Making the Impact on Research and Society

a case study: open repository and crowdsourcing solutions developed for the Finno-Ugric Digitization Pilot Project at the National Library of Finland

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The National Library of Finland (NLF) is executing a pilot project (7/2012-10/2013) that aims for digitizing and publishing of Finno-Ugric material for the benefit of the linguistic research within the Kone Foundation Language Programme (2012-2016). Decision on the follow-up project for 2014-2016 is pending.

The objective of the Kone Foundation Language Programme is to advance the documentation and status of small Finno-Ugrian languages, the Finnish language, and minority languages in Finland. Both, the scientific community and all language users, will profit from the results of this research and documentation.
Another key objective of the project is to foster a culture of openness and interaction in linguistic research. This entails, for example, the unlimited availability, accessibility and usability of source material and research results via a virtual library, as well as the participation of the language community in various stages of documentation and application of research results.

It is essential not only ensure the availability of language materials, but to make it easy for different users to approach and use them. Free, open access to the material ensures that it can be used by both the academic community and the speakers of the kindred languages of Finnish.
The focus is on the Finno-Ugric languages, which suddenly became socially important, at the beginning of the Soviet era in the 1920s and 1930s. No contemporary literature will be digitised.

The researchers made the selection of materials for the digitization plan in autumn 2011. The selection consists of 17 000 pages of monographs in Veps, Ingrian, Mari (Meadow and Hill Mari) and Mordvinic (Erzya and Moksha) languages and around 20 000 pages of newspapers in Mari and Mordvinic languages. Monographs are mainly school and text books and in many cases they are translations from Russia to the local languages.
Digitization Project of Kindred Languages

Co-operation with Russian Partners

During the pilot project the NLF has produced the research infrastructure (repository and OCR editor) and takes care of co-operation with the Finnish (Helsinki University Library) and Russian partners (National Library of Russia, NLR and National Library Resources).

The material was digitised from the collections of the NLR. This is the first time that material published in the former Soviet Union has been made freely available for public use in the NLF (or any foreign?) data systems.
Mordvinic language, **Erzya**, was converted into a medium of popular education, enlightenment and dissemination of information pertinent to the developing political agenda of the Soviet state. The “deluge” of popular Erzya literature, 1920s-1930s, suddenly challenged the **lexical orthographic norms** of the limited ecclesiastical publications from the 1880s.

Newspapers were written in orthographies and in word forms that the locals would understand. Schoolbooks were written to address the separate needs of both the adults and children. **New concepts were introduced in the native language.** It was the beginning of a renaissance and period of enlightenment.
Digitization Project of Kindred Languages
Open Access to the Material

Since the Kone Foundation Language Programme has an objective of free access to the materials, NLF will publish the material as its own repository and provides an open access without geographical or IP restrictions.

In order to publish the material as public domain, the copyrights regarding material was needed to be cleared. The research on copyrights was conducted by Moscow-based National Library Resource during winter 2013.

Public domain allows NLF to donate the language-resources after editing to the FIN-Clarín for the benefit of other research (linguistic) communities.
Digitization Project of Kindred Languages

Open Repository

Fenno-Ugrica

Fenno-Ugrica is the National Library of Finland's digital collection of Fenno-Ugric publications. The Fenno-Ugrica collection includes monograph publications in Ingrian, Veps, Mari (Hill Mari and Meadow Mari) and Mordvinic (Erzyan and Molsha) languages and newspapers in Mari and Mordvinic languages from the 1920s and the 1930s. All in all, the collection consists of more than 120 monographs and nearly 20,000 pages of newspapers.

The material of Fenno-Ugrica has been produced by the National Library of Finland in the Digitisation Project of Kindred Languages, which is a part of Language Programme of Kone Foundation. The material Fenno-Ugrica collection belongs to the collections of the National Library of Russia (St. Petersburg), where the publications have been digitised. The digitised content of this collection is published based on the research on copyrights, which was conducted by Moscow-based copyright organization, National Library Resource.

Within the Digitisation Project of Kindred Languages, the National Library of Finland has developed an open source OCR editor that enables the editing of machine-encoded text for the benefit of linguistic research. Permissions for the editing of the material of Fenno-Ugrica will be granted mainly for the researchers of Fenno-Ugric languages and the permissions will be administered by the Digitisation Project of Kindred Languages. Requests and enquiries: kk-fennougrica@helsinki.fi

Collections

- Monographs [153]
- Newspapers [2052]
The material is catalogued directly to the repository in Dublin Core format, but the metadata will be linked to the local library catalogues too.

In order to ease the access to the material, the material will be linked to Europeana and the National Digital Library of Finland and it can be browsed through its interface, Finna.
The NLF has developed an OCR editor to support the research use of the material. The editor allows text that has undergone a process of machine identification to be edited for the purposes of linguistic research.

Editor ia capable for correcting the alphabets that cannot be recognized upon digitization or will be mistread by the OCR programme.

Once the text will be corrected, the edited material will be re-uploaded.
Digitization Project of Kindred Languages
Impact on research and society

Are the scientific community and language users, profiting from the results of this research and documentation?

As for the research of Finno-Ugric languages, the publication of open-access and searchable written materials from the 1920s and 1930s is a “gold mine”. The linguistically oriented population can also find writings to their delight:
1) lexical items specific to a given publication
2) orthographically documented specifics of phonetics.
Also the historians, social scientists and laymen with interests in specific local publications can now find text materials pertinent to their studies.
When it comes to the **societies of the minority languages**, the impact cannot be specifically measured. However, one can notice slight changes in attitudes:

1) **Community participation** and interaction were also supported and through the interactive research with the **citizen scientists**, who carried out proofing work and thus contributed to research directly. New ”scientists” are willing to join the project and there are a plenty of local initiatives in about to take off.

2) The published material was unlike to be digitized by the Russian libraries, so the project **made the preservation of the material** possible. The Russian libraries have already started the speak more about open access etc.
Digitization Project of Kindred Languages
Resources and Services Online

Project Web Site
www.nationallibrary.fi/services/digitaalisetkokoelmat/finnougric_en_ru.html

Fenno-Ugrica Collection
fennougrica.kansalliskirjasto.fi/

Fennio-Ugrica Blog
blogs.helsinki.fi/fennougrica/

National Library of Finland
www.nationallibrary.fi/
DIGITIZATION PROJECT OF KINDRED LANGUAGES
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