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Users have a full right to expect to receive the national heritage in their daily environment. Our mission is to ensure the availability of the published national heritage in the community.
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The National Library of Finland's Mikkeli-based Centre for Preservation and Digitisation is creating a new technique for the electronic deposit and receipt of newspapers as well as processes related to the microfilming and provision of access to newspapers received in digital format.

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Digital preservation of cassette tapes

Since 1981, recordings published in Finland have been deposited by law in the National Library of Finland. At the beginning of this period, the CD was yet to be introduced on the market, and vinyl records and cassette tapes (also known as Compact Cassettes, audio cassettes or simply cassettes or tapes) were the most popular recording formats.
Hello friends and colleagues!

When entering the premises of the National Library of Finland, you are surrounded by our history. Unioninkatu 36 (Union Street 36) is a reference to the old union with the Russian Grand Duchy. You can see neoclassical buildings, Russian emperors and a magnificent dome around you. The library main building stands beside the Senate, Helsinki Cathedral and the University of Helsinki, in a unique triangle in the historical centre of Helsinki.

Users have a full right to expect to receive the national heritage in their daily environment. We endeavor to deliver the contents and services in as wide and as rich a way as possible. One part of the struggle is the open data principle, which is highly respected and promoted in every part of our service. Our mission is to ensure the availability of the published national heritage in the community.

**We cannot build silos and be happy with that**

The National Library is a strong partner in all major infrastructure-related issues, such as the National Digital Library (NDL). We now provide the user interface for the NDL along with two million pages of data. We are currently looking for a way to release newspapers up to the 1940s and further to the public with the cooperation of media publishers.

As a relatively small player in the digital economy, libraries must be persistent, clever and flexible, finding ways to bring their materials to the users.

**If there is a will, there is a way!**

We are happy to tell you more about our Finnish solutions and to discuss whether they would help you in your daily planning and work.

Let our friendly staff serve you anytime!

Yours

Kai Ekholm
Director of the National Library Chair of FAIFE, IFLA

P.S.

We have prepared many surprises for all the visitors to the IFLA conference. The magnificent neoclassical Cupola Hall and the Rotunda annex welcome you every day to share a quiet moment in one of the oldest libraries of Europe. There is an exhibition of medieval parchments and Martin Luther that showcases European medieval culture and newer Protestant religious tradition.

If you want to revisit us, take our virtual tour, which leads you through every corner and even uses a bird’s eye view. Virtual tour for ipad.
The National Library of Finland Bulletin 2012 - If there is a will, there is a way!

Photo by Sanna Järvinen

Portrait of Kai Ekholm by Linda Tammisto

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In March 2012, the National Library of Finland launched a research database of its collection of medieval parchment fragments. This internationally important collection includes more than 9,300 parchment leaves from the turn of the 10th and 11th centuries to the 16th century. The database and related research work have taken knowledge of early Finnish literary culture to a whole new level and expanded future research opportunities.

International literary culture

Until recently, little was known of early Finnish literary culture. In the 19th century, the nationalist spirit of historical research resulted in an inaccurate simplification, whereby books and literary culture failed to gain a foothold in Finland before the Reformation and the emergence of vernacular literature in the 16th century. This false notion proved difficult to shake off, but it is precisely these kinds of key issues and misunderstandings in Finnish history that the *Fragmenta membranea* collection aims to resolve and clarify.

Only through studying parchment fragments can we gain a broad overview of early Finnish literary culture as well as the northern dimension of the Latin cultural sphere and the transnationality of medieval literary culture. The fragments also reveal interesting details: for example, their reconstruction has put scholars on the trail of medieval Finnish scriptoria, or writing workshops.

The *Fragmenta membranea* database comprises 9,319 digitised parchment leaves, that is, 18,638 medieval manuscript pages from some 1,500 handwritten books. The figures are high in Nordic terms and demonstrate the importance of books and their use for centuries before the Reformation. Sixty-four per cent of the manuscript leaves come from various liturgical manuscripts, while 16% represent law and 14% theology in various forms. The Bible and hagiographies account for some 3% each. Because of the background of the *Fragmenta membranea* manuscripts, the vast majority of them are in Latin.

Among the fragments are remains of the first books written in the area of present-day Finland and a large number of leaves from books produced elsewhere in the Swedish realm. On the whole, however, the collection is markedly international: remains of manuscripts of English, German and French origin abound, particularly among the oldest fragments, which date back to the 11th to the 14th centuries. This diversity is precisely what makes the collection a treasure trove to scholars: it sheds light not only on the spread of the Latin cultural sphere to the North in the medieval period, but also on the international book trade as well as the beginnings of local book production.

Formation and history of the collection

The National Library's collection and the online research database contain a large part of the literature circulated in the area of present-day Finland in the early 16th century. As a result of the Reformation, which began in the Swedish empire in the 1520s, earlier ecclesiastical and Latin-language literature lost much of its significance. However, as most books were made of valuable and durable leather, their leaves were recycled and put to new use. In practice, the Crown seized a large number of the medieval liturgical books – both handwritten and printed – owned by churches, monasteries and convents, and cut the books apart. Most of the resulting double leaves were used from the 1530s to the 1630s as covers for account books in the expanding administration of the Crown. The covers ended up in the central administration archives in Stockholm together with the annual account books.

The Treaty of Fredrikshamn, which concluded the Finnish War in 1809, altered the course of history for the mediaeval parchment leaves. Having conquered Finland, Russia dictated in the treaty that the defeated Sweden had to return all topical and historical documents relevant to Finland to territory
east of the Gulf of Bothnia. As a result, most of the account books produced in Finland in the 16th and 17th centuries were also returned. Although the provisions of the treaty did not apply to the remains of mediaeval books, thousands of fragment leaves were shipped to Finland, still in the form of account book covers.

The material first arrived in Turku, from where it was transferred to the Senate Archives (later the State Archives and currently the National Archives) in Helsinki. In the 1840s and 1850s, the parchment covers were cut apart from the account books. The collection of thousands of mediaeval book leaves thus created was moved to the Helsinki University Library, now the National Library of Finland.

From pioneering scholarship to a research database

The current Fragmenta membranea collection is divided thematically into seven groups. Its cataloguing and study began in the 1840s, when Edward Grönblad, an archivist, organised the parchment leaves that he had cut apart from bailiffs' account books. Systematic cataloguing did not begin, however, until the 1910s when musicologist Toivo Haapanen took over. Over the following decades, Haapanen catalogued most of the liturgical material in the collection. Around the same time, Aarno Maliniemi, a church historian, studied the calendar fragments in the collection.

Although the importance of the collection for research on early Finnish literary culture was understood at the time, the fragment leaves were little used for decades because they were difficult to interpret and were only partly catalogued. In the 1970s, however, Anja Inkeri Lehtinen began the cataloguing of theological and legal material, which is still ongoing. In the 1980s, Jyrki Knuutila examined the manuale material among the fragments, while a catalogue of the collection's antiphonarium, drawn up by musicologist Ilkka Taitto, was published in 2001.

From 2006 to 2012, historian Tuomas Heikkilä led a project exploring literary culture in mediaeval Finland. This project was the first to comprehensively use parchment fragments as sources and provided a detailed overview of early Finnish literary culture. As a by-product of the project, uncatalogued material in the Fragmenta membranea collection was preliminarily catalogued.

What is more, on the initiative of the above project, the National Library began in 2008 to plan the creation of a digital research database of its mediaeval parchment fragments. The Helsingin Sanomat Foundation provided generous funding and, later, the Ministry of Education and Culture also contributed. The parchment fragments were conserved and digitised in Mikkeli at the Centre for Preservation and Digitisation, and the database as well as a more comprehensive online publication on mediaeval literature were unveiled in March 2012.

The project for the digitisation and conservation of parchment fragments and the creation of a related database was exceptional in Finland due to its broad scope and the fragility of the material. It was a useful learning experience for everyone involved. The project gave new impetus to the digitisation and conservation of early literary resources and set a new standard for Finnish expertise in these areas. Crucially, the project led to the establishment of teamwork between scholars and conservators, which is expected to benefit both parties in future. Conservators' tacit knowledge about manuscript materials is invaluable to scholars, while the scholars' knowledge of manuscripts is useful to the conservators.

From fragments towards a comprehensive overview
Although the National Library’s fragment collection is large in international terms, it does not provide an entirely representative picture of the spectrum of the works produced and used during the mediaeval period in the eastern parts of the Swedish realm. The National Archives of Sweden in Stockholm currently preserves a fragment collection of some 22,500 parchment leaves, from which the Helsinki-based Fragmenta membranae was separated at the beginning of the 19th century. Separating the sections relevant to Finland alone from the collection of bailiffs’ account books proved difficult after the Fredrikshamn Treaty, and some such fragments still remain in Stockholm. On the other hand, plenty of material related not to mediaeval Finland, but to other parts of the Swedish realm, ended up in Helsinki.

The Helsinki collection consists entirely of the remains of the books seized for the Crown. Since it was church libraries in particular that had to relinquish their literary treasures to the Crown, religious and liturgical material may be overemphasised in Fragmenta membranae. However, estimates suggest that only about 50% of the book leaves originally used as covers for bailiffs’ account books have survived to our time. The number of parchment leaves reused after the Reformation was thus considerably higher than what we now know, as the passing centuries have taken their toll on a large part of our mediaeval literary heritage.

On the other hand, the Crown did not reuse all the mediaeval parchment books, most of which have been destroyed over the centuries. Almost nothing is now known of their content. The manuscript material also limits the scope of the fragment collection. As only parchment leaves were accepted as the covers of account books, the collection includes no remains of paper manuscripts. Although works written on paper are known to have circulated in Finland during the last centuries of the mediaeval period, most of them have since been destroyed.

Despite the above limitations, the Fragmenta membranae collection and database provide important scholarly source material, particularly on the emergence of literary culture in Finland as well as on pre-Reformation literature. The collection covers a chronological span from the arrival of literacy in the 11th and 12th centuries to the Reformation in the 16th century. As the area of present-day Finland had no indigenous literary culture before the arrival of Latin literature, Fragmenta membranae allows us to study, as in a laboratory, how literary culture developed and what its social implications were.

By all accounts, the collection also offers an exceptionally comprehensive picture of literature in one diocese – the Diocese of Turku, which encompassed all of Finland – on the eve of the Reformation. Firstly, the number of books in the area was relatively small compared to that of regions that had been shaped by literary culture earlier on. Secondly, with the benefit of several centuries of hindsight, the seizure of books by the Crown’s bailiffs in the 16th and 17th centuries and the recycling of parchments as the covers of account books turned out to be a blessing in disguise. We can reasonably assume that a far higher number of recycled parchment leaves have survived to our time and can now be used by scholars than if the books had remained in parish churches through the intervening centuries.

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Keskiaho, Jesse – Tahkokallio, Jaakko

http://keskiaika.kansalliskirjasto.fi.


Conservation and digitisation of the mediaeval parchment fragment collection

The conservation and digitisation of *Fragmenta membranea*, a mediaeval parchment fragment collection, aimed to facilitate access to this historically important and unique national treasure and to secure its long-term preservation. By studying parchment fragments online, the original material can be protected from damage caused by handling, light, and changes in air humidity and temperature. This was the first project in the National Library's history in which such a large quantity of special library material was conserved and digitised. The project received funding from the Kone Foundation and the Helsingin Sanomat Foundation.

Travelling through time

The passage through time has left imprints on the fragments. They suffer from numerous types of damage, including surface dirt and soot, fire damage, cockling caused by contraction and expansion, moisture damage and resulting mould formation, tearing, creases and missing areas as well as ink corrosion. Paper leaves had become pasted onto some of the parchment fragments, while others had suffered from poorly executed repairs or insect damage. The fragments are also highly varied in terms of thickness, quality and size, with the smallest fragment measuring approximately 15x15 mm and the largest folded sheet approximately 600x900 mm.

The smallest fragment
The largest fragment in the collection: a folded sheet of two leaves

A parchment leaf suffering from fire damage, tearing, crease lines and curling
From pilot to project

The conservation and digitisation project was preceded by a pilot project involving the planning of the entire work process and the transport of parchments from Helsinki to the Centre for Preservation and Digitisation in Mikkeli and back to Helsinki. The processes and techniques used at various stages were also charted and tested to ensure maximum efficiency and quality under a tight schedule. (Figure: Workflow chart)
Conservation of parchment fragments

The objective was for one part-time and two full-time conservators to conserve the parchments in one year. The estimated number of parchments in the partially catalogued collection was 10,000, while the final figure was 9,319. This meant that some 200–250 parchments had to be conserved each week according to a well-planned schedule.

To produce high quality images of each parchment fragment and include as much data as possible in them, the material had to be appropriately conserved first. In practice, the fragments were surface cleaned, and any creases, tears, folds and cockling that impeded reading were straightened. No repairs were made.

Work process: 1. Transport, unpacking, documentation and surface cleaning

The material was catalogued, placed in protective folders and packed into boxes in Helsinki. From there it was transported every other week to the Centre for Preservation and Digitisation in Mikkeli in batches of approximately 500 leaves. Once unpacked, the fragments were documented by class number in a database tailored to the project. During documentation, the fragments were classified into two groups:

A. Fragments requiring mechanical surface cleaning only

B. Fragments requiring not only mechanical surface cleaning, but also other conservation measures, such as straightening or the removal of mould or paper leaves pasted onto the fragments

The fragments in group B were photographed before conservation. All the parchment fragments were surface cleaned. Material damaged by mould was cleaned in a fume cupboard. The paper leaves pasted onto the fragments were removed after surface cleaning using moisture treatment.

Documentation of parchments in an electronic database
2. Humidification of the parchment fragments

To be able to process the parchments, their humidity content had to be raised. This was done using the “sandwich” technique. Foam sheets were placed between two humidified felt sheets, which acted as a permeable layer. Between the foam sheets were two non-woven fabrics protecting the parchment leaf.

As the number of leaves to be straightened each week could amount to as many as 70–150 items, a humidity chamber was constructed. By placing a “sandwich” on each of the chamber’s shelves, some 20–30 leaves could be humidified at a time.

Leaves that could not be humidified in the humidity chamber due to their fragility, ink corrosion or gilded illustrations were humidified locally using a solution of water and isopropanol, which was applied to creases using a thin watercolour brush. The humidified creases were then straightened by placing a non-woven fabric and a glass weight or weight bag on the affected area.
3. Straightening, pressing and finishing of the leaves

After being treated in the humidity chamber, the leaves were straightened for 15–18 hours using glass weights and/or weight bags or by tensioning the leaves similarly to the process of their original manufacture.

For the tensioning, frames were built in which paper clips attached to velcro strips could be used to straighten parchment leaves by gradually tightening the strips. Two-, three- and four-sided tensioning frames were built.

Next, each conserved fragment was placed between felt sheets and under a light weight for about one week. After this light pressing, they were placed back inside the folders bearing their class numbers to await digitisation. (Photographs 9 and 10)
Digitisation of parchment fragments

The fragments were scanned at a resolution of 400 dpi on a grey background using an i2s over head camera scanner without a glass plate on top of the fragments.

The operator was trained to handle fragile material and use various aids (spatulas, weight bags and snake weights) to support the material and protect it from damage during scanning. After scanning, the original parchment leaves were returned to the conservators, who checked the leaves and packed them for transport back to the National Library headquarters.
Handling fragile material during scanning: 1. Placing material on the scanning bed

After scanning, the operator saved and named the image files according to the instructions provided. The scanning was followed by the post-processing of the image files with docWORKS to check that each class number included the pages specified in the catalogued data, in the right order. DocWORKS was also used to incorporate the metadata associated with the images into a single package. The data about the parchment fragments collected during the documentation and stored in the conservation database were manually entered into this package along with the catalogue data.

The digitised collection is now available on the National Library website at: http://fragmenta.kansalliskirjasto.fi/.
Digitization of medieval manuscripts – technical issues and solutions

IT specialist Juha Hakala

The oldest resources and the latest technology can be a happy match. This section of the article discusses the technical challenges faced and the solutions developed during the project. Some of the techniques that we used were inherited from the National Library’s earlier digitisation initiatives, and some were created for the manuscripts. Similar solutions can be applied in any organisation digitising old manuscripts.

Descriptive metadata

The cataloguing format had to be chosen early on in the project. The challenge we faced was that MARC21 was not applicable to manuscript fragments. Many of the data elements that we tend to take for granted, such as the author, title, or place and time of publication, were more often than not missing. On the other hand, we wanted to use a standard-based solution so as to enable metadata exchange.

After a careful analysis of the options available, the project chose Dublin Core. A local application profile suitable for providing simple descriptive metadata about the fragments was established. There are no local metadata elements, but one might argue that our usage of some of the normal Dublin Core elements is slightly unorthodox. The benefits of using Dublin Core include the ease of exchange of metadata with other initiatives, such as Europeana, and the simple loading of the content into digital asset management systems which understand Dublin Core, such as DSpace.

Administrative metadata

While the manual cataloguing was kept simple – we had to deal with about 1,500 fragments and 9,300 leaves – the project produced a great deal of administrative metadata. This kind of metadata can be produced automatically during the digitisation process if the tools are sophisticated and the production process is carefully planned. We met this requirement since we could rely on the infrastructure in place in the National Library’s digitisation centre.

The obvious reason for why it was necessary to invest in technical and preservation metadata was the goal of long-term preservation. The material digitised was at least 500 years old, and the digital manuscripts should live that long as well. And digital preservation is a process which starts when the documents are created; alas, there are birth defects which are hard or impossible to fix.

The technical metadata of the digitised images is presented in the MIX format, the preservation metadata in PREMIS. Mandatory metadata elements required by the National Digital Library (NDL) initiative’s METS profile are all present; once libraries, archives and museums establish their joint digital preservation system (the plan is to launch the system in 2016), mediaeval manuscripts may be among the first collections to be submitted by the National Library.

This project has made it even more obvious to us that outsourcing digitisation is not a good idea if in doing so control over the digitisation process is lost. If the digitised material has special features or if there are stringent requirements concerning the end product, a flexible in-house production process is an invaluable asset.
Container policy

The outcome of a well-designed digitisation process must be a product that can be easily submitted not only to the digital preservation system, but also to various other systems, such as digital asset management systems and search portals.

All descriptive, administrative and structural metadata about the manuscripts (and links to the full document PDF and the page image files) were compiled into METS containers using the docWORKS software. We did not seriously consider any alternatives for METS, since METS is the chosen container of the NDL project.

From the point of view of METS, manuscript fragments are not complex material. OCR technologies could not be used, so we do not have ALTO encoding of the pages. In this respect, the fragments differ from the five million other pages that the National Library has already digitised.

The pages’ images were not embedded into the METS files, since that would have made the METS files very large (given the high quality of our image data). Instead, the outcome of the process is a ZIP package. These packages can be easily loaded into any system which supports both METS and Dublin Core.

User interface

The Fragment database is available at

http://fragmenta.kansalliskirjasto.fi/

Instead of developing a specialised search tool, we were able to utilise DSpace (with some helper applications for, e.g., viewing the manuscripts) due to our choice of Dublin Core and METS.

Manuscript-specific functionalities and the texts describing the collection were developed by the curators of the collection in close (and fruitful) cooperation with Tuomas Heikkilä’s group of researchers at the University of Helsinki.
Conclusions

Even in hindsight, it is difficult to say whether we paid more attention to making the fragments searchable or to improving the odds that their digital surrogates can be preserved for the long term. With treasures like mediaeval manuscripts, both aims are essential – fragile materials should not be digitised more than once, and with high quality digital versions, the need to consult the originals can be minimised if not eliminated completely.

In spite of the special nature of the material, run-of-the-mill tools could be used for cataloguing, digitisation and facilitating access to the resources.

Future researchers will continue analysing the manuscripts, and since the entire collection is now freely available on the Internet, it is possible that interest in the manuscript fragments will grow. Future research projects may supply more descriptive metadata about the fragments and links to similar collections in Sweden and elsewhere.

Therefore, our database of digital manuscripts should be regarded as a work in progress. Descriptive metadata about the fragments will be harvested from the database for central indexes such as Europeana, and metadata from peer systems and future projects will be ingested into the system. Thus, we can claim that thanks to digitisation, these ancient documents are once more very much alive and in use.
The National Library's Comellus project creates new skills and solutions for digital access and the long-term preservation of printed publications

Towards a digital newspaper process

The Comellus project aims to create a new, efficient process in which publishers deposit newspapers in the National Library in digital format. Newspaper printing plates are created using digital (often PDF) page images, or print-ready PDFs. In practice, such files are digital replicas of the printed newspaper. The new digital newspaper process will mean that the print-ready PDFs of publishers as well as related metadata from editorial systems are automatically deposited in the National Library.

It will be easier and more cost-effective to provide scholars and the public with access to digitally deposited newspapers via the National Library's Historical Newspaper Library, as the material need not be digitised or post-processed.

The National Library will exploit the metadata deposited together with the print-ready PDFs. Editorial systems may contain data about page structures, articles and authors or even geographic information, some of which may be used directly in the National Library's own publishing system when providing access to deposited digital newspapers.

The National Library will ensure the long-term preservation of deposited material by converting print-ready PDFs to microfilm through the Computer Output Microfilm (COM) process. This stage will replace the microfilming of printed newspapers in the digital newspaper process.

Digital processes for maximising efficiency and usability

The project aims to develop a more efficient work process for handling newspapers at the National Library's Centre for Preservation and Digitisation. The digital process will increase efficiency, primarily by reducing the need to manually scan and post-process newspapers. In addition, some time and resources will be saved in the preparation of newspapers for microfilming.

The National Library is also seeking to offer a greater variety of digital newspaper material. The utilisation of metadata from editorial systems in the National Library's publishing systems will allow the construction of more user-friendly interfaces with diverse search functions and speed up the actual process of making material available. With less manual work required, deposited digital material can ideally be made available to customers almost immediately. Copyright issues naturally impose some limitations.
Challenges involving the diverse data systems of newspaper publishers as well as legal issues

The Comellus project must address the technical challenges posed by the various editorial systems and metadata production methods of newspaper publishers. As a rule, a separate system integration must be carried out for each editorial system to enable the automatic submission of metadata and print-ready PDFs. The extent and quality of the metadata produced varies a great deal from newspaper to newspaper. The National Library will face a challenging task in incorporating heterogeneous metadata from various editorial sources while ensuring that the metadata can be used appropriately.

Other challenges include adjusting new digital operating models to other in-house processes. For example, the information systems developed in the project must support the parallel processing of printed and digital newspapers.

Major challenges are also related to copyright issues and the Act on Collecting and Preserving Cultural Material. As the Act currently requires publishers to deposit printed newspapers rather than print-ready PDFs, separate deposit agreements must probably be signed with newspaper publishers.

Due to copyright issues, the provision of digital access to deposited newspapers is also likely to be based on agreements. Negotiations on such agreements must usually be conducted separately with each newspaper publisher, which takes time and resources. What is more, individual journalists and photographers may also hold the copyright on some material, in which case agreements with publishers are not sufficient. Kopiosto (the Finnish copyright organisation for authors, publishers and performing artists) may play a significant role here.

Beginning with system design and process modelling

The Comellus project commenced with the design and implementation of the information system needed to receive print-ready PDFs and ensure quality. Developing this system is a key component of the project, for the new digital newspaper process will be largely based on the system.

All system design and development will be conducted within the project to ensure that the final product is compatible with in-house processes and can be integrated seamlessly with existing in-house systems. Where possible, development work will consider not only newspapers, but also other types of publications, such as journals and monographs.

The system developed has already been tested for the deposit of print-ready PDFs, and the results were encouraging. In future, the aim is to expand the process so that the National Library also receives the descriptive metadata associated with the print-ready PDFs. Detailed planning and modelling of the digital newspaper process has begun and will continue as the project progresses.
Project funders and partners

The Comellus project will strengthen Mikkeli’s status as a hub of digitisation, archiving and electronic services in Finland. The project is part of the establishment of a research, development and training centre within the Digitalmikkeli network to promote knowledge transfer and synergy in related development projects.

The Comellus project is funded by the European Social Fund (ESF/“Leverage from the EU”), the South Savo Centre for Economic Development, Transport and the Environment, the City of Mikkeli and the National Library.

The National Library’s partners in the Comellus project include the publisher of the Länsi-Savo newspaper, Etelä-Savon Viestintä Oy, and the publisher of the Etelä-Suomen Sanomat newspaper, Esan Kirjapaino Oy. Also involved is Anygraaf Oy, system supplier for the above newspaper publishers. Anygraaf holds a major market share in Finland in the provision of editorial systems for newspapers and magazines. By cooperating with Anygraaf and the pilot newspapers, the project aims to develop an approach and metadata specification that serve the publishing sector as widely as possible.

Newspapers as a vital source of information for scholars and the general public

The central objective of preserving our published cultural heritage is to meet the needs of scientific research. Newspapers provide important information to both scholars and the general public. They are vital source material particularly for historical, cultural and social scientific researchers. Through newspapers, we obtain information about everyday history and political movements, from major events to microhistory. Communication studies is a key discipline that uses mass communication resources: each year, some 400 major research projects and more than 100 Master’s theses are completed in the discipline in Finland.

The National Library preserves our published cultural heritage especially for research purposes. In its digitisation policy from 2010, the National Library stated that its materials should be provided to the general public as freely and comprehensively as possible within the scope of the Copyright Act. Currently, Finnish newspapers published prior to 1912 are freely available in digital format in the National Library’s Historical Newspaper Library.

In our increasingly digital world, consumer demands have increased in line with requests for online access to resources. Both scholars and members of the public can benefit from being able to access the digital format, as it enables them to carry out extensive searches in newspapers which may be difficult when done manually. The use of source material is directly related to ease of access for researchers.

Newspapers are usually printed on relatively cheap paper which is difficult to preserve. The National Library microfilms newspapers to preserve their content and then copies the films for customer use. The National Library’s high-quality microfilms are expected to last some 500 years, guaranteeing that the content of these fragile newspapers is preserved far into the future.

Links

National Library of Finland URL: http://www.nationallibrary.fi
Digital preservation of cassette tapes

Since 1981, recordings published in Finland have been deposited by law in the National Library of Finland. At the beginning of this period, the CD was yet to be introduced on the market, and vinyl records and cassette tapes (also known as Compact Cassettes, audio cassettes or simply cassettes or tapes) were the most popular recording formats. Currently, cassette tapes account for a major share of the National Library’s legal deposit collections.

Although the 1980s may not seem that distant, the cassette tapes of the time will not survive for long as physical recordings. And even if they did, what devices would we have for playing them in future? For now, cassette players are still being manufactured, but for how long? As a recording format, the cassette has undoubtedly run its course. Despite this fact, the National Library has up until recently been receiving cassette tapes as legal deposits.

The National Library’s efforts to digitise recordings are based firstly on demand: the records needed immediately for research are digitised in the studio of the Music Library in Helsinki. Secondly, the National Library digitises and preserves material by concentrating on extensive bodies of material under threat, such as the legal deposit tapes. The Mikkeli-based Centre for Preservation and Digitisation has been digitising the National Library’s collection of cassette tapes over the past few years.

Diverse content

The digital preservation of cassette tapes began with recordings published solely in that format. The most successful artists published their recordings in the 1980s on vinyl and later on CD. The cassette tape was less valued as a format, but was cheaper and easier to use for publishing than the vinyl record, which meant that it was a good medium for small record labels and self-releasers. The National Library has also digitised recordings that attracted little media attention at the time of their release.

Peter von Bagh, a Finnish film historian, has referred to Finnish schlager music as "the hidden memory of the nation". The idea could also be extended to the cassette tapes which are now digitised. Some of these were originally cheaply produced music cassettes featuring cover versions of the hit schlagers of the day. Although the singers are not household names and the accompaniments not as lush and refined as those of the original versions, the recordings nevertheless contain the playing of numerous Finnish musicians, with the composition of the bands changing with technological evolution. Such cassette tapes were produced and sold in great numbers in the 1980s, but you would be hard-pressed to find them on current music sites. The music of small nations or language areas holds little interest to commercial digital music stores. Is it even sold in such stores? This is why the National Library strives to preserve our cultural heritage without turning a deaf ear to fainter voices.

The cassette tapes selected for digitisation also include plenty of spoken content and recordings of various events. One almost forgotten group in terms of digital preservation are the cassettes related to textbooks and courses, which are just as threatened as other cassette tapes. Recordings reflect the fashions and current events of the time. The audio cassettes released by political parties ahead of elections are a good example, as are the recordings marketed off the back of hit TV shows. With PCs becoming increasingly common in Finland in the 1980s, the computer programme available for loading from a cassette by the Finnish band Argon was a portent of things to come.

Process of digitisation

After a cassette tape has been digitised, it is returned to the Helsinki repository. Although customers will always be provided with the digital version and the tape will thus probably never be played again, it is important to save it, for its covers and casing tell us much about its technical quality and content. Some tapes had gold-plated cases, for example, and to give customers an idea of this and other physical features of the recordings, the covers and cases are also digitised.

Digital sound can be manipulated in various ways, but audio files are not post-processed during digital preservation; rather, the files are archived with all the defects of the original recordings. This is
sometimes a source of headache for the digitiser. As future listeners may not have access to the original recordings, they will not know what the recordings were like and that no errors were made in the digitisation.

No publications are digitised until their descriptive metadata have been entered into library databases. If a recording contains music, its descriptive metadata must be entered into Viola, the National Discography of Finland, whereas metadata about recordings of speech must be entered into Fennica, the National Bibliography of Finland. Determining the content of a cassette tape is difficult if it is not accompanied by its cover or other information. Sometimes the number of tracks fails to correspond to the tracklist, in which case the digitiser must ascertain which tracks are actually included on the recording. On one occasion, a missing track was found "within" another. This was an advertising tape for a record label on which an original track contained the refrain for its Finnish version.

It would be interesting to find out how many digitised versions of a given hit song are eventually produced. The number could be used to demonstrate the popularity of a song or performance. Although several versions of the same track may be digitised, this is not in vain. Recordings must be archived as part of the whole in which they were originally published. Which track preceded the other? Do all the B side tracks of a specific tape include the same technical error? Has a better version from another tape been digitised?

Some of the cover art features computer graphics typical of the time.

Easier to use

The National Library of Finland also boasts a comprehensive collection of Finnish recordings published before the entry into force of the Legal Deposit Act in 1981. Unfortunately, the collection includes few examples of cassette tapes from the 1970s. In fact, no Finnish organisation holds a perfect collection of tapes from that period or is responsible for archiving their content. Large record companies may have archived their own releases, but many self-releases are threatened. A piece of Finnish recorded history hangs in the balance.

As the tapes contain many works by still living composers, it will take a long time before all the material now digitised is freely available online. However, the situation in Finland is good, as the National Library's music resources can be digitised and listened to on the National Library's premises. Recordings no longer under copyright protection are also available for listening through the Raita database.

Thousands of cassette tapes have now been retrieved from the collections and will be digitised and made available on the Music Library's legal deposit workstation in Helsinki. The content of many tapes may receive a new lease of life: with the material easy to search, browse and use, some works may again be found under the spotlight.

The content of the cassette tapes selected for digitisation shows that Finland was quite pluralist in the 1980s; both ends of the ideological spectrum are represented on the tapes. How the digitised data can be preserved for future generations is a topic for another article: the digitisation of cassette tapes alone is expected to require dozens of terabytes of disk space.
The cassette covers provide further information to the listener. The photograph shows detailed information about the instruments used in the recording.

### Links

- Fennica: [https://fennica.linneanet.fi/vwebv/searchBasic?sk=en_FI](https://fennica.linneanet.fi/vwebv/searchBasic?sk=en_FI)
- Viola: [https://viola.linneanet.fi/vwebv/searchBasic?sk=en_FI](https://viola.linneanet.fi/vwebv/searchBasic?sk=en_FI)
- Raita: [http://www.doria.fi/handle/10024/66373](http://www.doria.fi/handle/10024/66373)
A paradigm shift – from closed systems to open solutions. Developing library system services in Finland

Finnish memory institutions are currently involved in several projects to develop their data systems. The National Digital Library (NDL) project is creating a public interface to improve access to the collections of memory institutions and developing a national long-term preservation solution (Figure 1). The National Metadata Repository project is redesigning the metadata production environment for the library sector, while similar projects for the development of metadata production are also progressing in the museum and archive sectors. The construction of the NDL interface and the development of the metadata repository support each other (Figure 2), as high-quality descriptions of information resources enhance search results. Plans were also drawn up in 2012 to acquire a new library system.

Most of the systems maintained by the National Library of Finland are commercial (Voyager, Aleph, MetaLib, SFX), but interest in open-source software has increased exponentially in recent years.

A paradigm shift – from closed systems to open solutions

For some time, a paradigm shift has been occurring in the development of data systems both in Finland and abroad. This shift will allow the expanded use of open-source software, making it the best option in many cases. Open-source solutions have often emerged when no appropriate off-the-shelf software has been available for a specific purpose.

The most widely known and significant open-source solutions include the various distributions of the Linux operating system, the Apache web server software, the MySQL database and the Firefox web browser.

The potential of open source has also been recognised in Finnish national policies. To quote the current Government Programme: “In the context of procurement, a technology-neutral approach will be applied to open and closed source software.” In addition, the Advisory Committee on Information Management in Public Administration has issued a recommendation (JHS-169) on the use of open-source software in public administration.

The National Library has long experience in using open-source software in its core operations. Finnish online material is harvested, or archived automatically, using the Heritrix software, developed by various important national libraries such as the Library of Congress and the National Library of France. Many commercial service providers also use Heritrix. Due to the fairly small and heterogeneous body of Heritrix users, commercial software has not been an attractive option.

The digital repository services Doria and Theseus are also based on an open-source platform and serve more than 30 higher education institutions and other organisations. To ensure the development of the DSpace system, a non-profit organisation has been established. Development work is undertaken not only by the community of users, but also by the maintenance organisation, using voluntary financial contributions and service charges. DSpace has achieved an important position among digital repository platforms.

In 2012 the National Library decided that the NDL public interface will be based on the VuFind library resource portal.
**Figure 1.** National Digital Library enterprise architecture

**Figure 2.** Back-end systems of libraries
Shifting gears on the road towards the National Digital Library

The National Library of Finland will use open-source software to create the public interface of the National Digital Library. This new software solution will enable a level of service and cooperation unparalleled in Finnish memory institutions. The chosen solution will, however, require transparency, flexibility and trust on the part of the National Library and the participating organisations.

The public interface of the National Digital Library (NDL) is a shared online service of Finnish libraries, archives and museums that ensures access to their printed and electronic resources and services. The National Library of Finland is responsible for developing forms of cooperation in the network of libraries, archives and museums as well as for creating the NDL public interface.

At the beginning of 2012, the National Library decided that the public interface will be based on VuFind open-source software. Choosing VuFind will promote national and international collaboration in developing the interface. The public interface will be created through several rounds of development together with the archives, libraries and museums. The first round in 2012 will involve the construction of features according to the revised, but largely unchanged requirement specifications.

The second round will include further development of the service and the addition of new functions according to the organisations' needs. The development will be overseen and coordinated by the National Library of Finland, which allows its clients to follow the development process, contribute to it and provide feedback according to the principles of agile software development. The National Library will also function as a central service unit responsible not only for service development and maintenance, but also for the provision of support and training to the network of archives, libraries and museums.

The new software solution has enabled rapid progress to be made over the past three months, and most of the functions have already been implemented. The deduplication, the processing of component parts, the visualisation of the archive hierarchy and various other features were presented in the first demonstrations and convinced the participants that the end result would meet their high expectations.
From the Finnish National Union Catalogue to the National Metadata Repository: The development of MELINDA, the National Metadata Repository for Finnish libraries

The National Metadata Repository will offer a new environment for the production of library metadata and provide a major boost to the bibliographic description process. The joint use of metadata will make it easier to take full advantage of the work carried out by other libraries and will mitigate the need for multiple bibliographic descriptions. The National Metadata Repository will function as a central information resource at the heart of the library system.

The National Metadata Repository will be a joint database for all library sectors in Finland. It will be based on LINDA, the Union Catalogue of Finnish University Libraries, which is maintained by the National Library of Finland. The expansion to cover public libraries and the libraries of universities of applied sciences as well will increase the number of records and diversify the content. The National Metadata Repository for Finnish libraries is not just a technical project, but will substantially change the cataloguing processes in libraries.

The National Metadata Repository contributes to various upcoming changes in cataloguing and description rules and practices, for example, ISBD, FRBR, RDA, vocabularies and ontologies, user-generated metadata and linked open data. It offers the opportunity to develop entirely new web services with new partners by using Web 2.0 technologies and making the most of metadata.

In the near future, the National Metadata Repository’s authority file will link Finnish authority records to the Virtual International Authority File (VIAF), which builds on the authority work of national bibliographic agencies.

Currently, the LINDA database contains approximately 5.6 million records. The development of LINDA dates back to the 1970s. Online searching in LINDA was enabled in 1993–1994. The project to expand LINDA into MELINDA started in 2009. The work will require plenty of joint planning, compromises, ideas, inspiration and motivation. The years 2012–2013 are reserved for piloting. In 2015 the National Metadata Repository should be fully functional.
The National Metadata Repository will offer a new working environment for the production of bibliographic data. The National Metadata Repository will rationalise the description process significantly: sharing the metadata makes it easier to utilise work done by other libraries and minimises the need for multiple bibliographic descriptions. Thanks to this cooperation, cataloguing will be faster and the quality of data enhanced.

As a centralised data pool, the National Metadata Repository will be at the core of the next generation library system, which is also being advanced in Finland. The metadata contained in the National Metadata Repository can be presented to users via various public interfaces.

The National Metadata Repository will be administered and is being developed by the National Library of Finland in close cooperation with participating organisations. This centralised solution brings both cost efficiency and effectiveness in the form of joint server solutions and enhanced data security. The project is funded by the Ministry of Education and Culture. The organisation responsible for maintaining the technical environment is CSC – IT Center for Science.

The National Archives has recently launched a metadata project called AHAA, and the National Board of Antiquities, together with major museums in Finland, has also started a metadata project, Museum 2015. These new projects indicate the increased importance of metadata.
The design of a new library system is underway in academic, public and special libraries. The first projects for implementing the system will not be launched until 2014.

Finnish libraries are currently using different integrated library systems. Higher education libraries funded by the Ministry of Education and Culture use the same ILS in three different installations on the same hardware. Special and public libraries are using several different systems. Many of these library systems are reaching the end of their life cycle. During the spring and summer of 2011, all the Finnish library sectors together with the National Library of Finland formed a joint committee in order to assess the feasibility of a single library system entity, possibly an open-source solution that would suit the needs of all the different types of libraries.

New Finnish legislation, passed in 2011, advocates moving towards interoperable information systems that are funded by the government. To be in line with the legislation, the committee decided to use enterprise architecture as the method of describing the functionalities of the new library system.

Several working groups have been formed from all types of libraries to perform the actual work. The first planning phase runs until the end of 2012.

The project plan will specify the following:

- The necessary joint guidelines and culture (e.g., principles for lending and cataloguing)
- Products and functions based on library systems
- The opportunities and needs of joint databases (bibliographic, collections, customer and similar databases)
- Standards and interfaces
- A risk analysis
- A financing solution and a cost-benefit analysis
- An administrative model and legal issues
- A timetable (for the first implementation projects for the new system in 2014)

The working methods include wiki-based collaboration, mailing lists, long-distance meetings and face-to-face meetings.
National Library of Finland has a new strategy focus on the digital services and use

Vision: National treasures for all

Strategic objectives of the National Library of Finland for 2013-2016

1. Offer superior digital-age repository and service solutions
2. Promote the success of the Finnish scholarly community
3. Enable citizens' access to information (national content)

Strategic spearheads

The National Library's strategic focal points, the spearheading elements with which the strategic intent described in the vision and objectives will be achieved, include:

- Electronic deposit
- Long-term preservation of the national publication heritage
- Transparency and compatibility of information systems
- Open metadata for joint use
- Open digital user services
- Availability of digital services in research environments
- Digitisation of unique, nationally significant materials
- Availability of digital services in citizens' environments
In the domain of knowledge – the historical review of the National Library of Finland is now complete

Published just before summer 2012, Tiedon valtakunnassa. Helsingin yliopiston kirjasto – Kansalliskirjasto 1640–2010 (In the domain of knowledge. Helsinki University Library – National Library of Finland 1640–2010) is a comprehensive historical review of the National Library. The book, authored by historian Rainer Knapas, is the first of its kind to cover the entire history of the National Library, from the year of the university’s establishment in 1640 (under the name of the Academy of Turku) to the present.

The Helsinki University Library began its operations as the Library of the Academy of Turku. Its collection of 40,000 volumes was almost completely destroyed in the Great Fire of Turku in 1827. Once the university relocated to Helsinki, its library gradually developed during the 19th century into the hub of Finnish scholarly and cultural life, thanks to major donations and legal deposits. Today, it is Finland’s only scientific library with a history stretching back to before Finnish independence in 1917. The Helsinki University Library also became Finland’s national library at an early stage.

The book explores the origins, development and historical turning points of the National Library’s collections, the use, architecture and colourful personal history of the National Library as well as the continuous adjustment of its duties in relation to the academic world and Finnish history. The book also investigates the reasons for changes in recent years, specifically for the period beginning in 2006 when the redesigned library was accorded the status of the National Library to provide services to the Finnish library network.

The book covers both important historical events and everyday activities at the National Library. During the writing process, numerous topics for further study emerged, for which the National Library’s collections and archives can offer plenty of material. The National Library of Finland has a distinct historical profile compared to the former royal or academic national libraries of other Nordic countries: it maintained contacts with Russia and Europe throughout the 19th century, serving as a gateway for international scholarly literature to enter Finland. The magnificent architecture of the library building and its location in the heart of the Finnish capital further emphasise its status – self-evident to all Finns – as the country’s leading cultural institution.

The book was simultaneously published as a Swedish-language edition, Kunskapens rike. Helsingfors universitetsbibliotek – Nationalbiblioteket 1640–2010, and an abridged English-language version focusing primarily on the history of internationally significant collections, such as the Monrepos Library of Enlightenment era literature, the Adolf Erik Nordenskiöld Map Collection and the Slavonic Library.

The publishers of this richly illustrated work are the Finnish Literature Society and the Society of Swedish Literature in Finland.

The National Library carried out its history project between 2008 and 2011 under a steering committee led by Director Kai Ekholm. In addition to funding from the National Library, the project received support from the Research Funds of the University of Helsinki and private foundations.
My National Library: Professor of Book History Tuija Laine

1. You have been appointed the first chair in book history in Finland. What exactly is book history?

Book history studies the entire lifecycle of a book, from writing to printing and publishing. Other relevant issues include distribution and retail, in other words, how books get into readers' hands. Current key topics include reading and reader experiences. For the purposes of book history, books include not only traditional books, but also other printed products, such as ephemera and newspapers.

2. You have a background in church history. How did you end up studying book history?

I wrote my Master's thesis on early devotional literature and its ownership and use. I became fascinated with old books and later wrote my dissertation on general church history focusing on various translations of English devotional literature and the changes made to the original text, as well as the reception of the books in Finland at the beginning of the modern era. At the time, I was also working in the then Helsinki University Library, now the National Library of Finland, in a project cataloguing early Finnish literature, which contributed to the development of my identity as a book historian.

3. What instruction is currently offered in book history?

Next autumn, all university students will be able to complete 25 credits in book history as a minor subject. The purpose is to provide basic information about book history. Various lecture series, proseminars and advanced seminars with varying themes are also offered each year. For example, this past spring I lectured on education and propaganda in children's literature, and for the next academic year I will talk about the foundations of book history. In addition, an advanced seminar will be held in autumn 2012 on reading and writing as book and church historical phenomena.

4. What is the significance of the National Library of Finland and its collections to Finnish research in book history?

The National Library houses diverse collections which are particularly useful for the study of early book history. Finnish literature is one of my personal interests, as I have both catalogued and studied it extensively. The National Library's collections can be used in a wide range of ways in teaching and research in book history. What saddens me, however, is the National Library's current approach to research and expertise in "Fennica" literature. Although experienced specialists in this area have retired or are about to retire, the National Library has not deemed it necessary to consider Fennica expertise in recruitment. I find it surprising. After all, issues related to Finnish literature are central to the National Library despite its important international collections.

5. How should collaboration between libraries and scholars be enhanced?

Academic libraries should view themselves from the research perspective. Library staff include plenty of skilled professionals interested in book history and collections. They could be encouraged to cooperate more broadly with scholars and share their collections expertise with them. Scholars would then be able to share their research knowledge with library staff, not only through personal contacts but also through lectures and talks. Library staff and scholars could participate in joint seminars, and the former could be encouraged to complete studies in book history as work-related continuing education.

6. What do you as a book historian think about the digitisation of books and libraries?

Book historians are of course pleased to find resources they can use for free on their home
computer. As an extensive international project, digitisation provides scholars with access to sources that would otherwise be difficult or impossible to access. But in the midst of the digitisation craze, we should not lose sight of the importance of printed literature and libraries. Digitisation does not provide all the answers. We still need libraries to read research and source literature on site and to borrow material for use outside the library.

7. **Do book historians need original printed publications alongside digitised copies?**

   **What is the role of printed books in research?**

Many relevant research issues cannot be addressed by studying digitised material only. The scholarly significance of original material cannot be overestimated. That is why scholars appreciate collections from which they can borrow original items and which offer additional material for, for example, comparisons between various editions or information about the ownership of books based on dedications. One such collection is the Heikki A. Reenpää Library, which Professor Reenpää donated to the National Library.

*Interviewer: Harri Ahonen, Librarian*
The National Library of Finland's Digitalkoot project wins the Digital Heritage Award

The joint Digitalkoot project of the National Library of Finland and Microtask won the Digital Heritage Award in conjunction with the international DISH 2011 conference.

Digitalkoot won over the four other finalists, all of which were projects involved in crowdsourcing, after topping a public vote on Wednesday, 7 December 2011. The Digital Strategies for Heritage 2011 conference took place between 6 and 9 December in the Rotterdam World Trade Centre in the Netherlands and was attended by some 500 delegates from throughout the world.

The Digital Heritage Award nominees and the jury statements:

Background

The National Library of Finland launched the Digitalkoot project in February 2011 to improve the usability of digitised historical resources. Anyone can participate in the project by playing the fun, community-based Mole Hunt and Mole Bridge games, thereby supporting both researchers and history buffs.

"Currently, a few million newspaper pages are available online, and more material is being digitised. A small percentage of the digitised text contains errors and deficiencies. As computers cannot always read text written in such lettering as Fraktur, we need extra pairs of beady eyes to scan for unclear words. Once the digitised text is flawless, archive users can find more relevant material through the search functions. The names of places and persons, in particular, should always be double-checked by human users to improve the usability of the material," says Director Kai Ekholm of the National Library of Finland.

To coordinate the crowdsourcing project, the National Library opened a web service which anyone can use to participate in the proofreading and correction of texts. The service involves two separate games: the Mole Hunt, in which players try to find erroneous words, and the Mole Bridge, in which players must correctly type words that appear on screen. To date, the website has attracted more than 97,000 visitors.

http://www.digitalkoot.fi/en/splash
Further information: Minna Kaukonen, Senior Planning Officer, National Library of Finland, Centre for Preservation and Digitisation.
Ambassadors of the National Library of Finland

Since 2010, the National Library has appointed 'ambassadors', or eminent public figures who value the National Library's collections and share an interest in fostering the Finnish cultural heritage. As the National Library's advocates, the ambassadors support its efforts and projects with their expertise and contact networks. The ambassadors also participate in various National Library events and appear in media produced by the library. In addition, they participate in raising funds for the National Library Cultural Heritage Fund.

For 2012–2013, the ambassadors will be Dr Sinikka Salo, former board member of the Bank of Finland, and writer and editor Kai Linnilä. Part of their mission is to promote the extensive project for digitising Finnish material to mark the centenary of Finnish independence in 2017.

Kai Linnilä and Sinikka Salo

Print this article (PDF)   Print entire issue (PDF)
The National Library digitised the Missale Aboense missal

Missale Aboense is the oldest book printed specifically for Finland. The National Library undertook the challenging task of digitising all the versions in its collections of this missal, printed on both parchment and paper in Lübeck in 1488 for the Diocese of Turku. The digitised pages, which also contain handwritten notes, provide important information for theology scholars. The material is now available online at http://www.doria.fi/handle/10024/67149.

Missale Aboense was printed in 1488 in Lübeck at the behest of the Bishop of Turku, Konrad Bitz, and Dean Maunu Särkilahti. The missal is in Latin and contains all the parts of the Mass, including scripture and prayers arranged according to the church year. It is the only incunable of Finnish literature, i.e., a book printed before 1501.

Photo by Ari Aalto
Finland's first professorship in research on digital resources to be established

Finland's first professorship in research on digital materials will be established within the discipline of language technology at the Department of Modern Languages in the Faculty of Arts, University of Helsinki. The appointee will work in Mikkeli and Helsinki.

Worldwide, the area of the professorship is still largely unexplored. One of the long-term objectives for the professorship is to generate new research that promotes the use of digital materials. The topics explored will focus on methods for processing raw data into more useable material as well as on methods for using such material. The two lines of research are linked with research and development at the University of Helsinki and the Mikkeli University of Applied Sciences.

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The National Library of Finland
National Library events associated with the 'Helsinki 200 Years as Capital' jubilee project

The Engel tour of the National Library
Carl Ludvig Engel: man and architect. This one-hour guided tour presents Engel's design of the library building as well as his personality.
Language: German and/or Finnish
Partner: Goethe Institute

The Generational Puzzle
16 May–29 September: Exhibition in the Rotunda Photography books on Helsinki, fiction writing, food culture, farming and crafts.
Exhibition design: Journalist Tiina Harpf

Characters in South Ostrobothnian Literature
7 June–8 September: Exhibition in the cafeteria and the Agricola Room
The exhibition is associated with the provincial fair held in Senate Square from 7 to 9 June.
Exhibition design: Mervi Heikkilä, Director of Library Services, and Hannele Puhtimäki, Head of Section
Partners: Seinäjoki Public Library/Provincial Library, Regional Council of South Ostrobothnia

Summer Sowing!
Courtyard of the National Library
18 August from 11.00 to 15.00
Urban farmers from the Dodo environmental organisation encourage people to "paint the town green" by cultivating useful plants in the Greater Helsinki area. Join us for advice and inspiration, spinning, plant dyeing, food circles, DIY tips and crafts.

Capital Life
8 October 2012–31 January 2013: exhibition in the Rotunda
The exhibition will be arranged collaboratively with the discipline of history at the University of Helsinki and will also involve various public events.
Exhibition design: history students under the direction of Professor Laura Kolbe
Luther, the Reformation and the Book

The National Library’s summer exhibition focuses on the Lutheran faith and early Finnish literary culture

This year’s summer exhibition at the National Library of Finland will examine the spread of the Reformation in Finland, which led to the beginning of literacy instruction and the publication of vernacular literature. The exhibition is associated with the international conference entitled Luther as Teacher and Reformer of the University, to be held in Helsinki in August 2012. The organising committee of the conference is chaired by Professor Risto Saarinen, who together with Professors Simo Heininen and Tuija Laine also designed the National Library exhibition. The exhibition will be open to the public from 7 June to 20 October 2012 and be accompanied by a book containing various articles and the exhibition catalogue.

Emergence of vernacular literature

As a result of the Reformation, Finland, then part of the Swedish empire, broke away from the Catholic Church and turned to Lutheranism. The new creed also had far-reaching educational implications for the entire nation. Martin Luther had emphasised that everyone should be allowed to acquire personal knowledge of the foundations of Christianity, which required both literacy skills and the publication of literature written in the vernacular. Both issues were actively addressed in Finland: in the 1540s and 1550s, Mikael Agricola, known as a prominent proponent of the Reformation and the "father of the Finnish written language", translated and published a primer, a prayer book, a Mass book, the Passion narratives, the New Testament and parts of the Old Testament in Finnish. Ordinary Finns could now immerse themselves in the literary world on their own, without an instructor.

Promoting various forms of catechism

As the initiator of the Reformation, Luther played a key role through his writings in the instruction of Christianity also in the Swedish empire. The most important booklet in this context was Luther's Small Catechism, which was both read as such and used by bishops and pastors who drew up versions of it for public education between the 17th and the 19th centuries. For the clergy, Luther also wrote the Large Catechism, which could be used for more profound and diverse instruction in the Christian doctrine compared to the Small Catechism, which was mainly intended for popular use.
Churchgoers became familiar with various forms of the catechism. Not only did they have to participate in catechetical meetings and reading tests, for which they were expected to memorise various chapters of the catechism or to decipher the text in their dark dwellings, they also encountered it in other situations, such as during the catechetical sermons preached in church services. The catechism was included in the "old" hymn book, its unannotated chapters formed the core of the primer long into the 19th century, and the schooled youth read it in Latin and sometimes the other liturgical languages.

**Christianity for heretics**

The catechism was also used to spread the Lutheran faith among other religious groups, including non-Christians. For this purpose, a Lutheran catechism was printed in Cyrillic letters as part of the Treaty of Stolbovo in 1618 for the Orthodox Karelian regions annexed to Sweden. In addition, Swedish- and Sami-language catechisms were drawn up to teach the Christian doctrine to the Sami and, as the most far-reaching project, a catechism was compiled in both Swedish and a Native American language to convert the Native Americans living in the Swedish colony of Delaware in North America. All these catechisms were published in the 17th century, although some Sami catechisms
Growing interest in Finnish translations of Martin Luther's works in the 19th century

At the beginning of the 19th century, Finnish translations of Luther's catechisms were complemented with translations of his other works. At the time, several active revivalist movements in Finland considered themselves followers of the work of Luther. Particularly popular among translators were Luther's postils, the Church Postil and the House Postil, as well as various sermons. Luther's and Melanchthon's fables were also translated into Finnish as early as 1854, with a new edition published in 1983 to mark Luther's 500th anniversary. However, possibly the most printed Finnish translation of Luther's works is Manna for the children of God, a collection of his aphorisms, first published in Finnish in 1878. The latest edition was printed in 2010, when it was also published as a recording. Luther's works have also been published in Finnish in a series entitled Valitut teokset ("Selected works") in 1908–1934, 1958–1959 and 1983. The publication and translation into
Finnish of Luther's works continues to the present day.
In the Cupola Hall: The Literary Middle Ages. 1000 years of book history

National literary treasures for all!

The National Library of Finland’s The Literary Middle Ages exhibition displays the oldest national treasures of Finland’s literary culture for all to admire. Assembled by leading experts in the field, the exhibition tells the forgotten story of how Finland began to emerge as a cultural entity almost a thousand years ago. Many previously unseen treasures, long hidden away in archives, will now be revealed to the general public for the first time at the National Library of Finland’s Cupola Hall.

The exhibition culminates the Literary Culture in Medieval Finland, research project, initialized in 2006, that was associated with the digitization and configuration of a database, launched in March 2012, for the National Library of Finland’s internationally significant collection of parchment fragments.

The exhibition’s expert group is Docent Tuomas Heikkilä, Researcher Jesse Keskiaho, and Researcher Jaakko Tahkokallio.

Read more >>
Guided tours in English during the IFLA Conference 2012

All guided tours start at 13.00 at the National Library's main entrance, Unioninkatu 36, Helsinki. The tour includes a 30-45 minute presentation of the history and architecture of the library, and starting at 14.00, a 30 minute presentation of the two summer exhibitions.

Dates for guided tours:
Friday, 10 August 2012, 13.00
Saturday, 11 August 2012, 13.00
Monday-Thursday, 13-16 August, 13.00

Programme for the IFLA visit to the National Library of Finland on 17 August 2012

Morning programme from 9.30 to 12.00
From 9.30 to 10.00: An overview of the history and architecture of the library
From 10.00 to 10.30: The Digital Library
  * Finna - The National Digital Library of Finland. Presentation by Aki Lassila and Ere Maijala
  * Digital Cultural Heritage in the National Library. Presentation by Esa-Pekka Keskitalo, Satu Niininen and Matti Pitkälä
From 10.30 to 11.00: Historical collections of the National Library.
  Presentation by Sirkka Havu and Mika Hakkarainen
From 11.00 to 11.30: Break
From 11.30 to 12.00: Guided tour of the exhibitions

Afternoon programme from 13.00 to 15.30
From 13.00 to 13.30: An overview of the history and architecture of the library
From 13.30 to 14.00: The Digital Library
  * Finna - The National Digital Library of Finland. Presentation by Aki Lassila and Ere Maijala
  * Digital Cultural Heritage in the National Library. Presentation by Esa-Pekka Keskitalo, Satu Niininen and Matti Pitkälä
From 14.00 to 14.30: Historical collections of the National Library.
  Presentation by Sirkka Havu and Mika Hakkarainen
From 14.30 to 15.00: Break
From 15.00 to 15.30: Guided tour of the exhibitions
Facts and Statistics 2011

- Visitors: 166,000
- Local loans: 497,881
- Interlibrary loans to other libraries: 1,935 and from other libraries: 1,091
- Use of digitized material: 7.6 million downloaded pages
- Use of FinELib materials: 21.6 million downloaded articles
- Information service requests: 1,650; information retrieval advice was given to 264 persons, and guided tours of the library were conducted for 909 persons
- The accession of collections was approximately 1,000 meters of shelving; at the end of the year the collection totaled 112,000 meters of shelving
- The accession of the National Collection was 164,000 units; of those 67,812 are uncatalogued publications
- The accession of monographs and series in other collections was 9,374 volumes
- The sound recording collection grew by 3,107 legal deposit copies and purchases, the sheet music collection by 243 publications
- The collections totaled 3 million books and serials, 689,000 microfilms and microfiches, and over 4 million units of other items
- The online archive contains 718,5 million units
- The number of digitized printed products’ pages exceeded 1.9 million items; there were 1,900 microfilm rolls; the number of conserved units was 14,900
- Databases of the library’s own collections contain almost 2.7 million references, a growth of 98,000
- Fennica, the National Bibliography database, contains 902,600 (0.9 million) bibliographic entries
- Viola, the National Discography database, contains 963,100 (0.9 million) discographer entries
- Linda, the Union Catalogue of the Finnish University Libraries, contains 5.9 million references
- Staff: 286 full-time employees
- The Library has four service points, two in Helsinki, one in Mikkeli and one in Urajärvi

Loan services

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local loans</td>
<td>538,000</td>
<td>512,700</td>
<td>499,700</td>
<td>489,154</td>
<td>497,881</td>
</tr>
<tr>
<td>Interlibrary services</td>
<td>4,200</td>
<td>4,400</td>
<td>3,490</td>
<td>3,275</td>
<td>3,026</td>
</tr>
<tr>
<td>Total</td>
<td>542,200</td>
<td>521,500</td>
<td>503,190</td>
<td>492,429</td>
<td>500,907</td>
</tr>
</tbody>
</table>

Databases of the Library’s own collections, number of titles

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Bibliography Fennica</td>
<td>827,100</td>
<td>848,000</td>
<td>868,100</td>
<td>892,132</td>
<td>902,600</td>
</tr>
<tr>
<td>National Discography Viola</td>
<td>759,764</td>
<td>794,100</td>
<td>839,100</td>
<td>900,605</td>
<td>963,100</td>
</tr>
<tr>
<td>Other collections (Helka)</td>
<td>877,700</td>
<td>852,400</td>
<td>867,000</td>
<td>909,147</td>
<td>901,520</td>
</tr>
</tbody>
</table>

Premises 2011

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>25 500 m²</td>
</tr>
<tr>
<td>User service areas</td>
<td>4 600 m²</td>
</tr>
<tr>
<td>Collection areas</td>
<td>19 600 m²</td>
</tr>
<tr>
<td>Other areas</td>
<td>700 m²</td>
</tr>
</tbody>
</table>

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International Cooperation

International interaction
Organisations and bodies

Alto Editorial Board, metadata development team

Bibliotheca Baltica, cooperation body for libraries in the Baltic Sea region

Breitkopf & Härtel, Wiesbaden, Germany

CCS, Content Conversion Specialists GmbH, Germany

CDNL, Conference of Directors of National Libraries

CENL, Conference of European National Libraries, Executive committee

CERL, Consortium of European Research Libraries

CLM, Copyright and other Legal Matters, working group

Cobra+, coordination body for European national library project cooperation

Dublin Core Metadata Initiative, developer group and steering group of the Dublin Core Standard

EBLIDA, European Bureau of Library, Information and Documentation Associations

EDITEUR, the international group coordinating development of the standards infrastructure for electronic commerce in the book, e-book and serials sectors

Eesti Rahvusraamatukogu, the Estonian National Library

eIFL (electronic information for libraries)

ELAG, European Library Automation Group

EROMM, European Register of Microform Masters

European ICOLC, International Coalition of Library Consortia

The European Library, portal for European national libraries

Europeana, the European Digital Library - Europeana Travel project - The Council for aggregators and content providers, Europeana network

FAIFE, Committee on Free Access to Information and Freedom of Expression

IAML, International Association of Music Libraries

IASA, International Association of Sound and Audiovisual Archives, head of the Nordic division

ICA, International Cartographic Association

IFLA, International Federation of Library Associations, participation in several divisions and working groups

IGELU, International Group of Ex Libris Users, various groups

IIPC, International Internet Preservation Consortium
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