



Filozofická
fakulta
Faculty
of Philosophy

Jihočeská univerzita
v Českých Budějovicích
University of South Bohemia
in České Budějovice



Université de Franche-Comté, Besançon



The NOOJ Association

NOOJ 2016

International Conference

Book of Abstracts

České Budějovice (Czech Republic)

9-11 June 2016

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NOOJ 2016 International Conference – Book of Abstracts

Edited by Jan Radimský

Published by the University of South Bohemia in České Budějovice (2016)

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Addition of IPA transcription to the belarusian NooJ module

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In earlier researches [1] we have shown that it is possible to represent phonetic level of language in NooJ. We demonstrated this new, up to this time undeveloped possibility of NooJ, in the Belarusian Module by creating dictionary with transcriptions and by developing morphological NooJ grammars for creating a phonetic transcription for arbitrary orthographic word.

Created dictionary with transcriptions contains four types of phonetic transcription: Cyrillic, International Phonetic Alphabet (IPA) [2], simplified IPA and X-SAMPA.

However, there are still some issues in generating of phonetic word representations. One of them is connected with stress position in some types of transcriptions (in particular IPA transcription), where stresses (') are put before the stressed syllables in the phonetic word transcription. The task of adding of IPA transcription requires splitting words into syllables. Thus, firstly we need to solve the problem of syllabification of words in Belarusian.

The main purpose of the research presented in this paper is to introduce syllabification process into the producing and addition of IPA transcriptions to the Belarusian NooJ Module. Furthermore, the results of the research can be used for solving different educational and linguistic problems. Process of syllabification can also be implemented into other computational linguistic programs and into NooJ modules of other languages.

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