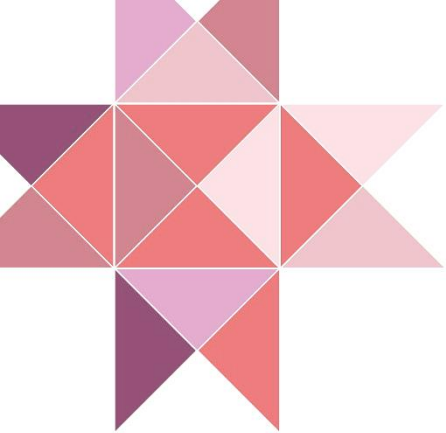


Digital Heritage Serving Two Masters: the Great Public and the Academia

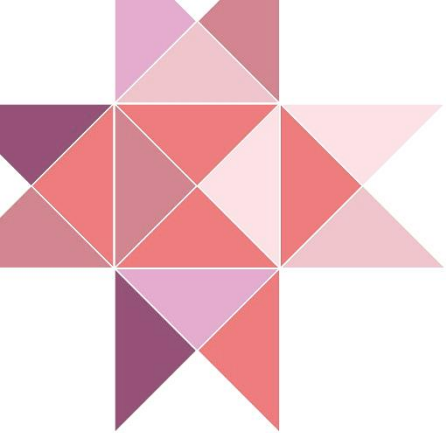
Jussi-Pekka Hakkarainen
Project Manager

Seminar on Fenno-Ugric Computational Linguistics
23.9.2016, Helsinki



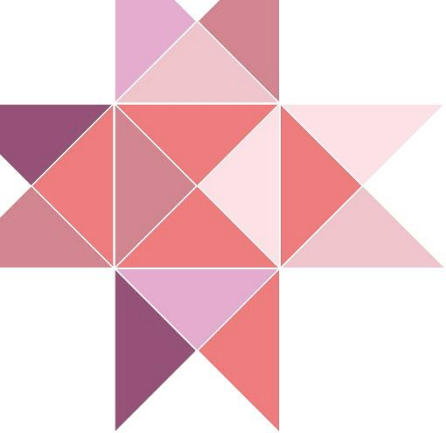
Overview of the Project

- The **National Library of Finland** has been implementing the **Minority Languages Project** since 2012.
- Within the project we have digitized materials in 18 Uralic languages as well as developed tools to support the **1) linguistic research** and **2) citizen science**.
- Through this project, **1) researchers** would gain access to new corpora which they have not been able to study before and to which **2) all users** would have open access regardless of their place of residence.



Materials and Collection

- Within the project, **National Library of Finland** has digitized and published around **1150 monograph** titles and more than **100 newspapers** titles in 18 Uralic languages.
- The online collection, **Fenno-Ugrica**, will consist of 110,000 monograph pages, 150,000 newspaper and journal pages as well as some manuscripts. All in all, ca. **30 000 items** were published.
- The majority of materials belong to the collections of the **National Library of Russia** in Saint Petersburg.



The Content

- Aim to digitize items which **would precisely fill the gaps** in linguistic research and in corpora, vocabularies etc.
- After 1917, the languages were 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 literature in 1920s-1930s suddenly challenged **the lexical orthographic norms** of the limited ecclesiastical publications from the 1880s. New concepts were introduced in the language. This was the beginning of a **renaissance** and **period of enlightenment**.



Selection Criteria of Material

- The selection of the materials has been made in co-operation with the researchers and we used several criteria upon the selection of material:
 - genesis and consolidation period of literary languages
 - availability of material in Finnish libraries and institutions
 - online access to collections in Russia
 - locality – the languages of peripheries are more tempting
 - cost efficiency – loads of parallel titles (translations)
 - **No-one else would digitize and publish this material!**



Fenno-Ugrica of the [National Library of Finland](#) is a digital collection of publications in Uralic languages. The Fenno-Ugrica collection includes more than 1500 monographs and over 110 newspaper and journal titles in 20 languages.

In addition to the prints in Uralic languages, Fenno-Ugrica contains five special collections, Lapponica for Sami languages, Zingarica for Romani languages, Hebraica for Yiddish, Institute of Estonian Language for Livonian and Komi National Library for Komi languages.

The material of Fenno-Ugrica has been produced by the National Library of Finland in the [Digitization Project of Kindred Languages](#) in 2012-2015 and [Minority Languages Project](#) in 2016. The both projects have been funded by [Kone Foundation](#).

The material available in Fenno-Ugrica have been linked into the [Uralica](#), which is an open portal for Fenno-Ugric publications, digitized in several libraries in Estonia, Germany and Russia.

You may follow the progress via the [project blog](#).

Requests and enquiries: kk-fennougrica@helsinki.fi

Collections

- [Special Collections](#) [1586]
- [Periodicals](#) [25592]
- [Monographs](#) [1273]
- [Word lists](#) [24]

Search Fenno-Ugrica

- [Titles](#)
- [Authors](#)
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KONEEN SÄÄTIÖ



Bukvari izoroin škouluja vart

Iljin, N. A.; Junus, V. I.; Ильин, Н. А.; Юнус, В. И.

The permanent address of the publication is <http://urn.fi/URN:NBN:fi-fe2013123010160>



Name: bx000010952.pdf

Size: 52.57Mb

Format: PDF

Description: User copy PDF
simplestats.downloads



[View/Open](#)



Name: 04f6aaa2-442a-449 ...

Size: 222.9Kb

Format: Unknown

Description: Alto XML files of ...
simplestats.downloads



[View/Open](#)

Title: Bukvari izoroin škouluja vart

Alternative title: Букварь для ижорских школ

Author: Iljin, N. A.; Junus, V. I.; Ильин, Н. А.; Юнус, В. И.

Published: Moskova ; Leningrad : Riikin ucebno-pedagogiceskoi izdatel'stva, 1936

Subject: aapiset; inkeroisen kieli; ижорский язык

This Collection

- [Titles](#)
- [Authors](#)
- [By Issue Date](#)
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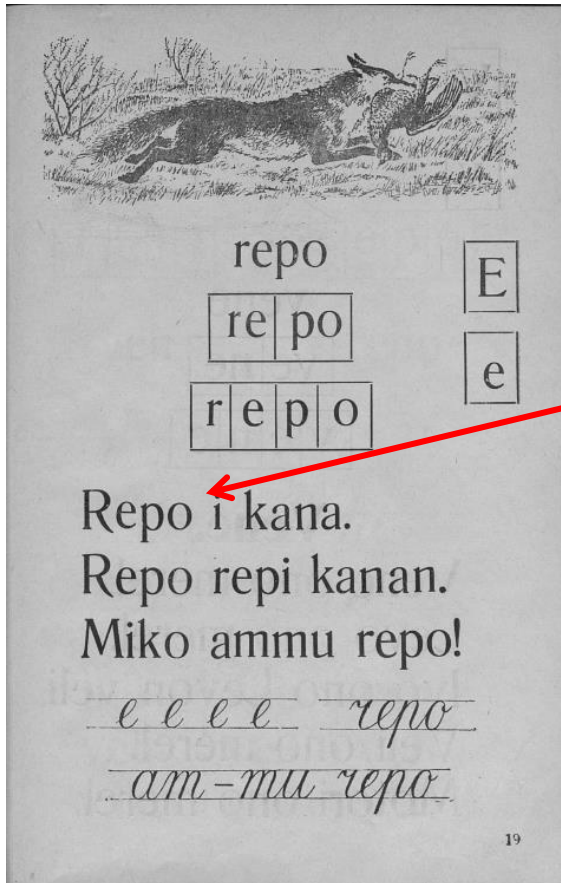
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KONEEN SÄÄTIÖ



Materials and Collection



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Languages of Publications

Mari

- Meadow Mari
- Hill Mari

Permic

- Udmurt
- Komi-Zyrian
- Komi-Permyak

Ob-Ugric

- Khanty
- Mansi

Samoyedic

- Nenets
- Selkup

Mordvinic

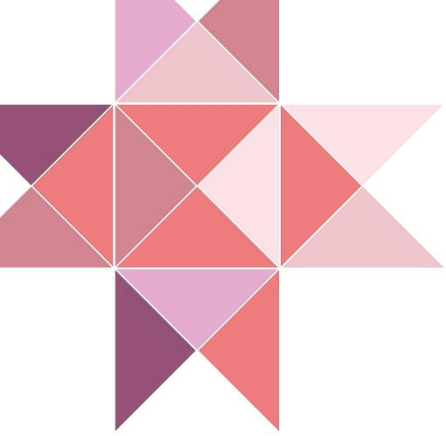
- Erzyan
- Moksha
- (Shoksha)

Baltic Finns

- Ingrian
- Veps
- Karelian
- [Livonian]

Sami

- Kildin
- Skolt
- Northern



Engaging the Academia

- Key factor for success was the engaging the researchers to the project. The researchers were in the loop from the very beginning, even before the money was raised.
- Researchers did participate in
 - **Planning**
 - **Decision-making**
 - **Communications**
 - **Networking**
 - **Distribution of data**



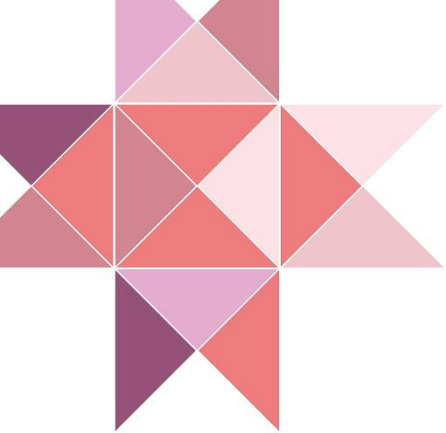
Researchers and Decision-making

- Once the money was granted, we called researchers to the steering group, so they were part of decision-making.
- In addition to that, the meetings with the researchers in the field took place, both formally and informally:
 - Coffee sessions with the Helsinki-based researchers on the weekly basis
 - Annual meetings to discuss about the needs within the Academia
 - Participating the seminars, congresses, workshops etc.
 - **Forcing** them to communicate on our behalf.



Researchers and Networking

- The participation of researchers and the co-operation with the researchers took off once we got the reputation.
 - **2 projects in 2012**
 - **7 projects and 2 institutions in 2013**
 - **4 PhD students, 11 projects, 4 NGOs and 8 institutions in 2016.**



Datasets and Further Use

- We have created the data ourselves and released the data for other operators in **Fenno-Ugrica** as wordlists > raw data for linguistic solutions like online dictionaries, spell-checkers, corpora etc.
- Edited material is available also in **Korp**, which is the concordance search tool of the Finnish Language Bank.
- Some parts of available also at **Giellatekno** of Arctic University of Norway and **Institut für Deutsche Sprache** and **FU-Lab** in Syktyvkar, Komi Republic (Russia)

Datasets and Further Use



Fenno-Ugrica: Vepsä (näyte) valittu — 29,74K / 2,01M sanetta

ictāz

Yksinkertainen Laajennettu Edistynyt Vertailu

ictāz

Etsi

myös ☐ alkuosa ☐ loppuosa ja ☐ samaista pien- ja suuraakkoset

Konkordanssi: osumia sivulla: 25 järjestä korpuksen sisällä: järjestämätön Tilastoja: laske tilastot tämän perusteella: sana

Konkordanssi Tilastoja

Tuloksia: 12

Näytä konteksti

FENNO-UGRICA: VEPSÄ (NÄYTE)

Hubin ictāz vedab Riz nor' koir, — pomes' taksad 1) verei koiranke, — kudam kārzal jalos koskui reboihe, joksen
Kaštanka mušti, miše tel hān vedi ictāz jalos ij luukas.
Tunmatoi yhtnāgoi fati ictāz pās, ani kuti toropihe' i kidastaškanzi: — Karaul!
Kut pidi ictāz mamš konz o !i krest' janan ,k dvorānkan i, jāl' gmal, yarican?
Krilov. ZIRKOL I OBEZJAN (Basnā) Martiška ictāz zirklos homaic i Jougal hillāšti hān kondjad tuukaiz: — "Kačke, — pagizeb, — kom sinā minun!
Da jo i Žilin kerazi jāl'gmāizen vägen fati kādehe kolodkan, Jokseb kazakqidenno, a ice ictāz ij mušta, kidastab: — Velled!
Ymbārziba hāndast kazakad, kyzeltas: ken hān, mitte mez', kuspei? A Žilin ice ictāz ij musta, voikab i johtuteleb: "Velled, velled !" Tuliba soudatad, ymbārziba Žilinan, — ken hānele liibi:
Kut plenas pidi ictāz Žilin? i kut pidi ictāz Kostilin? 3.
Kut plenas pidi ictāz Žilin? i kut pidi ictāz Kostilin? 3.
Iški ictāz viicel hurha kādehe ylembahko kynambrust, hurahti cak, jokseškanz' hulal ojaizel, ligoti hān hānes i
Kut ozuti (mitceks) ictāz Lōn'ka nicukaizenke pagištes?
Kut ictāz muiba lapsed udes sijas?

Korpus

Fenno-Ugrica: Vepsä (näyte)

Kuvailutiedot

Tekstin ominaisuudet

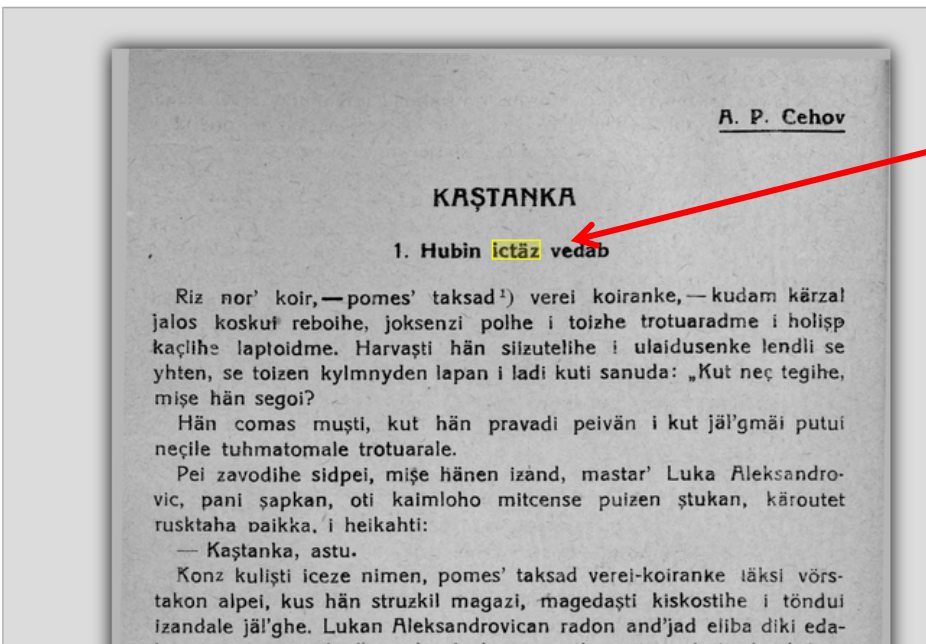
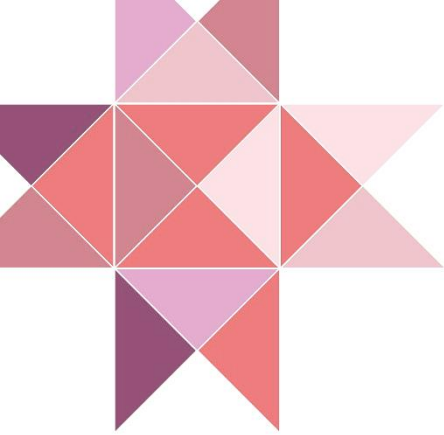
otsikko: Literaturnij hrestomatij, vepskijale
nacial'nijale školale kuumanz' openduz'voz'
gosudarstvennij
kirjailija: F. A. Andrejev
päiväys: 19340101
sivunumero: 6
vuosi: 1934

Sanan ominaisuudet

linkki kuvaan:
<http://ocrui-kk.lib.helsinki.fi/...3b367c79/6>

Lataa tiedostona muodossa: Annot Ref Nooj

Datasets and Further Use



A. P. Cehov

KAŠTANKA

1. Hubin ictāz vedab

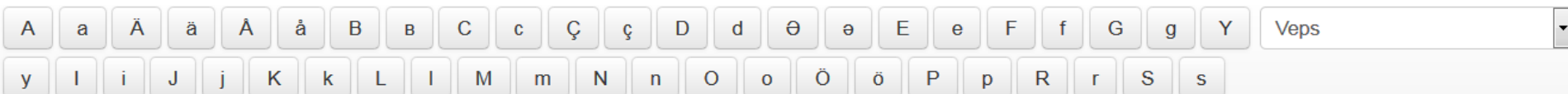
Riz nor' koir, — pomes' taksad verei koiranke, — kudam kārzal jalos koskui reboihe, joksenzi polhe i toizhe trotuaradme i holisp kaçlihe laploidme. Harvašti hān siizutelihe i ulaidusenke lendli se yhten, se toizen kylmnyden lapan i ladi kuti sanuda: „Kut neç tegihe, miše hān segoi?”

Hān comas mušti, kut hān pravadi peivān i kut jāl'gmāi putui neçile tuhmatomale trotuarale.

Pei zavodihe sidpei, miše hānen izand, mastar' Luka Aleksandrovic, pani šapkan, oti kaimioho mitcense puizen štukan, kāroutet rusktaha paikka, i heikahti:

— Kaštanka, astu.

Konz kulišti iceze nimen, pomes' taksad verei-koiranke läksi vörstakon alpei, kus hān struzkil magari, magedašti kiskostihe i tōndui izandale jāl'ghe. Lukan Aleksandrovican radon and'jad eliba diki edahan, muga miše kudei sadas kaikutcenno hiiš mastar' ij yhted kerdad cokoihe traktiraha kovidumha. Kaštanka mušti, miše tel hān vedi ictāz jalos ij luukas. Ihastusiš, miše hāndast otiba guiāimaha, hān hyppi, hurgi nutandanke heboroudten vagonoile, cokoihe kodiden vereihe i hurgui koirile jāl'ghe. Mastar' migi aigad kadoteli hāndast silmišpei, siizutelihe i karedas hānen päle kidasti. Daze kerdan tabazi kulakoho hānen reboin korvan, pudišti kerdan toizen i harvašti sanui:





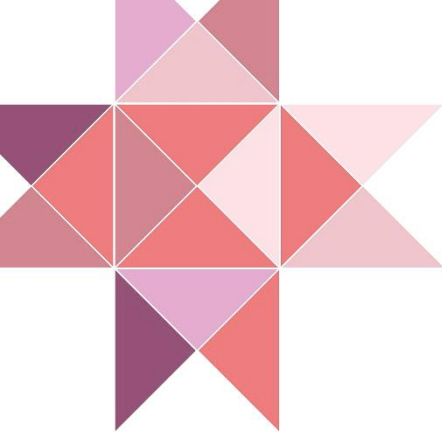
Finding the Language Communities

- How to locate people who could use the content for their benefit?
- Co-operation with universities and libraries didn't really work out
- Activity in English-oriented social media did not help us
 - No remarkable networking, contact or results via [WWW](#), [Twitter](#), [Facebook](#) or [Project Blog](#)
 - No interactivity with native-speakers



Language Communities, ie. The Great Public

- When thinking of the possible **wider audiences**, one must bear in mind that the most of the people, who speak these languages are located in Russia.
- Communication and marketing
 - Schedule for blog posts and Vkontakte messages
- Accessible user interface for Russian-speaking audience
 - [Fenno-Ugrica](#), [Uralica](#)
- Activity in social media in Russian is necessary
 - [Vkontakte](#)
 - Chat forums (for linguists etc)
 - IRC channels



Jussi-Pekka Hakkarainen

Сегодня празднуется День эрзянского языка! Эрзя является одним из мордовских языков и на нем говорят на данный момент около 500 000 человек. Портал Национальной библиотеки Финляндии Fenno-Ugrica содержит около 4000 единиц книг и журналов на эрзянском языке, выпущенных с конца XIX до середины XX веков, являясь, таким образом, крупнейшим электронным ресурсом и коллекцией материалов на эрзянском языке. Подробности и ссылки на коллекцию в нашем блоге: <http://blogs.helsinki.fi/fennougrica/2015/04/16/erzya..>

#финноугры #эрзя #мордва #язык #литература



Erzya Language Day, April 16th | Fenno-Ugrica

16 Apr at 9:14 am | Comment

12 Like 35

The Vkontakte Effect

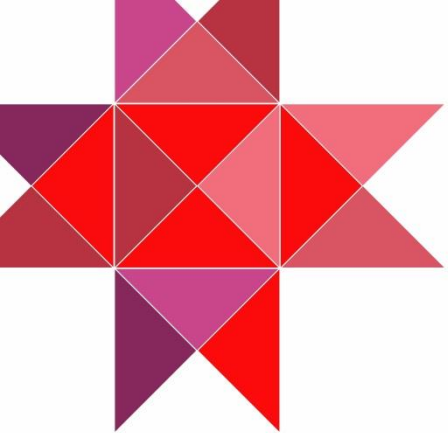
Monthly download statistics

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1437	585	867	301	983	794	748	587	489	653	381	2813	17718	8193	8271	19906	18996	9431	8159	7340	10730	6716	14522	47316	7454



Some Conclusions

- Involvement of the researchers did build up our reputation, but only among the academia.
- The great audience was reached with the help of social media. One cannot underestimate its power. We benefitted on this in several ways.
 - More active and returning users, more audience and more opportunities to find suitable user-groups etc.
 - Increased co-operation with Russian institutions (when speaking Russian)
 - Makes our work open and understandable for the great audience.



Contact Details

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blogs.helsinki.fi/fennougrica