British Library
Report to the Digital Library Federation
October, 2005

TABLE OF CONTENTS

I. Collections, services, and systems

A. Collections

Caxton's Chaucer

This project has made available William Caxton's two editions of Chaucer's Canterbury Tales, probably printed in 1476 and 1483. The originals are both in the British Library.

The digitisation was undertaken by a team of 14 Japanese experts, including a professional photographer, bibliographers and IT specialists, all from the HUMI (Humanities Media Interface) project at Keio University in Tokyo. The work was directed by Professor Toshiyuki Takamiya, a specialist in 15th-century English literature, and managed by Masaaki Kashimura.

The images are accompanied with a detailed background on Caxton and his editions of Chaucer's Canterbury Tales, carefully structured to provide information for users ranging from school-leaver age to the level of the specialist scholar.
http://www.bl.uk/treasures/caxton/homepage.html

Gutenberg Bible

Johann Gutenberg's Bible was the first real book to be printed using the technique of printing, which Gutenberg invented in the 1450s. The British Library has two complete copies, one printed on paper and one on vellum (calf's skin). We also have an important one-leaf fragment, and the site also presents two other items in the British Library which are closely connected with Gutenberg's Bible, a school book and a letter of indulgence. The Gutenberg page makes it possible to compare the two complete copies.

The digitisation was carried out in March 2000 by ten researchers and technical experts from the HUMI project at Keio University in Tokyo and from NTT, under the direction of Professor Toshiyuki Takamiya.

The images are accompanied with a detailed background on Gutenberg, his invention, his Bible, and on the special features of the Library's two copies of the Bible. The background is carefully structured to provide information for users ranging from school-leaver age to the level of the specialist scholar.
http://www.bl.uk/treasures/gutenberg/homepage.html

Collect Britain

Collect Britain presents 90,000 images and sounds from the British Library, chosen to evoke places in the UK and beyond.

It includes:

- o Over 650 recordings of English regional accents and dialects from 1950 to the present day.
- o 1000 maps and plans from the Crace Collection, charting London's growth through three centuries.
- o Some of the world's most intriguing rarities, from our renowned philatelic collections.
- o More than 3,000 stunning images from our illuminated manuscript collections.
- o 130 plans and drawings of Deptford, uncovering history in and around the royal dockyards.
- o A portrait of the Indian subcontinent, in 15,000 images from the Oriental and India Office collection.
- o A sketchbook tour of England between 1750 and 1850 with 2,500 fantastic drawings.
- o Illustrated sheet music for piano pieces and songs from the heyday of the Victorian Music Hall.
- o The Penny Illustrated Paper, chronicling Victorian life through 52,000 pages and thousands of images.
- o Images of Victorian Britain captured in 1,500 original early photographic book illustrations.
- o 1,200 items presenting perspectives on Caribbean plantation life during the 18th and early 19th centuries.
- o Over 200 early wax cylinder recordings of song, music and speech from around the world.
- o Hundreds of maps of the British Isles created between 800 and 1600AD.
- o Over 2,500 watercolours, drawings and prints from King George III's vast collection.

Soon to be added are:

- 700 wildlife recordings, portraying a vibrant sound picture of Britain's landscape
- The British landscape, shown in 1,500 illustrations taken from 19th-century topographical books.

http://www.collectbritain.co.uk

Shakespeare Quartos

On this site you will find all the British Library's 93 copies of the 21 plays by William Shakespeare printed in quarto before the theatres were closed in 1642. The Shakespeare quartos were digitised during 2003. The Library developed the web pages and search engine, while the digitisation work was done by Octavo, a company specialising in the creation of digital facsimiles of rare books and manuscripts.

The digitised quarto editions are placed in context by a brief introduction to each play. These discuss the date the play was created, and when it was first performed. The editions, in quarto and in folio, are listed. Shakespeare drew on a variety of sources to create his plays, and some of these are listed. Each introduction includes the story of the play.
http://www.bl.uk/treasures/shakespeare/homepage.html.

Digital Catalogue of Illuminated Manuscripts

This site provides access to descriptions and images of a selection of the decorated manuscripts in the British Library, which has arguably the most comprehensive, and certainly one of the richest collections of medieval and renaissance illuminated manuscripts in the world.

The current phase of the cataloguing project (2004-2007) is a partnership between the British Library and the Centre for Manuscript and Print Study, Institute of English Studies, University of London, and is supported by the Arts & Humanities Research Council.

The Project aims to provide unprecedented access to online descriptions and images of all the western illuminated manuscripts in the British Library. For the purposes of the Project, illumination is considered to include all pictorial and decorative embellishment, from fully painted miniatures to minor decorated initials. By including such a wide range of material we aim to provide a useful resource for those working in a variety of disciplines, and also to show the Library's most celebrated illuminated manuscripts in the context of their far more numerous but correspondingly far less well known contemporaries.
The catalogue will ultimately grow to include roughly 10,000 entries. When complete, it will include:

- all British Library codices (and fragments of codices) made before c.1600 that contain decoration including decorated initials, significant pen flourishing and non-representational embellishment
- illuminated manuscripts dating from after c.1600 to the present day with particular relevance to the medieval tradition of manuscript illumination, including calligraphy and handmade facsimiles
- at least one image from each manuscript (but in some cases over 100 images)

http://www.bl.uk/catalogues/illuminatedmanuscripts/

Database of Bindings

This database is a finding aid to the British Library's bookbinding collections. It includes information and images for selected items from the Library's rich collection of fine bindings of books printed in western Europe from the fifteenth century to date. There is also a selection from the valuable bookbindings collections of the Library's partner, the Koninklijke Bibliotheek (the National Library of the Netherlands). To date, there are over 5,900 illustrated records. The database is a work in progress and its scope will be widened as resources allow. It is hoped that more information on binding structure will be included.
http://www.bl.uk/catalogues/bookbindings/welcome.htm

International Dunhuang Project

Over 100,000 manuscripts, artefacts, paintings and textiles, discovered over the last century at archaeological sites on the Eastern Silk Road (Chinese Central Asia), are possibly the single most important source for world history in the first millennium AD. In over 20 languages and scripts, they are rich sources of information on the world civilisations of the period and on all the major world religions. One of the major find sites was a Buddhist Library of 40,000 manuscripts and paintings which was discovered at Dunhuang. But study of the items has been hampered by the fact that many are in need of conservation and cannot be handled. Furthermore, following their discovery they were dispersed to institutions worldwide making access difficult.

IDP is an international collaboration started in 1994 to address the conundrum of access versus preservation for the Dunhuang and other Eastern Silk Road material. Based at the British Library it has Cataloguing, Digitisation and Research Centres worldwide hosting multi-lingual web sites and interactive web databases giving free access to this material along with images, contextual information, educational sites, scholarly tools, maps, and much more. It currently offers:

- Information on over 50,000 items from over 10 collections worldwide with 80,000 images (250,000 planned by 2010) on a fully searchable web database freely accessible to all.
- 20 international partners providing images, data, scholarship and technical expertise.

- Website hosted by local partners in English, Chinese, Russian, Japanese and German.
- Fully-searchable bibliography of over 10,000 items.
- Background information on the finds, their history, the archaeologists and the holding institutions
- Research tools, techniques and methodologies, including (in development) new tools for the palaeographic study of East Asian manuscripts.
- Interactive map interface showing modern and historical maps (being updated).
- Archaeological site plans and information, including historical and modern photographs.
- Educational web resources developed in conjunction with institutions worldwide and aimed at all levels, from schoolchildren to scholars.
- A cataloguing and research programme combining worldwide expertise.
- Full documentation on the standards and procedures used for digitisation and image management.
- A model for a digital project, offering advice to new projects worldwide.
- A twice-yearly newsletter.

As well as the British Library, there are currently IDP Centres at the National Library of China, Beijing; the Institute of Oriental Studies, St. Petersburg; Ryukoku University, Kyoto; and the Staatsbibliothek, Berlin. IDP has been externally funded since its inception from a variety of sources, trusts, foundations and individuals. It currently receives funding from the Leverhulme Trust, the Pidem Fund, The Mellon Foundation, the Higher Educational Funding Council for England and the Sino-British Fellowship Trust.

The Project was set up 1994. The website was launched in 1998 (in English). It was redesigned and relaunched in 2002 (in English and Chinese). It was again redesigned and relaunched in 2005 (in English, Chinese, Russian, and Japanese, with German due by the end of 2005). Website use has grown steadily. In the first 8 months of 2005 over 80,000 distinct hosts accessed the web sites, transferring an average of over 530MB of data per day.

http://idp.bl.uk http://idp.nlc.gov.cn http://idp.orientalstudies.ru.

Amaravati Sculptures

The earliest recorded excavations of a Buddhist monument in India happened at Amaravati between 1798 and 1817. The drawings that documented these excavations were collected by Colonel Colin Mackenzie (1754-1821) and are today held in the British Library. They depict plans of the site while it was being excavated, and the beautifully carved white limestone slabs that originally clad the outside of the Amaravati Stupa.

Many of the sculptures from Amaravati were later removed from the site, and are now in museums around the world. The most famous collections of Amaravati sculptures are in the British Museum and the Chennai Government Museum. By digitising the Mackenzie drawings from Amaravati, the locations of many of the sculptures recorded by Mackenzie have been successfully identified. It is hoped that these identifications will continue, and

allow the international scholarly community to learn more about this once great Buddhist monument.

The World Corpus of Amaravati Sculptures Project is supported by the Society for South Asian Studies.
http://www.bl.uk/collections/mackenzie.html
http://www.bl.uk/collections/amaravati/mackamaravati.html
http://www.britac.ac.uk/institutes/SSAS/projects/amaravati.htm

The Evanion collection

This is a collection of some 5,000 items of Victorian ephemera and occasional printing, formed by Henry Evans (c.1832-1905), a conjuror and ventriloquist, who performed under the stage name Evanion. The often colourful items fall into two main categories - popular entertainment, and everyday life - and include posters, advertisements, trade cards and catalogues, most of which date from the later 19th century. While London is particularly well represented, the collection includes items from all parts of the United Kingdom.

The resource makes the now extremely fragile original material accessible through a fully searchable catalogue description, alongside a digital image, where available. This is a work in progress and images are currently being added.
http://www.bl.uk/catalogues/evanion/welcome.asp/

Renaissance festival books

Renaissance festival books describe and illustrate the magnificent festivals and ceremonies that took place in Europe between 1475 and 1700 - marriages and funerals of royalty and nobility, coronations, stately entries into cities and other grand events. The resource contains digital images of 253 complete books, selected from over 2,000 in the British Library's collection. Each book and each image is associated with detailed descriptive metadata enabling in-depth searches of the contents.

The resource was funded by the Arts & Humanities Research Council and is the result of collaboration between the Arts & Humanities Research Centre for the Study of Renaissance Elites and Court Cultures at the University of Warwick and the British Library.
http://www.bl.uk/treasures/festivalbooks/homepage.html

B. Services

Images Online

Images Online gives users access to around 15,000 images from the British Library's collections; new images are being added on a weekly basis. It offers search, order and purchase facilities. Images can be supplied in low resolution JPEG format (5MB uncompressed) or as high resolution TIFF files on CD–ROM.
http://www.imagesonline.bl.uk/britishlibrary/

Electronic Beowulf

The British Library began the Electronic Beowulf project in 1993: selected images from the project were among the first pictures of medieval manuscripts to be mounted on the internet. A digital camera was used to record images of obscured letters and letter-fragments, to restore hidden letters to their place in the manuscript. Professor Kevin S. Kiernan of the University of Kentucky, the world's leading authority on the history of the Beowulf manuscript, made use of new technologies to present a completely new view of the sources for the Beowulf text. This electronic version enables readers to place the original manuscript's leaves side by side again, to examine the colour and texture of the vellum leaves by magnifying the images and to explore the work of the early scribes. It is supplied on two CD-ROM discs.
http://www.bl.uk/onlinegallery/themes/englishlit/beowulf.html

British Library Direct

The British Library has a vision to make the world's intellectual, scientific and cultural heritage accessible, and to bring our collections to everyone - at work, school, college or home. British Library Direct is a new service that fulfils part of this vision.
The British Library Direct database covers the last 5 years' worth of articles from our 20,000 most heavily requested serial titles. It includes some 9 million articles, and covers most subjects, languages and places of publication. Not all the serials are stored in electronic form, but all the articles are delivered electronically. You can search the British Library Direct database without having to register. You do, however, need to register if you want to order a copy of a document.
http://direct.bl.uk/bld/Home.do

C. Systems

Turning The Pages

Some of the British Library's treasures are on display using the Turning the Pages software. The website also explains how other institutions can implement the software for their own sites.

Turning the Pages is the award-winning interactive program that allows museums and libraries to give members of the public access to precious books while keeping the originals safely under glass. Initially developed by and for the British Library, it is now also available as a service for institutions and private collectors around the world.

Turning the Pages allows visitors to virtually 'turn' the pages of manuscripts in a realistic way, using touch-screen technology and interactive animation. They can zoom in on the high- quality digitised images and read or listen to notes explaining the beauty and significance of each page. There are other features specific to the individual manuscripts. In a Leonardo da Vinci notebook, for example, a button turns the text round so visitors can read his famous 'mirror' handwriting.

Turning the Pages can also be produced on CD-ROM and online, thus making precious books available to a huge audience. Books can be converted to two different standards - one suitable for highlights, the other for entire volumes.

The British Library's own pages include 14 texts:

- Sketches by Leonardo: the genius's personal notebook
- Jane Austen's early work: The History of England in her own hand
- The first atlas of Europe, compiled by Mercator in the 1570s
- Masterpiece of the Renaissance: images from the Sforza Hours
- The lavishly illustrated Golden Haggadah, a glorious Hebrew Prayer Book
- Vesalius's stunning 16th century anatomy, a landmark in medical history
- The Sherborne Missal, an outstanding Gothic Service Book:
- Elizabeth Blackwell's remarkable Herbal, a classic of botanical illustration
- Baybars' magnificent Qur'an, the epitome of sumptuous Arabic calligraphy
- The priceless Lindisfarne Gospels, the pinnacle of Anglo-Saxon art
- The Diamond Sutra, the oldest printed 'book' printed in China in 868
- Glimpses of medieval life: selections from the famous Luttrell Psalter
- Flemish Masters in miniature: the superb 'Golf Book'
- Alice's Adventures Underground - Lewis Carroll's original manuscript of the classic children's book

http://www.bl.uk/onlinegallery/ttp/digitisation.html

II. Projects and programs

A. Projects

New Project Announcements

Newspapers Digitisation Project: British Newspapers 1800-1900

The objectives of the Project are to digitise up to two million pages of British national, regional and local newspapers from microfilm, and to offer access to that collection via a sophisticated searching and browsing interface on the Web.
The project will unlock hidden resources for the study of the nineteenth century and the Victorian period, seen through the pages of the British Library's extensive holdings of newspapers. The content will focus on London national newspapers, English regional newspapers, home country newspapers from Scotland, Wales and Northern Ireland, and titles in specialist areas such as Victorian radicalism and Chartism.

The project will reach out through the Web to UK Higher Education and Further Education sectors, offering free access and a number of search interfaces.
The Project is funded by JISC, the Joint Information Systems Committee.
http://www.bl.uk/collections/britishnewspapers1800to1900.html

Archival Sound Recordings Project

The aim of the Project is to increase access to the British Library Sound Archive's extensive collections of recordings and supporting materials.
This innovative project will:

- Make 4000 hours of digitized audio freely available to the Higher and Further education communities of the UK.
- Offer unique previously unpublished African field recordings and oral history material for the first time.
- Include material on the history of recording and playback technology.
- Develop a user interface in consultation with representatives from the user community and in accordance with agreed standards.
- Seek licences from rights owners to provide managed access to users within these communities in support of teaching and learning.
- Make the content accessible in the reading rooms of the British Library and, where rights issues permit, freely available over the web.

Initially, nine collections are being digitised, subject to licensing agreements:

- Comparative recordings of Beethoven String Quartets
- Visual art interviews
- Oral history of jazz in Britain from 1985

- 400 popular music tracks
- Soundscapes
- D. Rycroft South Africa recordings 1960s-70
- Klaus Wachsmann Uganda recordings 1949-54
- African Writers Club
- Sony Radio Awards

The Project is funded by JISC, the Joint Information Systems Committee.
http://www.bl.uk/collections/sound-archive/archsoundrec.html

Burney Collection of Early English Newspapers

The 700 or so bound volumes of newspapers and news pamphlets gathered by the Revd Charles Burney (1757-1817) represent the largest single collection of 17th and 18th century English news media available at the British Library. The material is overwhelmingly published in London, although there are also some English provincial, Irish and Scottish papers, and a handful of examples from the American colonies.
The original Burney volumes are now in a poor physical state, and they are therefore restricted from ordinary reading room use. Normal access is via a complete set of microfilms, which can be copied. The British Library is also working towards making digital facsimiles of the Burney newspapers available over the internet.
http://www.bl.uk/collections/burney.html
http://www.bl.uk/collections/early/earlynewspapers.html

Codex Sinaiticus

The Codex Sinaiticus, produced in the middle of the fourth century, is one of the two earliest Christian Bibles. It includes the earliest surviving copy of the complete New Testament and the earliest and best copies of some of the Jewish scriptures, in the form that they were adopted by the Christian Church. Just over half of the original book, which is handwritten in Greek, has survived and it is now dispersed between four institutions: St Catherine's Monastery, near the foot of Mount Sinai, where the Codex was preserved for many centuries; the British Library; Leipzig University Library in Germany; and the National Library of Russia in St Petersburg. The British Library has the largest surviving portion – 694 pages – which includes the whole of the New Testament.
A team of experts from the UK, Europe, Egypt, Russia and the US have joined together to reunite the Codex in virtual form. This important international collaborative approach to achieve reunification involves all four of the institutions which hold parts of the manuscript. The project aims to make accessible and reinterpret the Codex Sinaiticus for a worldwide audience of all ages and levels of interest, employing cutting-edge new technology and advanced scholarship. The project will include: a detailed conservation assessment of the whole manuscript, carried out with the aid of multi-spectral imaging equipment; full digital imaging; a new transcription of the whole text; and the creation of a range of products including a free-to-view website, a high-quality digital facsimile and CD-ROM.
This project is only one of a number of digital initiatives where the British Library

Department of Western Manuscripts is involved.
http://www.bl.uk/onlinegallery/themes/asianafricanman/codex.html

B. Programs

Digital Object Management Programme

The British Library Digital Object Management Programme was set up in 2003. It is responsible for developing the IT infrastructure for the National Digital Library.
The mission of the Programme is to enable the United Kingdom to preserve and use its digital output forever.
Our vision is to create a management system for digital objects that will:

- store and preserve any type of digital material in perpetuity
- provide access to this material to users with appropriate permissions
- ensure that the material is easy to find
- ensure that users can view the material with contemporary applications
- ensure that users can, where possible, experience material with the original look-and-feel

One of the principal drivers of the National Digital Library is the Legal Deposit Libraries Act 2003, which should come into effect some time in 2006 or 2007. This extends the present (pre-electronic publishing) legislation and places legal requirements on us.

- It enshrines the principle that UK electronic or e-publications and other non-print materials will be deposited in the British Library
- It ensures that these publications can be saved as part of the published archive, and become an important resource for future generations of researchers and scholars.

The Programme will develop the technical solutions to the problems arising from having such digital objects in the Library's collections.

- We have focused on the architecture and design of the underlying storage subsystem. This component is the bedrock of the system and its services, so any errors, omissions, or inefficiencies here will have a fundamental and major impact on the rest of the system. We are designing a fully scalable, fault tolerant, highly reliable, highly resilient storage sub-system which guarantees the integrity and authenticity of the objects that are ingested. A prototype has been demonstrated and is being continually enhanced. The current version manages all the electronic materials deposited with us under the Voluntary Deposit of Electronic Publications scheme, which has been running since 2000.
- Another strand of work is the E-Journals Pilot Project, which is testing the technical infrastructure, mechanisms and procedures relating to the deposit, ingest, storage and preservation of electronic journals. This is being managed within the UK's Joint Committee on Legal Deposit.

http://www.bl.uk/about/policies/dom/homepage.html
http://www.bl.uk/about/policies/legaldeposit.html

Digitisation Programme

A key area for the British Library is to continue and expand our programme of digitisation. The projects to digitise a substantial proportion of our early British newspaper collection and significant sections of our Sound Archive are covered elsewhere. We also intend to

o   increase the significant range of collection material available for desktop delivery to users by on-demand digitisation.
o   work with partners on bulk digitisation of significant collections that open up new possibilities for investigation and enrich research and learning opportunities.
o   provide interpretation of digitised content suitable for diverse audiences, making use of European policy and funding frameworks.

We have set up a Digitisation Strategy Project to define the British Library's digitisation strategy over the next 4 years, including selection criteria, sustainability, funding, and management of intellectual property rights.

Web Archiving Programme

The Web Archiving Programme's mission is to extend the Library's responsibility for the national published archive to the web - by acquiring, preserving and making accessible published material on the UK web. The British Library will take a leading role in developing appropriate policies and standards in partnership with other institutions nationally and internationally.
The British Library is lead member of the UK Web Archiving Consortium. The Consortium was formed in June 2004 to undertake a 2-year pilot project to investigate the issues of selection, collaboration and the technical challenges involved. The other members are the National Archives, the Wellcome Library, the National Library of Scotland, the National Library of Wales/ Llyfrgell Genedlaethol Cymru, and the Joint Information Systems Committee (JISC). Each partner is archiving sites (with permission from content providers) relevant to their interests. The British Library has produced a collection development policy which focusses on sites of cultural, historical and political importance, including specific topic 'collections' relating to one-off events such as the May 2005 General Election and the December 2004 Indian Ocean tsunami.
The Consortium's website, launched in May 2005, gives free access to the pilot archive through a user-friendly interface. Pages harvested from around 500 websites can be searched by subject category.
http://www.webarchive.org.uk/

The British Library is also working with other partners of the International Internet Preservation Consortium on a future Curator Tool, which will support web archivists in the full range of the processes they need to manage, and on a Smart Crawler, which will

automate the process of locating and gathering related material by following links within and across websites.

III. Specific Digital Library Challenges

The British Library's perception of the challenges posed to a 'traditional' library in the 21st century are fully covered in "Redefining the Library - The British Library's strategy 2005-2008", published in June 2005.
http://www.bl.uk/about/strategy.html

IV. Digital library publications, policies, working papers, and other documents

British Library strategy

o "Redefining the Library - The British Library's strategy 2005-2008." June 2005.
   http://www.bl.uk/about/strategy.html

Papers on Digital Preservation

o Shenton, Helen.
   "Real Time, Deep Time, Life Time - Spanning Digital and Traditional Collections Life Cycles."
   'Archiving 2005' conference, Washington DC, April 2005. IS&T: The Society for Imaging and Technology.
   http://www.imaging.org/store/epub.cfm?abstrid=32259
o Shenton, Helen.
   "Digital versus print as a preservation format – expert views from international comparator libraries." Jan 2004.
   http://www.bl.uk/about/collectioncare/digpres1.html
o Woodyard, Deborah.
   "The great digital information disappearing act."
   OECD Observer No. 240/241, 11 December 2003, pp 33-34
   http://www.oecdobserver.org/news/fullstory.php/aid/1155/The_great_digital_information_disappearing_act.html
o Shenton, Helen.
   "Managing the life cycle decisions for the long term use of original collection material and surrogates."
   'Parallel Lives: digital and analog options for access and preservation' conference, London, November 2003. National Preservation Office/Kings College

London.
http://www.bl.uk/services/npo/conf2003.pdf

o Woodyard, Deborah & Shenton, Helen.
"Developing a Digital Preservation Strategy at The British Library: Application of the 'Preservation Management of Digital Materials' Handbook."
Presented at the 'Preservation of Electronic Records: New Knowledge and Decision-making' Symposium, Ottawa, Canada, 15 September 2003.
Canadian Conservation Institute, 2004. ISBN 0-662-68620-9.

o Woodyard, Deborah.
"Digital preservation at the British Library."
Library and Information Research News 26(84) Winter 2002, pp. 27-31.
http://eprints.rclis.org/archive/00003389/01/article84c.pdf

o Shenton, Helen.
"From talking to doing: digital preservation at the British Library."
The New Review of Academic Librarianship, vol 6, 2000, pp 163-178.
(Paper presented at 'Preservation 2000', the Cedars Project conference, York, December 2000.)

Specific project documentation

o Marks, Philippa.
"The British Library image database of bookbindings."
Einband Forschung, Heft 10, April 2002, pp 14-17.

o The International Dunhuang Project.
"Standards for Digitisation and Image Management."
http://idp.bl.uk/chapters/publications/IDP_papers/standards.html

Digital Object Management Programme

o Baker, Mary; Keeton, Kim; and Martin, Sean.
"Why Traditional Storage Systems Don't Help Us Save Stuff Forever."
1st IEEE Workshop on Hot Topics in System Dependability, June 30th 2005, Yokohama, Japan.
http://www.stanford.edu/~candea/hotdep/papers/baker_forever.pdf

o Farquhar, Adam et al.
"Design for the Long Term: Authenticity and Object Representation."
'Archiving 2005' conference, Washington DC, April 2005. IS&T: The Society for Imaging and Technology.
http://www.imaging.org/store/epub.cfm?abstrid=32235

o Linden, Jim; Martin, Sean; Masters, Richard; and Parker, Roderic.
"The large-scale archival storage of digital objects."
(DPC Technology Watch Series Report 04-03). Digital Preservation Coalition, February 2005.
http://www.dpconline.org/docs/dpctw04-03.pdf