



Law, Derek (2002) Building the Glasgow Digital Library and Its Components. In: Knowledge Navigation and Library Services: Proceedings of the First Shanghai International Library Forum, March 2002, Shanghai.

<http://eprints.cdlr.strath.ac.uk/2823/>

This is an author-produced version of a paper published in Knowledge Navigation and Library Services: Proceedings of the First Shanghai International Library Forum.

Strathprints is designed to allow users to access the research output of the University of Strathclyde. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in Strathprints to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain. You may freely distribute the url (<http://eprints.cdlr.strath.ac.uk>) of the Strathprints website.

Any correspondence concerning this service should be sent to The Strathprints Administrator: eprints@cis.strath.ac.uk

Building the Glasgow Digital Library and its components

Professor Derek Law, University of Strathclyde

Background

The key Glasgow development bodies, including the Glasgow Congress, are committed to making Glasgow one of the great cities of Europe. An essential element in achieving this goal is the implementation of a successful strategy to place Glasgow in the vanguard of cities which have prepared for the Information Society which will revolutionize access to knowledge and skills for all its citizens. The information society will lead to a knowledge-based economy with the potential for steady sustainable growth, increased competitiveness, new job opportunities, and improved quality of life for all." Researchers - the initial focus of the proposed Glasgow Digital Library project - will, of course, be key beneficiaries.

The City of Glasgow has had strong intra-sectoral library co-operation for a number of years. Organisations such as CULT (Clydeside University Libraries Together) for Higher Education and GTN (Glasgow TeleColleges Network) have prepared a firm base for what is now seen as a timely shift to cross-sectoral co-operation, while the Mitchell Library is the largest public reference library in Europe and heavily used by university and college staff and students. The ideal would be information "never more than a bus-stop away" for Glasgow citizens. Many of the problems associated with such collaboration in other co-operative ventures relate to physical access. This project bypasses such difficulties by creating the Glasgow Digital Library (GDL), in which electronic resources will be shared, created and, if appropriate purchased, for residents of the City of Glasgow. It will investigate the provision of a single information source for significant research and archival material of relevance to Glasgow metropolitan area. The initial grouping is small, but it is intended to use the platform of the Metropolitan Area Network, Clydenet, to extend the consortium to other education related bodies in the City, within the lifetime of the project, and bring together material separated by ownership and physical location.

The Glasgow Digital Library¹ (GDL) is a city-wide initiative funded initially by the Research Support Libraries Programme² in the United Kingdom which aims to create a collaborative, cross-sectoral, digital collection that will be of significant value, both to researchers in Glasgow, and to researchers elsewhere with an interest in Glasgow-oriented or Glasgow-based research

collections. Dependent on CAIRNS technologies (see below) for its distributed catalogue, the GDL is seen as having the potential to be our 'Digital Scotland in microcosm' in that it aims to be cross-sectoral and cross-domain and to serve every type of (Glasgow) user. The long term aim is to create a wholly digital resource to support teaching, learning and research at all levels in the city. The project will significantly enhance existing collaboration within the city and will bring together material currently separated by ownership and physical location.

The creation of a collaborative, cross-sectoral, digital collection will be of significant value, both to researchers in Glasgow, and to researchers elsewhere with an interest in Glasgow-oriented or Glasgow-based research collections. The collection will be based initially on electronic resources created by the institutions, on public domain information, and on joint purchases and digitisation initiatives. A Metropolitan Area Network-based digital library service is being created, based on these shared resources and incorporating a collaborative approach to collection development and management.

The particular lessons to be learnt are expected to be in collaborative digital collection management within a large metropolitan area, the management, distribution and accessibility of locally created, stored or purchased resources, and the use of the Metropolitan Area Network (MAN) in these contexts. The project will be of value both in itself and as a model for other MANs. Integration with the [CAIRNS](#) project³ will enable inter-MAN issues to be explored, while integration with the [SCONE](#) project⁴, also based in the Centre for Digital Library Research at the University of Strathclyde, will enable lessons to be learnt on the inter-relationships between local (GDL) and national (SCONE) collaborative collection management programmes.

It has also spawned various other mini digitisation projects such as ASPECT, the SCRAN⁵-funded digitisation of samples from Springburn Community Museum⁶ and historical material on “Red Clydeside”, with the latter also being extended with a New Opportunities Fund grant. Technical and other issues of interest related to the GDL include:

- Human level co-operative mechanisms at a metropolitan area level, including issues related to cross-sectoral and cross-domain organisations and issues relating to co-operation between competing organisations (the GDL currently comprises the three Universities, ten Further Education colleges, and the Public Library Service in Glasgow)
- Metadata issues relating to aggregating and disaggregating electronic materials from FE colleges, universities and the public library as required
- The use of the CAIRNS landscaping mechanism to dynamically generate the GDL sub-set of the larger distributed catalogue and also offer a GDL specific look and feel
- Interface issues relating to the need to serve different user groups of varying age, interests, and educational level
- Policy and strategy issues relating to the creation and maintenance of a large digital library aiming to serve all users in a large metropolitan area
- Collaborative collection development issues in the same context
- Authentication and access control issues for purchased materials and valuable materials not offered free to non-GDL institutions

Project Outline and Purpose

A Project Officer has been appointed to work with the partners in the identification of existing electronic resources created by the partners, the identification of relevant public domain information, and in the identification of coherent sets of resources for digitisation. The latter will form the basis of

funding bids to other agencies such as NOF (New Opportunities Fund) and AHRB (Arts & Humanities Research Board). Approaches will be made through existing contacts to other local resource providers such as BBC Scotland and newspapers to provide reciprocal access to resources. A server has been set up on the MAN to hold or link available resources. An analysis will be undertaken of the MAN cache to identify potential resources for mirroring. An aggressive publicity campaign has been created to advertise the resources throughout the Glasgow area and project results will be actively disseminated nationally and internationally.

Benefits to Higher Education

- a. There is a long history of cross-sectoral usage of libraries within the City of Glasgow and it is assumed that the sort of usage demonstrated in the Peopleflows Project in Birmingham and Sheffield are replicated here. There is thus benefit to users in increasing their ability to work cross-sectorally and to access higher education irrespective of their physical location. It is worth noting that the universities have a strong tradition of local recruitment of students, while the University of Strathclyde is the largest provider of continuous professional development and short courses in Scotland, with some 35,000 accredited students above and beyond its 17,000 full time equivalent students. The College network is also a significant provider of IT training. In sum there is a strong and coherent community tradition of education which is both local and cross-sectoral.
- b. Clydenet is one of the most advanced networks in the UK, but like all of the MANs has yet to exploit the recently expanded connection policies which allow easier connectivity to non-HE partners. This project will act as a portable demonstrator for the ability of a MAN to support the HE sector as a major partner in regional development (cf the emergence of the Regional Development Agencies in England).
- c. HE will benefit from the greater availability of content. Bringing together significant resources for research into a single information source will increase its accessibility. There should be an enormous benefit to informing the community about the wealth of resources held in the city of Glasgow, especially as this includes the rich depth of material held in the Mitchell Library (the City of Glasgow's main public library), which currently has no electronic connections to the HE sector.
- d. Although this project concentrates on cross-sectoral collaboration within the Glasgow Metropolitan Area, the experiences learnt are intended to

act as an impetus to other areas, where MANs are in place and is in line with current JISC thinking on regional area networks. Also local resources, identified as important for the Glasgow area, have counterparts in other local areas throughout the United Kingdom. Once it has been shown what can be done, other areas will be encouraged to follow the original model. The potential is there for this project to encourage collaboration within other local communities and to replicate its achievements through other cross-sectoral MANs. Integration with CAIRNS will highlight inter-MAN access and co-operation issues.

Description and significance of collections

Part of the project is to identify suitable material. The JISC funded Catriona II Project clearly identified both that technical barriers exist to making material readily available and that large quantities of suitable and valuable research material exist. In addition we have the rich research collections of three universities, the largest public reference library in Europe and a large FE network. The nature of the project is quite specifically then to provide cross-sectoral access to materials across a MAN at marginal cost and to continue to explore the issues associated with the maintenance and preservation of distributed resources. Such material of interest to the research community includes special collection resources, rare or valuable items, slides, maps, archival material (including newspapers), material produced by members of the Consortium. Discussions have already begun between Strathclyde University Library and the Royal Scottish Geographical Society on making the latter's rich collection of images available on the basis of a commercial partnership.

The partners have been involved in a variety of projects and services which may be seen as providing the building blocks and experience which will allow us to expand and create and deliver a larger vision. The institutions of the city of Glasgow have a rich seam of nationally known experts in the digital library area, thanks to work on earlier projects and all of their expertise will be used to develop what is seen as a landmark project for the City.

[BUBL](#)⁷: A JISC funded resource discovery service.

[CAIRNS](#): An eLib funded "clumps" project.

[CATRIONAII](#)⁸: An eLib funded project on locally created resource management.

CORC: OCLC Project on the co-operative cataloguing of e-resources.

[CVU](#)⁹: A Scottish Higher Education Funding Council funded virtual university project in HE.

[GAELS](#)¹⁰: A SHEFC funded resource sharing project in Engineering.

[Virtual Mitchell](#)¹¹: A Scottish Office Challenge Fund Project:

Phase 1 digitises images of the city and links them to an existing text database.

Phase 2 will add unique holdings from the collections.

To emphasize both the shared and novel nature of what is proposed, the Project Officer has been appointed as Librarian of the GDL. The Librarian works to a Project Management Committee comprising a representative of each of the member institutions, plus an academic from the Information Science Department at Strathclyde University and meets regularly. The Management Group works to a Steering Group, comprising management representatives from each collaborating institutions, plus two external members. This committee meets three times a year. An Evaluation Sub-group of the Steering Group evaluates GDL management structures and working practices on an ongoing basis and advise on improvements. Representative Technical and Reference Services Sub-groups works to the management group to advise on technical and reference issues. The GDL Librarian attends all Group meetings. A particular concern will be to adjust the structure to take account of cross-sectoral considerations. Each institution has a local GDL Implementation Group. Each local group has a representative on the Reference and Technical Services groups of the GDL.

Deliverables

- An attractive, well managed, and user-evaluated web interface to the GDL service and demonstrator web-site.
- Improved access over the MAN to existing electronic resources, to new locally created resources not currently accessible, to locally cached internet resources, to the products of ongoing and future digitisation projects, and (increasingly) to co-operatively purchased or created resources.
- Improved retrievability, usability and reliability of collections through resource cataloguing to agreed standards (In two years our goal would be to provide access to between 5000 and 10,000 discretely catalogued resources, with the primary focus on material of interest to researchers), link checking, archiving, improved online tools for resource manipulation.
- Improved services through improved management control, co-operative savings, co-operative collection management (possible interaction here with SCONE project if funded), joint service provision

(the consortium will explore the creation of a package of shared services. The most obvious developments are a local equivalent of Project EARL's "Ask a Librarian" and a local document delivery service building on the lessons of the e-lib funded LAMDA Project).

- The Project will produce a report on cross-sectoral use of MANs, identify best practice procedures, and make recommendations of agreeing and establishing draft model IPR contract for institutions sharing resources over a MAN.
- Basic (and evaluated) consultative, financial, managerial and technical infrastructure for the GDL, allowing ongoing development after RSLP funding ends through both joint funding and successful bids to other agencies (there are a significant number of funding agencies supporting content creation and/or "learning city" concepts. We intend to create a robust partnership which will be well placed to take advantage of these opportunities).
- Exit strategy and forward plan for the GDL: operational plan for five years beyond RSLP funding. In effect we have sought seedcorn funding to create a structure which can become self-sustaining.
- Report on the project with recommendations and guidelines likely to be of value to other MANs.
- Investigation of wider issues through integration of CAIRNS and work with SCONE.
- Guidelines on the value and limitations (if any) of city-wide (as opposed to (say) Scotland wide subscriptions to electronic resources.
- Collection management and user online tools recommendations for MAN.
- Model and demonstrator for cross-sectoral co-operation in a large metropolitan area.

Glasgow Digital Library Content.

A selection of material from the scientific to the political has been chosen and broken up into packages which it was felt might attract funding. This has proved to be the case and the various elements in existence already are described below.

The Aspect Archive

Devolution of political power within the UK meant that Scotland regained its Parliament after 300 years. The first elections to this Parliament led to a rich and vivid rediscovery of political life in Scotland and a huge amount of

political ephemera was produced. This was collected by Strathclyde University wherever possible.

The Aspect archive of political ephemera is now available for public access at:

<http://gdl.cdlr.strath.ac.uk/aspect/>

This currently comprises 3177 separate files, including over 1200 full images. OCR (text scanning) has been completed for a small number of the leaflets but is unlikely to be completed in the near future unless further funding is secured. All main political parties have been notified of the collection and invited to submit any additional items they may have available. The archive is not currently searchable by users, but this feature will be added in due course. The generation of multiple web pages from a single database, and the use of stylesheets, mean that any future changes to content or design can be easily incorporated.

Red Clydeside

This gateway provides access to digital copies of original source materials from this turbulent period of industrial, social and political upheaval which occurred in Glasgow between the years 1910 and 1922. During this period the city was witness to an unparalleled wave of militancy and protest by the working people of Glasgow. The people, organisations and events which shaped this period earned the city the title 'Red Clydeside' and reinforced Glasgow's reputation as the centre of working class struggle in Britain in early years of the 20th century.

Digital images of key source documents and artifacts from this period are presented in several ways:

- Within the context of a [chronological timeline of the period.](#)
- Within a presentation of [left-wing pamphlets and publications of the period.](#)
- Within presentation of [political cartoons of the period.](#)
- Within an analysis of the [main political organisations of this period.](#)
- Within an analysis of the [key political figures of the period.](#)

Aids for further research and study are also provided, these include;

- [Essays](#) on the topics of Red Clydeside and the Scottish labour movement.
- [Bibliography of key texts](#) on Red Clydeside and the Scottish labour movement.

- [Other collections](#) related to the events of the Red Clydeside period.
- [Links to other online exhibitions and sites](#) related to the British and the international labour movements.
- A list of [abbreviations](#).

To aid and simplify navigation of this collection a [list of contents](#) has been included.

The first funding was received from SCRAN and the project is on course to meet the milestones necessary for release of the second stage of funding, notably a selection of digital images, a list of all items to be selected, and the storyboard for the multimedia essay.

Voyage of the Scotia

This material covers the life and work of Dr William Bruce, and his scientific expedition to the Antarctic on board the *Scotia* in 1902-04. The expedition took many photographs. The first funding was received from SCRAN and the project is on course to meet the milestones necessary for release of the second stage of funding, notably a selection of digital images, a list of all items to be selected, and the storyboard for the multimedia essay. Digitisation of the glass plate images is due to begin shortly.

Mapmen

This is a new content creation project to digitise the whole of the book "*Memoirs and Portraits of 100 Glasgow Men who have died during the last thirty years*" by James Maclehose. This book was published in 1886 as a limited edition of 400 copies, and digitisation is being carried out by agreement with Glasgow University library, which holds copies of the book. A proof-reader was employed part-time for eight weeks to carry out the scanning and editing. In due course it is hoped to make the digital version available via the GDL as an electronic book.

GlasgowInfo

This list of links represents the first phase in the development of an online collection of general reference resources for and about the City of Glasgow and its inhabitants.

The collection will grow to include a comprehensive range of resources which are of relevance to people living, working or studying in Glasgow or planning a visit to the city, and which are up-to-date, accurate, widely accessible, well-designed and informative.

Springburn Virtual Museum

During the summer of 2000 when it became apparent that the future of Springburn Community Museum was under immediate threat, a race began to try to ensure that important elements of the museum's rich collection of local photographs would still be accessible to the wider public.

Thankfully the [Glasgow Digital Library](#) was able to secure a small amount of funding from [SCRAN](#) in the Autumn of 2000 which allowed us to digitise a representative selection of materials from the collection of [Springburn Community Museum](#) and thereby also laying down the initial foundations of Springburn Virtual Museum.

Images from the collection have been chosen on the basis that they help convey, in part at least, important elements of the social and economic history of Springburn. Not surprisingly, particular emphasis has been placed upon the [railway industry](#) and [community and tenement life](#) in Springburn.

Some of the selected images are very detailed and will be presented at [various resolutions](#) to draw out the richness of the information within them.

A few [documentary materials](#) have also been selected.

Browse the materials by following the links within the text, or choose from the [list of contents](#).

Also included is a page of [links](#) to other Websites that deal with related aspects of Springburn, Glasgow and the railway industry in Scotland.

Conclusion

The Glasgow Digital Library is an attempt to create a wholly separate and purely digital library available to all citizens irrespective of educational level. While examining in some detail technical issues required to create such a library it is creating a growing corpus of types of material aimed at different groups and sectors.

¹ See <http://www.gdl.cdli.strath.ac.uk>

² see <http://www.rslp.ac.uk/>

³ see <http://cairns.lib.gla.ac.uk>

-
- ⁴ see <http://scone.strath.ac.uk>
⁵ see www.scran.ac.uk/
⁶ see samples at <http://gdl.cdlr.strath.ac.uk/prototype/springburn/>
⁷ see <http://www.bubl.ac.uk>
⁸ see <http://wp269.lib.strath.ac.uk:5050/Cat2/index.html>
⁹ see <http://www.cvu.strath.ac.uk>
¹⁰ see http://gaels.lib.gla.ac.uk/info_skills
¹¹ see <http://www.mitchelllibrary.org/vm/>