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This volume contains the abstracts of the International conference “NooJ 2015”. The research presented covers different aspects of natural language processing using NooJ, including formalizing such levels of linguistic phenomena as syllabification, phonemic and prosodic transcription, multiword units and discontinuous expressions, local and structural syntax; transformational syntax and paraphrase generation, semantic analysis and machine translation, etc.

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У дадзеным зборніку прадстаўлены тэзісы дакладаў Міжнароднай канферэнцыі “NooJ 2015”. Разглядаюцца розныя аспекты апрацоўкі натуральнай мовы з выкарыстаннем лінгвістычнага асяроддзя распрацоўкі NooJ, улічваючы фармалізаваўныя такія напрамкаў лінгвістычнага аналізу як склададзяленне, фанетычная і прасадычная транскрыпцыі, устойлівыя выразы і дыскрэтныя слоўныя канструкцыі, лакальны і структурны сінтаксісы, трансфармацыйны сінтаксіс і перафразаванне, семантычны аналіз і машынны пераклад і г. д.

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GRAMMARS FOR THE SENTENCE INTO PHRASE SEGMENTATION: PUNCTUATION LEVEL

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This paper deals with, so called, punctuational phrases in the sentences and their intonation type marking in Belarusian electronic texts. Such marking allows to implement the algorithm of intonationally coloured (expressive) synthetic speech and to avoid its monotony.

There are 4 main categories of intonation types: finality (P), non-finality (C), interrogation (Q) and exclamation (E). The intonation types, constituting these categories, are designated by the category symbol (P, C, Q or E) and their subtypes marked the proper index (1-n).

The indicating model works as follows:

<PHRASE TYPE="C1">Амаль забылася</PHRASE> і <PHRASE TYPE="C7">здарэнне з лазняй</PHRASE>, а <PHRASE TYPE="C1">потым </PHRASE> і <PHRASE TYPE="P4">лазню злізаў Дняпро</PHRASE>. <PHRASE TYPE="C7">Быццам і не было ні людзей</PHRASE>, ні <PHRASE TYPE="P4">закуранай нізкай будыніны на беразе</PHRASE>.

Each phrase in these sentences is tagged with an intonation index, namely: “C1” – non-final “i”-intonation with “i” (a Belarusian co-ordinating conjunction meaning “and”) stating the end of the phrase, “C7” – non-final intonation of “comma staying before a co-ordinating conjunction” with a comma stating the end of phrase, “P4” – “full stop”– intonation with a full stop stating the end of phrase.

When marking intonation type of a phrase, not only punctuation marks are taken into account but also the nearest context in a text. For example, the intonation type “Q12” corresponds to each even phrase in a line of consecutive “Q1”– phrases – interrogative phrases containing an interrogative word:

<PHRASE TYPE="Q11">Як так атрымалася</PHRASE>? <PHRASE TYPE="Q12">Чаму ты мне нічога не сказаў</PHRASE>?

The algorithm developed represents the initial stage of prosodic processing in a speech synthesizer, the following step will be to provide segmentation of punctuational phrases into syntactic phrases.

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