

# UraLUID: Supporting data-driven (prosodic) research

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# Outline

- 1 Introduction
- 2 The content of the database
- 3 The structure of the database
- 4 Future plans

# Background

- *Languages under influence. Uralic syntax changing in an asymmetrical contact situation*
- Research Institute for Linguistics, Hungarian Academy of Sciences
- January 2016 – July 2017
- supported by the National Research Development and Innovation Office
- website: <http://www.nytud.hu/depts/tlp/uralic/dbases.html>

# Languages under influence

The pilot-project had a twofold objective:

- Theoretical work
  - to describe and analyze **potential syntactic** changes due to Russian contact
  - examined languages: **Udmurt**, **Northern Khanty** (Synya dialect), **Eastern Khanty** (Surgut dialect group), and **Tundra Nenets**
- Practical work
  - to collect and structure **primary data**
  - to build a linguistically annotated database of **written** and **spoken** texts, as well as of **“old”** and **“new”** data

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# Source types

	Udmurt	Synya Khanty	Tundra Nenets	Surgut Khanty
<b>“old”</b>	folklore	folklore	folklore	folklore
<b>“new”</b>	blog post	interview	newspaper spontaneous speech folklore	interview spontaneous speech

# Data types

	Udmurt	Synya Khanty	Tundra Nenets	Surgut Khanty
<b>“old”</b>	written	written	written	written spoken
<b>“new”</b>	written	spoken	written spoken	written spoken

# Spoken data

	Speakers	Place of recording	Length	Format
Synya Kh.	1	Ovgort	01:08:22	.wma
Tundra Nenets	1	Moscow	01:57:40	.wav
Surgut Kh. (new)	2	Kogalym	00:28:58	.wav
Surgut Kh. (old)			00:36:17	.wav



# The Synya Khanty spoken data

- the original data were collected within the frame of the project entitled **In the Khanty way** (<http://hantisirn.nytud.hu/>)
- source: interviews
- genre: expository, narrative texts

# The Tundra Nenets and Surgut Khanty spoken data

- the spoken data were collected during our fieldworks
- source: spontaneous speech data (elicited by graphical materials), “read” speech
- genre: narrative, procedural, expository texts

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# Data available on our website

## 1 Metadata

- title of the text
- text ID
- pages
- file name
- genre
- token number
- (sub)dialect
- age of the speaker
- gender of the speaker

# Data available on our website (cont.)

<http://www.nytud.hu/depts/tlp/uralic/dbases.html>

## 2 Text

- original transcription
- Cyrillic
- FU transcription(s)
- **IPA**

⇒ the original text split into sentences

## Data available on our website (cont.)

- ③ Morphologically analyzed text: .tsv files consisting of 15 columns
- 1-9: the token and its transcriptions
  - 10: (segmented) token
  - 11: lemma
  - 12: Hungarian gloss
  - 13: English gloss
  - 14: POS tag (and semantic label if there is any)
  - 15: RUS label (if the word has Russian origin)

# Data available on our website (cont.)

## 4 Translation

- **English**
- Russian
- German
- Hungarian

⇒ every translation is sentence-level aligned with the original text

# Data available on our website (cont.)

## 5 ELAN files

- .eaf file (containing data on sentence-, token- and morpheme-level)
- the .eaf files are created with a script written in Python3
- the script uses the Pympi module developed for creating and processing ELAN and Praat annotation files (<http://github.com/dopefishh/pympi>)
- the original sentences are aligned to the time slots of the audio file
- the other pieces of information are connected to the sentences via symbolic references



## Data in ELAN

	00:02:41.000	00:02:42.000	00:02:43.000	00:02:44.000
default [207]				
IPA [207]	nu i u:lti loʃat xɔ:tn u:lti loʃat xoʃatət u:sət.			
tokenized [1450]	nu	i	u:lti	loʃat xɔ:tn u:lti loʃat xoʃatət u:sət .
rme [1450]	nũ	i	ulti	lőwat xotn ulti lőwat xőjatət usət .
rus [1450]	RUS	RUS	-	- - - - -
segmented [1450]	nũ	i	ul-ti	lőwat xot-ən ul-ti lőwat xőjat-ət u-s-ət .
morphemes [2005]	nũ	i	ul ti	lőwat xot ən ul ti lőwat xőja,ət u s,ət .
lemma [1450]	nő	i	ulti	lőwat xot ulti lőwat xőjat ulti .
POS [1450]	Inter	C	V	A N V A N V .
eng_gloss [2005]	well	and	to.b, PTC, sized	hou, LOC to.b, PTC, sized man PL to, PR, 3P, .
hun_gloss [2005]	na	és	van PTC, méretű	ház, LOC van PTC, méretű emb, PL var, PR, 3P, .
eng_translation [207]	In such a large tent, that could be used to living well, there were as many people, as could fit well.			
hun_translation [207]	Egy akkora sátorban, amiben már jól lehetett lakni, annyi ember volt, amennyi jól elfért.			

# How to use the UraLUID database?

- ① use the .eaf files with the corresponding audio files:
  - download the latest version of ELAN:  
<https://tla.mpi.nl/tools/tla-tools/elan/>
  - download the Charis SIL font package:  
<https://software.sil.org/charis/>
  - download the .eaf and audio files:  
<http://www.nytud.hu/depts/tlp/uralic/dbases.html>
  - open ELAN → Open... → choose the needed .eaf file and the corresponding audio file
- ② use the .tsv files
  - download the .tsv files
  - use Unix commands or your dear old statistical tools

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# Future plans

Tundra Nenets spoken data:

- Transcription
  - Cyrillic
  - FUT
  - IPA
- Morphological analysis  $\Rightarrow$  improving the Giellatekno's morphological analyzer
- POS-tags
- Translation
  - Russian
  - English

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# Thank you for your attention!

<http://www.nytud.hu/depts/tlp/uralic/dbases.html>