Aims of the study
The present paper focuses on some formal and functional properties of reduplication in two Permic (Udmurt and Kom-Permyak) and one Volgaic (Meadow Mari) language of the Uralic language family. The languages examined in this study are among languages of the ongoing project Typological Database of the Volga Area Finno-Ugric Languages (VTDB), and from the Turkic languages of the Volga area.

Theoretical background: the notion of reduplication
1. Approaches to the study of reduplication
Reduplication can be broadly understood as the repetition of a linguistic constituent to form a new constituent with a different function. The phenomenon can be discussed, for instance, within the framework of Sign-Based Morphology, Morphological Doubling Theory (see, e.g., Inkelas & Zoll 2005; Jakobson & Zukoff 2015). According to the MDT, for example, duplication can be classified as phonological or as morphological. In the case of typical phonological copying, “small pieces of phonological structure are copied to satisfy a phonologically well-formedness constraint” (Inkelas & Zoll 2005: 2), while the clearest cases of morpho-semantic feature duplication are those which are motivated by phonological well-formedness but rather have a morphological or syntactic motivation and can be phonologically completely distinct – the duplicates are expected to be matched only semantically (cf. Inkelas & Zoll 2005).

Structurally, we can distinguish two basic types of reduplication: completeternal and partial (Steckauer, Valera & Kortvélyessy 2012: 107). Other canonical subtypes are, for example, echo reduplication, synonym reduplication, and syntactic doubling (Inkelas 2014: 169–170).

2. Reduplication as an inflectional/derivative device
Reduplication can be used to perform a wide range of both derivational and inflectional functions. It can change the word class and often carry new meanings, and, can, for instance, change the valency of verbs. As an inflectional device, the process is frequently employed for encoding plurality of nouns, or used to encode aspecific distinctions (cf. Inkelas 2014, Brand 1998).

However, the derivation-inflation relation also having a clitic-like nature itself, there are many examples regarding cases of reduplication that are not so clear-cut. Moreover, some of the common functions of reduplication shares the properties of both derivational and inflectional parts of this cline (cf., e.g., evaluations in Kortvélyessy 2015: 22–31; Inkelas 2014: 175–176).

3. Evaluative morphology
In this presentation, evaluation is treated as “a continuum such that prototypical cases express the meaning of quantity under or above the default value.” The “default quantity” is rather a relative concept: these reference points are influenced by extralingual factors: culture, experience and knowledge of the speakers. (Kortvélyessy 2015: 41–42)

Evaluatives in the Volga Area Finno-Ugric Languages
The formation of expressive, evocative or onomatopetic formations is among the most common functions of reduplication in the languages of VTDB (see, e.g., Riese 2015, Shlyakhova 2013). It is also as in the Turkic languages of the area (see, e.g., Ishakova 2015, Semenova & Ivanova 2015). In Bashkir (cf. Ishakova 2015: 3595) and Meadow Mari, for example, reduplication can even change the word class: (1) Meadow Mari manel–manel ‘gossip’ ↔ manel ‘tide (rise)’ (Riese 2015: 3528). Beyond these functions, evaluative evocative formations are frequently used in the area by both Finno-Ugric and Turkic languages. The main semantic functions of the evaluative reduplicates are as follows:

1. Higher quantity of a quality (augmentatives)

Total reduplication
(2) Udmurt (Kelekov & Saunier 1994: 112)

godd → gørd
red → red
very red
(3) Udmurt (Shlyakhova 2013: 1331)
amoj → amoj
vali-sty
well → well understand-INF
‘to understand very well’
(4a–b) Kom-Permyak (Informant)
göd → göd basök → basök red → red beautiful → beautiful
very red ‘very beautiful’
‘In Kom-Permyak/Coma: reduplications affect stems’
(5a–b) Meadow Mari
kanda → kanda
šokokin → šokokin mëndal-ä
blue → blue
‘his he gives a very warm hug’
(Riese 2015: 3287) (Informant)

Partial reduplication
(6) Meadow Mari
jokjäm-tame → jokjäm-tame
friend(2) → friend(2)
‘my friend is fit as a fiddle’ (www.marilanguage.com)
‘due to Turkic’ (Tatar and Chuvash) influence (Riese 2015: 3287)
(7) Tatar
kap → kapat
RED – old
‘very old’ (Kändy 2015: 3411)

Echo reduplication
(8) Udmurt
Kyre → meřeč
crookedly → RED
crooked → RED
‘very crooked’ (Shlyakhova 2013: 1330)
(9) Meadow Mari
Kyre → meřeč
RED-PREC-RED beautiful-PREC-RED → beautiful
very red ‘very beautiful’
(11) Udmurt
ark (a)cher (a)cher (a)cher
very beautiful
‘(Mari) postposition of from’ ‘motor of very motor’ ‘very beautiful’, or particle at: motor - motor ‘very beautiful’
(Informant)
(13) Udmurt
kašin → kašin-zi
kašin-zi
strength → strength-LA
‘to take away all his/her might.’ (Shishman 2014: 524)

2. Lower quantity of a quality (diminutives)

(14a) Kom-Permyak
yug – yug (Shlyakhova 2013: 1330)
(14b) Udmurt
mëndok – mëndok (Shlyakhova 2013: 1331)
(14c) Meadow Mari
polki – polki (Informant)
‘hard’ → ‘hard’, ‘hardly’, ‘barely’

Reduplication as an aspectual device in the languages of the VTDB
As has already been mentioned, reduplication is often used to encode various aspectual values: cross-linguistically, reduplication is not used as an aspectual marker in the OTDB (Kortvélyessy 2014: 173–174), Steckauer, Valera & Kortvélyessy 2012: 126–127).

1. In the languages of the VTDB (at least in Udmurt and Meadow Mari), the use of a verb can express the longer duration of an imperfective non-phrillsural event. These kinds of formations can be understood as a reduplicative – they express the higher quantity of (the duration of) an action than the prototypical default value (cf. Kortvélyessy 2012: 41–47). This is not uncommon in the case of the languages of the VTDB either, at least in Surtg Khanty and Hungarian (Csupszegi 2015, Gyulai 2015: 25).

(15) Udmurt
pugázhyxt / – wala: bök (ság) / – uj–bök (ság)
‘you work all summer (and still, you can achieve nothing)” (Shishman 2014: 529)

2. From an aspectual point of view, some reduplicated verbs can also have an effect on aspectual language systems (they can mark, for example, plunarticality): Meadow Mari ung–ung ‘repeatedly’ ↔ ung ‘aenec’, Udmurt sufat – sufat ‘repeatedly’ ↔ sufat ‘aenec’. Hungarian egyszer – egyszer ‘a few times’ ↔ egyszer ‘once’.

3. Doubling of suffixes and verbal particles
In some Northern Udmurt dialects, the plunarticality and the aspectuality can sometimes be intensified using reduplicated foquentative suffixes: (16) Udmurt (Kelekov & Saunier 1994: 125)

man-pa – too
győ–pá
too
győ–pá
‘someone/some girls to sing’ (FRE–PRES–PF–3PL)
Udmurt song–pl–ACC
‘A long time ago, men and girls used to Sing Udmurt songs.’

In Kom-Permyak, plunarticual or habitual meaning can also be expressed by doubling the foquentative suffix.

‘In the Ugric languages, verbal prephras may be reduplicated and provide different meanings that can be linked with aspectuality, and/or Aktionsart. Repeated prephras can express, e.g., frequentative Aktionsart (regular repetition in the same perfective prephras) in Hungarian (Kieser 2006: 149–155).

Conclusions
Reduplication is often a tool for expressing augmentatives in both the Turkic and Finno-Ugric languages of the Volga area. This word-formation process is not regarded as a typical nature of the Finno-Ugric proto-language, but it was already used for the evaluate classification of some languages and other adjectives in Old Turkic; The Turk partial reduplication in example (7) (and the Meadow Mari example (6)) is claimed to be a feature of Old Turkic as well (Kortvélyessy 1994: 65). The derivations of diminutives using reduplication seems to be much less common in the area.

Reduplication has a role in encoding aspectual values as well: in the languages of the VTDB, different aspecific distinctions linked to imperfective aspect are marked with reduplicated verbs, suffixes, and adverbs.

About the database and acknowledgments
The Typological Database of the Volga Area Finno-Ugric Languages (VTDB), is the Typological Database of the Uralic Languages (VTDB) compiled by Hrusa et al. (2015), the second major step towards the creation of a complete online typological database of the Uralic languages. Both the VTDB and the VTDB aim at analysing over 200 morpho-syntactic parameters covering a variety of topics from profiling the encoding of different grammatical relations.

This presentation was kindly supported by the NNB project (K 125328) “Typological Database of the Volga Area Finno-Ugric Languages”