjournals.aspx)

<sup>5</sup> <http://www.jisc.ac.uk/>

<sup>6</sup> <http://www.hefcw.ac.uk/>

<sup>7</sup> <http://www.wales.gov.uk/organipo/index.htm>

- large-scale donors or sponsors

### **13 How will the *Theatre* be funded?**

Finance to build *The Theatre of Memory* is likely to come from a variety of sources, some public (including the Wales Assembly Government) and others private (including trusts and charities, private donors, and sponsoring companies).

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