

Veronika MILANOVA, University of Vienna **Draft. Not for quotations!**  
Sampsa HOLOPAINEN, University of Helsinki  
Jeremy BRADLEY, University of Vienna

**Contact phenomena in Indo-European kinship and social terms and beyond (a pilot study with special focus on the Iranian and Uralic languages in the context of Central Eurasia)<sup>1</sup>**

ABSTRACT. — Terms of relatedness can belong to both basic and cultural vocabulary. Borrowing of such words happens fairly often in multilingual communities. Therefore, research of this lexical field should always include both genealogical and areal perspectives. This pilot study presents an effort to educe areal features of Central Eurasian terms of relatedness and how they are realised in the Uralic and Iranian languages. For this purpose, we have collected and analysed (Indo-)Iranian borrowings in the Uralic languages and Turkic borrowings in both Uralic and Iranian languages. The evidence indicates that not only separate words but whole structures can be borrowed: most languages of Central Eurasia tend to have different terms for older and younger siblings, i.e., they have so-called relative age distinction.

**1. TERMS OF RELATEDNESS. THEIR PLACE IN THE VOCABULARY AND BORROWABILITY.**

Terms of relatedness (first of all, kinship terms and age-gender ascriptions) might intuitively be assumed to be part of the basic/core vocabulary of any languages, i.e., words with universal meanings which are the least likely to be borrowed. The definition of basic vocabulary, much like the definition of semantic/lexical universals, is however rather ambiguous.

The question of basic words and meanings was first raised in the scope of the lexicostatistical research tradition. The original Swadesh lists (SWADESH, 1950: 161) contained 215 words and included 9 terms of relatedness: ‘brother

---

<sup>1</sup> The research was carried out thanks to the financial support of the Austrian Academy of Sciences (Doc-Stipendium, ÖAW) and of the Faculty of Arts of the University of Helsinki. We would also like to express our special gratitude to András CZENTNÁR (Eötvös Loránd University Budapest), who contributed insights on Turkic influence and borrowings. Further acknowledgements can be found at [kinship.mari-language.com](http://kinship.mari-language.com)

In this article Central Eurasia is understood as the historical and contemporary contact zone between the respective speaker communities: Northern Iran, Afghanistan, Tajikistan, Kazakhstan, Turkmenistan, Kyrgyzstan, Uzbekistan as well as (historically and contemporarily) Turkic- and Uralic-speaking regions in the Volga, Ural, and Western Siberian regions of the Russian Federation. As regards difficulties defining the term “Central Eurasia”, see [cesww.fas.harvard.edu/ces\\_definition.html](http://cesww.fas.harvard.edu/ces_definition.html); [www.iub.edu/~ceus/](http://www.iub.edu/~ceus/); [www.centraleurasia.org](http://www.centraleurasia.org)

(elder)', 'child (son or daughter)', 'father', 'husband', 'man', 'mother', 'sister (elder)', 'wife' and 'woman'. The later more famous list of 100 words (SWADESH and SHERZER, 1971: 283) only includes 'man' and 'woman'. Gerhard DOERFER'S approach in his monograph on borrowing of body parts designations (DOERFER, 1988: 56ff.) was to differentiate between *Kerngrundwörter* (= KGW, which are highly resistant to borrowing) and *Randgrundwörter* (= RGW, with a lower resistance to borrowing). In the course of a theoretical discussion he also mentioned terms of relatedness (ibid.: 98–99) and assumed that KGW must refer to close relatives while RGW must refer to distant relatives. German (or English) kinship terms corroborate this suggestion: e.g., *Vater*, *Mutter*, *Sohn*, *Tochter*, *Bruder*, *Schwester* are inherited words (KGW) and *Onkel* (← Fr. *oncle*), *Tante* (← Fr. *tante*), *Cousin* (← Fr. *cousin*), *Cousine* (← Fr. *cousine*) are borrowings (RGW). However, the further one ventures out of Western Europe, the less valid this approach seems to be.

Although Doerfer and Swadesh made some valuable observations in their research, their approaches are mostly intuition-based and Eurocentric, and hence must be viewed with caution. In recent decades the problem of basic vocabulary and lexical universals has been studied and discussed by scholars involved in two long-termed empirically-based projects: The Loanword Typology (LWT) project and the Natural Semantic Metalanguage (NSM) project. Within the scope of the LWT project, *The Leipzig-Jakarta List of basic vocabulary* (TADMOR, 2010: 68ff.) was created. It includes only one term of relatedness: 'child'. The NSM uses a highly complex methodology distinguishing semantic primes/primitives (the smallest elements of meaning) and semantic universals/molecules (complex meanings presenting universals of human experience) (cf. WIERZBICKA, 2016: 410). The list of semantic primes has only one concept that can roughly be viewed as a term of relatedness: 'people'. As for semantic universals, they also include 'mother', 'father', 'birth' ['born'], 'wife', 'husband'; 'man', 'woman', and 'child'. However, such seemingly trivial concepts as 'brother', 'sister', 'sibling', 'son', 'daughter', 'girl', and 'boy', as lexicalised in English, can be viewed as tentatively universal only in the context of contemporary Europe (ibid.: 412; GODDARD and WIERZBICKA, 2014: 22–54).

The discussion above indicates that most terms of relatedness do not belong to the basic vocabulary in a global perspective but rather constitute a culturally determined lexical field. The borrowing rate of 15% in this semantic domain counted by the LWT (TADMOR, 2010: 64), which is not extremely high but also not overly low, is in concord with this conclusion. Borrowing of such terms

may present cases of both *cultural* and *core borrowing* and takes place especially frequently in bilingual and multilingual language environments (cf. MYERS-SCOTTON, 2002: 239). Territorial factors play a great part determining kinship semantics and structures. One can speak of strong regional / areal trends (in Europe, Africa, South Asia etc.) in the categorisation of this semantic domain. Likewise, terms of relatedness in Central Eurasia follow certain patterns regardless of their genetic affiliation.

## 2. KINSHIP TERMS BORROWED FROM INDO-IRANIAN INTO URALIC

The reconstruction of Proto-Uralic kinship terminology is more difficult than the reconstruction of the same category in Indo-European. Overall, the number of lexemes that can be reconstructed for PU in general is much lower than for PIE, and among the kinship terms in individual branches of Uralic there are many later loans from Indo-European and Turkic.

The following Proto-Uralic words denoting kinship are found in SAMMALLAHTI'S (1988) wordlist: *\*ańa* 'sister-in-law', *\*ekä* 'uncle (paternal)', *\*emä* 'mother', *\*ina* 'mother-in-law', *\*iśä* 'father' (irregular, see below) *\*jppi* 'father-in-law', *\*käliw* 'in-law', *\*čečä* 'uncle', *\*koska* 'aunt', *\*mińä* 'daughter-in-law', *\*natiw* 'in-law', *\*orpa* 'orphan, relative' (problematic see below). The phonological reconstruction and semantics of many of these terms might need some updating, but that has to be left for future research.

The loanwords presented below reflect several different layers of Indo-Iranian borrowings into Proto-Uralic and its various branches, starting from Proto-Indo-Iranian. There have been suggestions that some kinship terms were borrowed already from PIE to PU, but these etymologies are problematic in one way or another. The prominent examples are **PU** *\*orpa* 'orphan', about which see below, and **PU** *\*käliw* 'in-law', possibly PIE *\*ǵl̥H-* (JOKI, 1973: 267 with references); this is probably a false etymology, stemming from the incorrect analysis of the IE word as an old *-uH-* stem; SIMON 2018, cf. also MAJER, 2018 for the reconstruction of the IE word. Also, KOIVULEHTO'S (1991: 79–82) etymology for **PU** (?) *\*inši* 'human' (cognates in Finnish and Mordvin) *\*inši* 'human' from PIE or North-West-Indo-European *\*ǵnh<sub>1</sub>o-* (cf. OI *jā-* 'descendant') has to be rejected because of very unlikely sound substitutions, namely the substitution of the IE laryngeal by Uralic *\*š* and *\*ǵ* by Uralic *\*i*.

Some terms denoting kinship relations were borrowed from an Alanian-type language into Hungarian and Permic, possibly also into Ob-Ugric at a relatively

late period (HELIMSKI, 2001; KORENCHY, 1972).<sup>2</sup>

In addition to Indo-Iranian loans, various Germanic and Baltic kinship terms were borrowed into the westernmost Uralic branches, Finnic and Saami, such as Finnish *veli* ‘brother’ ← Germanic *\*sweljan* ‘brother-in-law’ (*LÄGLOS* s.v. *veli*), Finnish *morsian* ‘bride’ ← Baltic *\*marti* ‘bride; daughter-in-law’ (JUNTTILA, 2015: 94).

## 2.1. Convincing etymologies

### 2.1.1. Mordvin E *miřd’e*, M *miřd’ü* ‘man, husband’; Udmurt *murt*, Komi *mort* id. < PU *\*mertä*

← PIIr. *\*mřta-* ‘dead, mortal’ > OI *mřtá-* ‘dead, mortal’ and *amřta-* ‘immortal’, Avestan *aməša-* ‘id.’ (cf. Greek *βροτός* ‘mortal’) (*NIL* 489ff. with references)

or ← Pre-IIr. *\*merto-* > OI *márta-* ‘mortal’ (KOIVULEHTO, 2016: 231; KATZ 1983: 174–176)

According to KOIVULEHTO, PU *\*mertä* is borrowed from PIIr. *\*mřta-* with *\*er* as the substitution for *\*r*. Although the Indo-Iranian etymology of Uralic *\*mertä* is an old idea, various details of the etymology are quite unclear; there are competing views on whether the word is borrowed from the zero-grade verbal adjective *\*mřta-* (< PIE *\*mřtó-*) or from the substantive *\*marta-* (< PIE *\*merto-* or *\*morto-*).

KATZ (1983) has argued for the second scenario, noting that the Uralic loan would support the reconstruction of *e-* rather than *o-* grade to the pre-form of the Indo-Iranian word. KOIVULEHTO (2016: 230–231) argued that Greek *μορτός* could be an exact parallel to the Indo-Iranian form *\*martas*; this would prove that the word has to reflect the PIE *o-* grade. BEEKES (2010: 969) also supported the connection of Greek *μορτός* and Indo-Iranian *\*martas*, deriving these from PIE *\*mortos*. *NIL* (489–491) reconstructs PIE *\*mertos* as the pre-form of the

<sup>2</sup> Among the Alanian (~ Ossetic) loanwords in Hungarian there are several kinship and social terms: *asszony* ‘lady’ (← *\*(a)χšaina-* > Ossetic *æfsin*, *æfsijnæ* ‘mistress of the house’ [MUNKÁCSI, 1901: 146–147; JOKI, 1973: 253; *EWUng* s.v. *asszony*; RÓNA-TAS & BERTA, 2011: 1331]), *özvegy* ‘widow’ (← Alanian *\*widawa-čī*, > Ossetic *idæz* [MUNKÁCSI, 1901: 513–514; JOKI, 1973: 299; RÓNA-TAS & BERTA, 2011: 1334]), and possibly some less certain etymologies like *legény* ‘young man’ (← ? Iranian/Alanian *\*lākwen*, cf. Ossetic *læg* ‘man’, *lægwæn* ‘son’ [MUNKÁCSI, 1901: 438–9; SKÖLD, 1925: 29; HELIMSKI, 2001; RÓNA-TAS & BERTA, 2011: 1333]) and *ember* ‘human’ (← ? Iranian/Alanian *\*ham-bārya-* ‘fellow rider, fellow fighter’, cf. Ossetic *embal* [ABAEV, 1965: 530; HELIMSKI, 2001]). Due to the lack of space and both due to the different historico-geographical circumstances, the etymologies will not be analysed systematically here. We intend to treat them comprehensively in a future publication.

Indo-Iranian word and specifically mentions KATZ'S etymology. Regarding Greek μορτός, *NIL* refers to SCHWYZER (1939: 344), who argues that μορτός is originally an Aeolic word showing the Aeolic Greek vocalization *or* of PIE \**r*. Both BEEKES and CHANTRAINE (2009: 713) have argued that μορτός is not an Aeolic form based on its appearance in Doric names.

Semantically PIIr. \**marta-* is the better option for the origin of the Uralic word, since no meaning 'human' has been attested for reflexes of \**mrtó-* in Avestan or OI, as Martin Kümmel has observed (p.c.).

According to STEER (2015: 76–77), PIIr. \**marta-* is a substantivizing *vṛddhi*-formation; Steer lists a number of this kind of forms in PIE and its daughter-languages, such as PIE \**ǵnh<sub>1</sub>to-* > \**ǵenh<sub>1</sub>to-* > PG \**kenPa-* > German *Kind* 'child'; here e-grade substantives are formed from zero-grade verbal adjectives. Although the Indo-Iranian word has no parallels in other Indo-European languages, it fits well into the category of derived substantives and there is no reason to oppose the idea that Uralic \**mertä* is borrowed from Pre-IIr. \**merto-* before vowels /e/ and /o/ had become /a/ in PIIr. (for the Pre-Indo-Iranian loanword layer in Uralic, see KOIVULEHTO, 2016: 289). Steer notes that due to the lack of non-Indo-Iranian cognates, the noun was probably formed in Pre- or Proto-Indo-Iranian. Uralic evidence indicates that the stem was already present in Pre-Indo-Iranian.

Finnish (arch.) *marras* (< PFi \**martas*) 'dead, bound to die' is a parallel borrowing from the same Indo-Iranian word group (*SSA* s.v. *marras*); \**ar* here could be substitute of either \**ar* or syllabic \**r*, so either \**marta-* or \**mṛta-* would be a semantically plausible origin.

### 2.1.2. Mordvin E *sazor* 'younger sister'; Udmurt *suzer* id., Komi *sozor* 'twin-threads (knitting mistake)' < PU \**sasarV*

← PIIr. \**swasar-* > OI *svásar-* 'sister' (MUNKÁCSI, 1901: 66, 79–80; JACOBSON, 1922: 181–182, 224; JOKI, 1973: 312; UEW: 752–753)

The Mordvin and Permic words for 'younger sister' regularly reflect \**sasarV*, clearly an old borrowing from PIIr. \**swasar-* to PU. The word was probably borrowed with the general meaning of 'sister'; the meaning 'younger sister' developed later through Turkic influence (cf. Udmurt *apa(y)* 'elder sister', Moksha Mordvin *aka* id., Turkic borrowings, cf. WICHMANN, 1903, MÉSZÁROS, 1999: 172; also see below 3.3.)

Mari M *šüžar*, H *šžar* 'younger sister' has been derived from the same proto-form (*UEW* gives a question mark before the Mari form), but because of its irregular vocalism it has to be a separate borrowing from some other branch

of Indo-European, possibly from Baltic *\*sesor-* if it is not a later borrowing from Permic (Udmurt). It is well known that the Baltic word for ‘sister’ was borrowed into Finnic (Fi *sisar*, Livonian *sezār*, and forms in various Finnic languages cannot be derived from a unitary Proto-Finnic reconstruction and reflect parallel borrowings according to KALLIO, 2018: 255 footnote 6). Komi *sozor* shows a peculiar semantic development but is a phonologically regular cognate of Udmurt *suzar*.

**2.1.3. Finnish *orpo*, *orpoi* ‘orphan’; Saami N *oarbbis* ‘orphan; lonely and deserted’; Mordvin E *urus*, *uros*, M *urəs* ‘orphan’; Hungarian *árva*; Khanty V (*jəŋk-*)*urwi* ‘orphan’**

~ ? Fi *orpana* ‘cousin, relative’, *orvas* ‘relative’; Saami N *oarbbinaččat* (pl.) ‘siblings’; Mordvin E *urva*, M *arva* ‘wife’; Mari M *rfeze*, H *arfeze* ‘young, new; young boy, child’

? < PU *\*orpa*

← PIIr. *\*(H)arbha-* > OI *árbha-* ‘small, weak’

(MUNKÁCSI, 1901: 145; JACOBSON, 1922: 53, 114, 184; JOKI, 1973: 297; KOIVULEHTO, 1991: 106; 2016: 218, 387; UEW: 343, 722)

The words denoting ‘orphan’ are certainly borrowed from Indo-European; they are usually assumed to be from Indo-Iranian. PU *\*o* from PIIr. *\*a* is a frequent sound substitution (see KOIVULEHTO, 2016 for numerous examples). However, reconstructing the PU forms is difficult due to various historic derivational suffixes contained in the modern forms; some of the formally and semantically divergent forms might result from later parallel borrowings from Iranian. NIRVI (1952) considers the Uralic words for ‘orphan’ and the ones denoting young relatives as etymologically distinct, and BERECZKI (2013) has noted that the Mari word is borrowed separately from Indo-Iranian. The UEW (343, 722) also presents too different entries for the ‘orphan’ and ‘relative’ words, although the two reconstructions which it offers are almost identical. The semantics of both ‘orphan’ and ‘young relative’ can be derived from the Indo-Iranian *\*arbha-* ‘small, weak; young’ (EWAia I/ 119–120), but the exact relationship of these Uralic words needs more research.

**2.1.4. Komi *veręs* ‘husband’ (< derived from *ver* ‘man’ < Pre-Permic *\*wira*)**

← PIIr./PIr. *\*wiHra-* > OI *vīrā-* ‘man’ (MUNKÁCSI, 1901 68, 498; JACOBSON, 1922: 110 footnote 2; KATZ, 1983: 175)

The Komi word has a cognate in Udmurt, the first part of the compound *vor-goron* ‘man’ (ZHIVLOV, 2010). The borrowing into Permic has to be relatively

early as it predates Permic vowel-shifts (PU *\*i* became Komi *e*, Udmurt *o* in Uralic *\*-a/ä-*stems; see SAMMALLAHTI, 1988, ZHIVLOV, 2010). This etymology was first presented by MUNKÁCSI (1901) but in many etymological sources the Komi word is connected with Finnish *orja* ‘slave’, Udmurt *var* id. and their cognates in other Uralic languages (UEW s.v. *\*orja*), which cannot be correct based on irregular vowel relations. It remains unclear whether Old Permic *ver* ‘slave, servant’ is etymologically connected with the modern Komi word.

KATZ (1983) has also connected SaN *varris* ‘male reindeer’ to the Komi word. While this North Saami word could in principle reflect PU *\*wira*, it is more probably related to Proto-Saami *\*orēs* which is usually considered as borrowed from Germanic *\*ūruz* ‘aurochs’; the words in other Saami languages regularly reflect this pre-form, the North Saami vowel in the initial syllable has been delabialized (see SSA s.v. *uros*; UEW: 545; LÄGLOS s.v. *uros* and HOLOPAINEN, 2016: 58–61).

### 2.1.5. Komi *zon* ‘son’ (< Pre-Permic *\*zana*)

← Iranian *\*zana-* (from PIE *\*ǵenh<sub>1</sub>-*), > Ossetic *zænæg* ‘son’ (LYTKIN and GULYAEV: 105–106, 1999; KOIVULEHTO, 2016: 224, 297)

This must be a relatively late Iranian borrowing from Iranian due to the initial *z-* not found in inherited Pre-Permic vocabulary in Komi, and the vocalism.

## 2.2. Doubtful etymologies

### 2.2.1. Hungarian *ara* ‘bride; (OHu) brother of mother or sister’; Khanty *O ordi*, Kaz *worti* ‘mother’s younger brother’; Mansi N *ār*, LM *oår*, LO *ār* ‘relative from mother’s or wife’s side’

← ? Alanian *\*awra-* ~ *\*arwa-* ‘brother’ > Ossetic *rvad*, *ærvadæ* (< PIr. *\*brātar-*) (MUNKÁCSI, 1901: 133, 643; KORENCHY, 1972: 47–52)

Contrary to claims by KORENCHY (1972), these words cannot be regularly derived from a common Proto-Ugric form: already SKÖLD (1925) considered this etymology uncertain for phonological reasons, and the Ob-Ugric cognate set is not mentioned by either of the major works on Ob-Ugric vocalism and etymology, HONTI (1982) and ZHIVLOV (2006). Although UEW (832–833) reconstructs a Proto-Ugric form *\*arV* for this word, the Mansi reflexes are marked with a question-mark and their relation to the Khanty and Hungarian words remain unclear. The Hungarian, Khanty and Mansi words might be parallel borrowings from Alanian, but it is uncertain whether the Khanty word has a connection with the other words mentioned here: based on DEWOS (182)

it can be connected with the other words mentioned here if it can be derived from Proto-Khanty *\*ar* + a suffix *-tj*. DEWOS does not mention the possible Iranian etymology of the Ob-Ugric words.

### 2.2.2. Mari M *mariy*, H *marâ* ‘man, husband; Mari (ethnonym)’

← ? Iranian *\*marya-*, cf. OI *márya-* ‘young man’

(MUNKÁCSI, 1901: 456; JOKI, 1973: 280)

This etymology has been suggested already in the early 20<sup>th</sup> century (MUNKÁCSI, 1901) but because of Mari *a* this equation remains uncertain (JOKI, 1973: 280; ITKONEN, 1956: 78): in inherited vocabulary there are no instances of Meadow Mari *a* = Hill Mari *a* in the first syllable, meaning that the borrowing from Iranian must have happened quite late (after the Proto-Mari period, so no earlier than ~1000 years ago) which is problematic due to the chronology and the geographical extent of Proto-Mari and the Iranian languages of that period (there is no evidence of Iranian speakers in the proximity of Volga-Kama region at that time).

### 2.2.3. Mansi LU *pańt*, LO/So *pānt* ‘husband of older sister’

← ? Iranian *\*banda-* > OP *bandaka-* ‘liegeman’ (MUNKÁCSI, 1901: 153–154; KORENCHY, 1972: 63)

This etymology is semantically possible (a general meaning of ‘relative’ can have developed a more specific meaning in Mansi), but palatal *ń* is difficult to explain based on the Iranian form (as noted by KORENCHY, 1972: 63). If the etymology is correct, the Mansi word is probably a relatively late Iranian loan.

## 2.3. Improbable etymologies

### 2.3.1. Udmurt *ken*, *kenak* ‘daughter-in-law’

← ? Iranian/Alanian cf. Ossetic *čənz*, *kinzæ* ‘bride, daughter-in-law’ (< PIIr. *\*kan(H)iHan-*) (ORANSKIY, 1979: 43)

While the Iranian etymology is formally and semantically fitting, a convincing Turkic etymology has been suggested for the Udmurt word (← Chuvash *kin* ‘daughter-in-law’; WICHMANN, 1903: 71; DOERFER III/ 666). This seems more probable due to the intensive contacts between Chuvash and Udmurt. Udmurt *e* often corresponds to Chuvash *i* in loanwords (WICHMANN, 1903).

The word appears also in Komi-Permyak, cf. RÓNA-TAS (1988: 762); there are a number of Turkic loans which appear in Udmurt and Komi-Permyak but not in Komi-Zyrian; according to RÓNA-TAS these are borrowed from Udmurt to

Komi-Permyak.

**2.3.2. Finnish *isä* ‘father’; Saami Kld *âžž* id. (N *áhčči* irregular); Mordvin M *očä* ‘father’s older brother’; Mari M *iža*, H *əzä* ‘older brother; father’s younger brother’; Hungarian *ős* /*õš*/ ‘ancestor’ (< ? OHu *ifemucut* ‘our father’); Mansi *ās* ‘mother’s father’ < ? PU *\*ičä***

**← ? PIIr. *\*Hi-Hič-* > OI *īš-* m ‘lord’ (TUNKELO, 1913: 118ff.; KOIVULEHTO, 2016: 269ff.)**

This etymology should be rejected: many of the Uralic forms are so irregular that it is impossible to derive them from PU. The possibility of parallel borrowings remains, but this seems unlikely as well: most of the words clearly point to earlier *\*ć*, which could not have resulted from a later Iranian loan. Uralic *\*ć* from PIIr. *\*ć* is regular; from Iranian *\*ts* or later *\*s* we would expect Uralic *\*ts* or *\*s*, cf. KOIVULEHTO, 2016, meaning that the the borrowing would have to be very early in each language. The vocalism of the Hungarian and Mordvin words is irregular; furthermore, the development *s* /*š*/ < *\*ć* lacks convincing parallels in Hungarian.

Koivulehto has considered **the Samoyedic word for ‘father’ (Tundra Nenets *nīše* < PS *\*eysä* < PU/Pre-Sa *\*äycä*)** a parallel borrowing from an Indo-Iranian form with full-grade diphthong *\*ai-*, but this seems unlikely: the assumed form with full-grade is unattested in Indo-Iranian and would have presumably resulted in *\*ay* rather than *\*äy* in Pre-Samoyedic. Furthermore, the Nganasan form (*yase*) is irregular and points to PS *\*yesä*.

Finnic *isäntä* ‘master’, probably an opaque derivatation of *isä* ‘father’, has also been considered an independent borrowing from an unattested participle PIIr. *\*ičant-* of this IIr. root, but with the problems with *\*ičä* taken into account, this is unconvincing as well.

### **3. TURKIC (AND MONGOLIC) INFLUENCE ON IRANIAN AND URALIC KINSHIP TERMINOLOGIES**

#### **3.1. Historical background**

##### **3.1.1. Iranian-Turkic language contacts**

The Iranian branch of IE is placed on the boundary between several linguistic and cultural regions; individual characteristics of each Iranian language depend on its proximity to the regions in question. The most significant region (especially as pertains to Persian, Kurdish, other languages of Iran, and to a

certain extent Ossetic<sup>3</sup>) is West Asia (“the Near East”), where Semitic languages are the predominant contact languages. In this region, semantic and structural trends for kinship terms are very similar to those in Europe, with only one special feature: a merging of alienable and inalienable possession in terms denoting young people, specifically using the same term for ‘boy / young man’ and ‘son’, ‘girl / young woman’ and ‘daughter’.<sup>4</sup> The languages and variants spoken in the southern and southeastern parts of the Iranophonic world (such as Balochi, Pashto, and to a lesser extent Dari) are influenced by the South Asian region (New Indo-Aryan languages and non-IE language of India).<sup>5</sup> The Eastern Iranian languages and the Tajik variant of Persian have had contacts with the language spoken or originating from Central, East, and Southeast Asia with their common special feature, which they also share with the South Asian region: relative age distinction (see 4.3). Of these contact situations, the relationship with Turkic has been the most extensive and multifaceted.

Contacts with the Turkic languages has influenced all Iranian languages. First reports on Turkic-speaking tribes in the Mongolian-steppes date from the 6<sup>th</sup> c. CE; after the fall of the second Khaganate of the Göktürks, the spread of Turkic tribes in Eurasia gathered momentum. Many areas that were traditionally inhabited by Iranian peoples were Turkified. The still ongoing mutual cultural exchange resulted in numerous Iranian words being borrowed into Turkic, and vice-versa (cf. BREGEL, 1991; FRAGNER, 1999: 49ff.).

Sogdians, Bactrians, Khwarezmians, and Saka interacted with Turkic peoples already in the epoch of the Turkic and the Uyghur Khaganate. At that time Sogdian served as the language of trade, management, and literature in Transoxania and China and became the model of the Uyghur script (cf. YOSHIDA, 2009: 281).

Persian and minor West Iranian languages came into contact with Turkic in the 9<sup>th</sup> century. DOERFER (I/2–5) educed three layers of Turkic/Mongolic loanwords in Persian: 1) the oldest purely Turkic layer (approx. 9<sup>th</sup>–13<sup>th</sup> c. CE, Kara-Khanid, Seljuk, early Old Ottoman); 2) mixed Turkic and Mongolic layer (13<sup>th</sup>–14<sup>th</sup> c. Mongol invasion under Genghis Khan and Timur); 3) the latest South Turkic layer (such as interaction between Azerbaijan Turkish and Persian

---

<sup>3</sup> Ossetic is expected to share certain features with the Caucasian region. However, this region is outside the scope of the present article.

<sup>4</sup> For examples and discussion of this phenomenon, see MILANOVA, 2016, 2018, and 2019 forthcoming; the overview of the inherited kinship terms and Arabic borrowing are listed in MILANOVA & HOLOPAINEN & BRADLEY, 2018: 7 (incl. Table 1.)

<sup>5</sup> Some loanwords from these languages are listed in *ibid.*: 7–8.

of Iran, or Uzbek influence on the Tajik variant of Persian).

Despite successive Arabic, Turkic, or Mongol rule since the 7<sup>th</sup> c. CE, the Persian language became the lingua franca in the eastern Islamic territories (Northern Iran and Central Asia), India, and China and held this position until the 18<sup>th</sup> c. After the Mongol invasion in particular, it was used in the most important domains of social life and served as the language of cultural life and trade (FRAGNER 1999: 63ff.); even in the Ottoman Empire it was a well-known language of culture and literature.

### 3.1.2. Turkic/Mongolic and Uralic

Archaeological evidence places the Volga Bulgars in the Volga-Kama region as early as the 8<sup>th</sup> century CE (RÓNA-TAS, 1988: 761), putting them within proximity to Mari, Mordvin, and Permic speaker communities, though it is ambiguous how quickly intense linguistic contact began (ibid.: 769–771). Hungarian also has a layer of Bolgar influence, due to the historical migration of Hungarians through the region in question.

Though a modern descendant of Bolgar Turkic has survived – Chuvash – Bolgar Turkic was eventually supplanted by Kipchak Turkic as the dominant contact language in the region by means of the Tatarization of the Bulgars. Today, the dominant contact language of the region is Russian, though two Kipchak languages remain in wide usage in the Volga-Kama area: Tatar and Bashkir. In spite of the Mongol conquests of the 13<sup>th</sup> century, Mongol did not become a major contact language on Uralic languages.

It is important to note that while Bolgar influence affected the proto-languages of the relevant Uralic phyla (primarily Mari and Permic); later Kipchak influence occurred after these proto-languages had divided into their current languages and varieties and is not evenly spread over contemporary languages and varieties. Kipchak influence is only strong in more eastern varieties of Mari, and within the Permic languages, only in Udmurt (and here especially in the southern varieties spoken in the immediate proximity of Tatarstan).

3.2. Turkic and Mongolic loanwords<sup>6</sup>

Turkic/Mongolic	Iranian <sup>7</sup>	Uralic
<i>aqɑ</i> ( <i>ɑχɑ</i> , <i>ɑyɑ</i> , <i>ɑχɑi</i> ) ‘male relative older than Ego, but younger than Ego’s parents’ (RYKIN 2011: 32ff.). <u>Turkic parallels:</u> Turkish <i>ağɑ</i> ‘lord’; <i>ağabey</i> ‘elder brother’, Tatar <i>āga(y)</i> ‘uncle, (in dialects) elder brother’	NP (all variants) <i>aqɑ</i> ‘mister’ (polite address), Farsi (col., voc.) also ‘father’, Dari (col., voc.) also ‘father/elder brother’	Udmurt <i>agay</i> ‘elder brother/uncle’ and Mari <i>kajn-aga</i> ‘wife’s elder brother’) (← Tatar)
Chuvash <i>akka</i> ‘elder sister; aunt’	NP <i>aka</i> ‘elder sister, aunt’ (in Medieval sources) (← Seljuk); Taj. <i>aka</i> ‘elder brother’ (← Uzbek, together with <i>uka</i> ‘younger brother’)	Mari <i>aka(y)</i> ‘elder sister/aunt (younger than parent)’ and Udmurt (dial.) <i>aka</i> ‘elder sister, aunt’, Moksha <i>aka</i> ‘id.’ (← Chuvash)
Turkish (dial.) <i>aba</i> ‘elder sister; mother’; Tatar <i>āpa</i> ‘elder sister’; Uzbek <i>opa</i> ‘elder sister’	Farsi <i>āpa</i> (dial.) ‘mother’ ; Dari <i>āpa</i> (voc., col.) ‘elder sister’; Taj. <i>apa</i> (voc., col.) ‘elder sister’ (← Uzbek) <u>Indic attestation:</u> Urdu <i>āpā(jān)</i> ‘id.’ (← NP, cf. ANSARI et al., 2015: 119–20)	Udmurt <i>apa(y)</i> ‘elder sister/aunt’; Mari <i>aβa(y)</i> ‘mother’; Mordvin <i>ava(y)</i> ‘mother’
Turkish <i>bacanak</i> ‘wife’s sister’s husband’; Tatar (dial.) <i>bācanaq</i> ‘id.’; Chuvash <i>pušana</i> ‘id.’	NP <i>bājenāq</i> ‘id.’ <u>Further IE parallels:</u> Bulgarian <i>bajanak</i> ‘id.’ (KITANOVA, 1999: 282)	Mari <i>posana</i> , Udm. <i>bušon(o)</i> ‘id.’ (← Chuvash)

<sup>6</sup> RÄSÄNEN, 1923; WICHMANN, 1924; DOERFER I/133–40, II/3–4, 91f., 231–33, III/196f., IV/206–7; SPOONER, 1966: 51; BATENI, 1973, KISELYOVA & MIKOLAYČIK, 1978: 24, 52–3, 737, 740; ISANBAEV, 1989–1994; BEREZKI, 1992–1994; MOISIO & SAARINEN 2008; ALIAKBARI & TONI 2008; MILANOVA & HOLOPAINEN & BRADLEY, 2018:7 (incl. Table 1 with references).

<sup>7</sup> In contrast to Uralic, borrowed Turkic sibling terms with relative age distinction are used in the Iranian languages under study parallelly to inherited kinship terms, mostly in the colloquial speech. However, there are a few exceptions such as Kurd. *bab*, which is used as the main term for ‘father’. See also the Yaghnobi example in 3.3. below and the discussion in section 4.

Contact phenomena in Indo-European kinship and social terms and beyond<sup>13</sup>

Turkish, Azeri <i>dayi</i> ‘mother’s brother’ Uzbek <i>tog’a, tog’ay</i> ‘id.’; Tatar <i>dai</i> ‘id.’	Farsi <i>dāyi</i> (← Turkish) ‘id.’ Taj. <i>tago</i> (← Uzbek) ‘id.’ <sup>8</sup>	-
Turkish <i>yenge</i> ‘brother’s wife, uncle’s wife’; Uzbek <i>yanga</i> ‘elder brother’s wife’; Tatar <i>ciŋgäy</i> ‘id.’; Chuvash <i>iŋke</i> ‘id.’	Dari, Taj. <i>yanga</i> ‘brother’s wife’ (← Chagatai)	Mari <i>yeŋga</i> ‘elder brother’s wife’, Udmurt (Beserman) <i>eŋgey</i> ‘aunt’
Azeri <i>yezne</i> ‘sister’s husband’	Dari, Taj. <i>yāzna</i> ‘id.’; Kurd. <i>yezne</i> ‘id.’	Moksha <i>ezna</i> ‘elder sister’s husband’, Khanty <i>yesnä</i> ‘brother-in-law’

The following terms might present instances of coincidental correspondences and/or nursery terms:

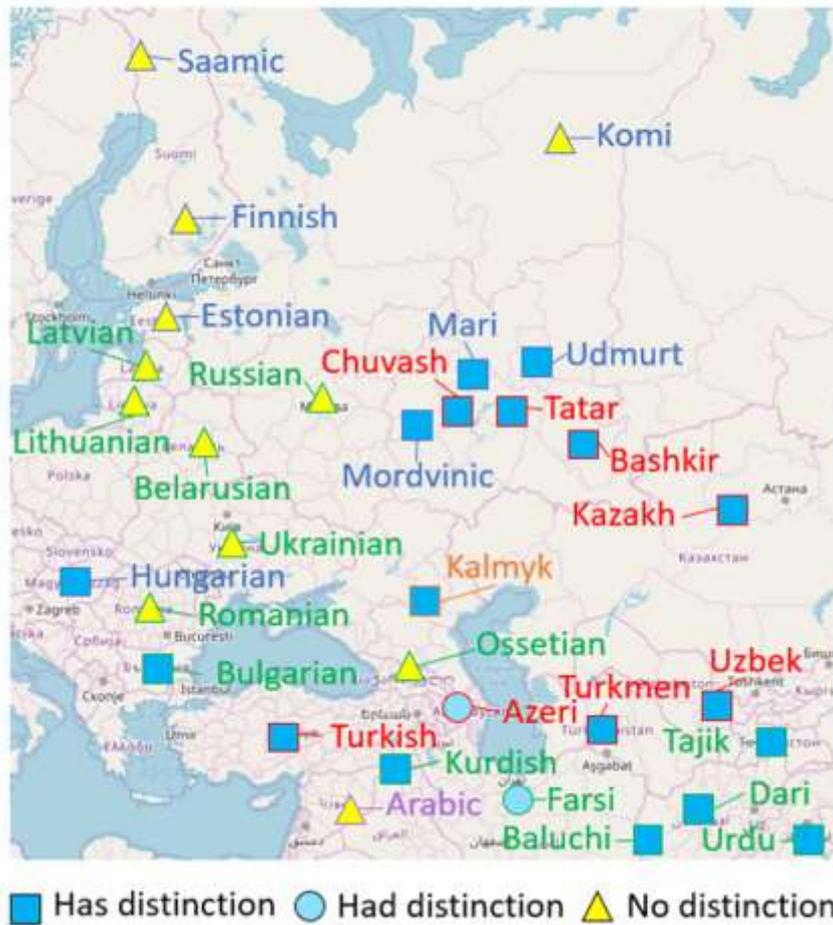
Turkish, Chuvash <i>anne</i> ‘mother’; Uzbek <i>ona</i> ‘id.’; Tatar <i>āna</i> ‘id.’	NP <i>āna</i> ‘mother’ (in Medieval sources); Taj. <i>ona</i> ‘mother’ (← ?Uzbek); Oss. <i>æna</i> ‘mother’	Udmurt <i>anay</i> ‘mother’ (← ?Tatar)
Turkish <i>ata</i> ‘father’; Tatar <i>āta</i> ‘id.’; Uzbek <i>ota</i> ‘id.’; Chuvash <i>atte</i> ‘id.’	<i>atā</i> ‘id.’ (in Medieval sources); Oss. <i>æda</i> ‘id.’	Mari <i>ač’a(y)</i> ‘id.’ (← ?Chuvash), Udmurt <i>atay</i> ‘id.’ (← ?Tatar)
Turkish <i>baba</i> ‘father’; Uzbek <i>bobo</i> ‘grandfather’; Tatar <i>bāba(y)</i> ‘id.’	NP (col., voc.) <i>bābā(i)</i> ‘(grand)father’; Kurd. <i>bab</i> ‘id.’; Bal. <i>bābā</i> ‘id.’ (the word can also mean ‘child’ < “father[’s child]”, cf. KORN, 2005: 300, fn. 86)	Udmurt <i>babay</i> ‘grandfather’

<sup>8</sup> DOERFER III/196f. suggests that the word existed in two variants *\*tayaj* and *\*tāyī* with a regular alternation of the long vowel and *-aŋa-* (< *a’a*) as in *xān* vs. *xayan*. In this scenario, Farsi and Tajik borrowed this stem from two different Turkic languages, Farsi from Ottoman or Azeri Turkish and Tajik from Uzbek.

### 3.3. Loan structures. Relative age distinction in Uralic and Iranian

In our research we assume that relative age distinction, i.e., specific terms for older and younger siblings (also older and younger siblings of parents and spouses, cf. the examples above) is a contact phenomenon not only in Iranian but also in Uralic. There have been attempts to reconstruct this phenomenon to Proto-Uralic, notably by AHLQUIST (1871) and SMIRNOV (1889), but already SETÄLÄ (1900) considered these assumptions incorrect and argued for a Turkic origin of this distinction. It is reflected especially vivid in the Udmurt sibling terminology: *vjn*, an inherited Permian term for ‘brother’, and *suzer*, an ancient loanword (see 2.1.2), were reanalysed as younger siblings after the borrowing of *agay* ‘older brother/uncle’ and *apay* ‘older sister/aunt’ (Komi, which is genealogically close to Udmurt but was not subject to comparable Turkic influence, lacks this distinction). Curiously, in East Iranian there is a similar pattern of semantic change caused by languages contact. Yaghnobi borrowed terms for ‘older brother’ *akó* / *aká* and ‘older sister’ *ap(p)á* from Uzbek and reanalysed the inherited terms *virót* (cf. Farsi *barādar* ‘brother’ < PIE *\*b<sup>h</sup>reh<sub>2</sub>ter-*) and *xōr* (cf. Farsi *xāhar* ‘sister’ < PIE *\*s<sub>2</sub>uesor-*) as younger siblings (NOVÁK, 2013: 174f.).

Relative age distinction in selected **Semitic**, **Turkic**, **Mongolic**, **Uralic**, and **Indo-European** languages of Central Eurasia



A cross-cultural comparison of sibling terminologies made by social anthropologists (e.g., DZIEBEL, 2007: 254ff., esp. 290 with references) shows that territorial factors most probably play a key role in determining how sibling terms are structured. Most languages spoken in Africa, regardless of their genealogic affiliation, have either one term for all kinds of siblings or none at all: siblings are instead descriptively labelled as ‘mother’s child’, ‘father’s child’ or the like. Across the globe, the indigenous American languages have up to eight specific sibling terms possessing not only relative age but also relative gender distinction. In such languages one encounters terms with very subtle meanings such as ‘older brother (of a female speaker)’ or ‘younger sister (of a

male speaker)'.

African and American sibling terminologies therefore present two opposite poles. The languages spoken between those geographical locations combine both tendencies to different degrees. Closer to the African region, languages tend to have less differentiated sibling terminologies regardless of their genealogic affiliation. For example, most languages of Europe have two terms (like German *Schwester* 'sister' and *Bruder* 'brother', Finnish *sisar* 'sister' and *veli* 'brother') or, especially in Southern Europe and Western Asia, in the closest geographical proximity to Africa, only one common term for 'sibling' modified by masculine and feminine suffixes (e.g., Greek ἀδελφός 'brother' and ἀδελφή 'sister', Spanish *hermano* 'brother' and *hermana* 'sister', Hebrew *ax* 'brother' and *axot* 'sister') is used. The closer to the American region, the more complex sibling terminologies become. Most sibling terminologies of East, Southeast, and South Asia as well as of Australia and Oceania possess some modifications of either relative age or relative gender distinction or both (cf. GODDARD, 2005: 29–39, 76 and WIERZBICKA, 2016: 1f. with references).

The relationship between these geographical factors and languages is by no means deterministic but rather tendential. In Europe one can also encounter terminologies with relative age distinction such as Bulgarian (KITANOVA, 1999) and Hungarian<sup>9</sup>, which can be easily explained as these languages have been influenced by languages spoken or historically originating from East Asia, first of all Turkic. The origin of the Saami kinship system, which has different words for parent's elder and younger siblings but only one general term for one's 'brother' and 'sister', remains a stumbling block both for the champions of relative age distinction in the Proto-Uralic and their opponents. The Saami system needs more research before anything certain can be said about its origins, but the Saami development is clearly independent of those in the languages of the Volga-Kama region, and contacts with Turkic or Mongolic cannot have played a role in it. It is interesting that Saami *\*muoθā* 'mother's younger sister' is borrowed from Germanic *\*mōþō(n)-* (an unattested derivation of *\*mōder-* 'mother') according to KÜMMEL (2015).

---

<sup>9</sup> Although both Hungarian and the Ob-Ugrian languages have relative age distinction for siblings, Khanty and Mansi terms for siblings are of different origin than Hungarian terms and the system found in Ob-Ugrian is remarkably more complicated than the Hungarian one (see RUTTKAY-MIKLIÁN, 2007 for a synchronic description of the Khanty system and KARIJALAINEN, 1913 for early research of its historical developments), making it very unlikely that the Hungarian and Ob-Ugrian kinship systems reflect a common Ugric innovation.

#### **4. FURTHER RESEARCH PROSPECTS**

We intend to corroborate and expand upon the research results contained in this paper through future research endeavours. In this section, we wish to give an overview of matters in need of further analysis.

The Indo-Iranian-Uralic contacts in the field of kinship terms are connected to the wider problems of loanwords from Indo-Iranian to Uralic. Regarding future research on borrowed kinship terms, it seems especially pertinent to attempt to reconstruct the cultural context of the early language contacts between Indo-Iranian and Uralic and compare the kinship terms with other cultural influence that can be assumed on the basis of loanwords. Also, later Alanian kinship terms borrowed into Hungarian present an especially interesting research problem as the cultural context of these contacts is overall much better known (cf. footnote 2).

As illustrated in Sections 3.2. and 3.3., Turkic sibling terms in most Iranian languages surveyed here function differently to those in Uralic languages. The latter borrowed not only terms but the whole structural principle of relative age distinction, while the former tended to borrow terms without changing the overall structure. This research result is well in concord with the geographical distribution of the languages. The languages having a more central position within the relevant area of structural convergence follow the pattern more consistently. Therefore, Farsi, which is spoken on the boundary between Central and West Asian regions reanalyzed terms for ‘elder siblings’ as terms for ‘parents’ (see table in 3.2), thus adopting them to the inherited structure, while in Tajik and especially in languages such as Yaghnobi (see 3.3.) the meaning of the borrowed terms is more similar to the original meaning in Turkic due to their proximity to and contact with Turkic speaker communities in Central Asia. Furthermore, most Iranian languages taken into consideration in the present pilot study are well-codified languages with a long literary tradition and thus can be assumed to be less prone to change. Hence the focus of the further research must be on the minority languages, especially those that are spoken in Central Asia.

#### **Abbreviations:**

col.	colloquial
dial.	dialectal
IE	Indo-European
Ir.	Indo-Iranian
Khanty Kaz	Kazym Khanty

Khanty O	Obdorsk Khanty
Khanty V	Vakh Khanty
Kurd.	Kurdish
Mansi LM	Middle Lozva Mansi
Mansi LO	Upper Lozva Mansi
Mansi LU	Lower Lozva Mansi
Mansi N	North Mansi
Mansi So	Sosva Mansi
Mari H	Hill Mari
Mari M	Meadow Mari
Mordvin E	Erzya Mordvin
Mordvin M	Moksha Mordvin
OI	Old Iranian
OP	Old Persian
Oss.	Ossetic
PFI	Proto-Finnic
PG	Proto-Germanic
PIr.	Proto-Iranian
PIE	Proto-Indo-European
PIIr.	Proto-Indo-Iranian
Pre-PIr.	Pre-Indo-Iranian
PU	Proto-Uralic
Saami Kld	Kildin Saami
Saami N	North Saami
Taj.	Tajik
voc.	vocative

#### REFERENCES

- АБАЕВ, Vaso I. 1965. К алано-венгерским лексическим связям. In: *Europa et Hungaria: Congressus ethnographicus in Hungaria* (16–20.10.1963 Proceedings). Budapest: Akademiai kiado, 517–537.
- AHLQVIST, August. 1871. *De vestfinska språkens kulturord. Ett lingvistiskt bidrag till Finnarnes äldsta kulturhistoria*. Helsingfors: SKS.
- ALIAKBARI, Mohammad; TONI, Arman. 2008. The Realization of Address Terms in Modern Persian in Iran: A Sociolinguistic Study, *Linguistic online* 35, 3/08.
- ANSARI Zakia R.; SHABNAM, Srushti; PRIYADARSHI, Brajesh. 2015. Kinship terms of Urdu in Mysore and Lucknow varieties: a comparative study, *Indian Linguistics* 76 (1–2), 113–130.
- BATANI, M.R. 1973. Kinship terms in Persian, *Anthropological linguistics* 15, 324–7.
- BEEKES, Robert S.P. 2010. *Etymological Dictionary of Greek* (2 Vol.). Leiden Indo-European Etymological Dictionary Series, Vol. 10 (10/1 and 10/2). Edited by Alexander Lubotsky. Leiden • Boston: Brill.

BERECZKI, Gábor. 1992–1994. *Grundzüge der tscheremissischen Sprachgeschichte* [I–II]. *Studia Uralo-Altica* 34–35. Szeged: Universitas Szegediensis de Attila József Nominata.

---. 2013. *Etymologisches Wörterbuch des Tscheremissischen (Mari)*. Veröffentlichungen des Societas Uralo-Altica 86. Wiesbaden: Harrassowitz.

BREGEL, Yuri. 1991. Turko-Mongol influences in Central Asia. In: Robert L. CANFIELD (ed.), *Turko-Persia in Historical Perspective*. Cambridge: Cambridge University Press, 53–77.

CHANTRAINE, Pierre. 2009. *Dictionnaire étymologique de la langue grecque: histoire de mots. Nouvelle édition*. Paris: Klincksieck.

DOERFER I–IV = DOERFER, Gerhard. 1963–1975. *Türkische und mongolische Elemente im Neupersischen: unter besonderer Berücksichtigung älterer neupersischer Geschichtsquellen, vor allem der Mongolen- und Timuridenzeit*. Vol. 1–4. Wiesbaden: Steiner.

---. 1988. *Grundwort und Sprachmischung. Eine Untersuchung an Hand von Körperteilbezeichnungen*. Stuttgart: Franz Steiner Verlag Wiesbaden GmbH.

DZIEBEL, German V. 2007. *The Genius of Kinship. The phenomenon of Human Kinship and the Global Diversity of Kinship Terminologies*. Youngstown • New York: Cambria Press.

EWAia I–III = Mayrhofer, Manfred. 1986–2001. *Etymologisches Wörterbuch des Altindoarischen*. Vols. 1–3. Heidelberg: Universitätsverlag C. Winter.

EWUng = *Etymologisches Wörterbuch des Ungarischen Sprache*. 1992–1997. Hrsg. von Loránd Benkő. Budapest: Akadémiai Kiadó.

FRAGNER, Bert G. 1999. *Die „Persophonie“: Regionalität, Identität und Sprachkontakt in der Geschichte Asiens*. Berlin: Das Arabische Buch.

HELIMSKI, Eugene. 2001. Zu den iranischen Lehnwörtern in Ungarischen. Manuscript of a presentation held in the symposium *Finno-Ugrians and Indo-Europeans: Linguistic and Literary Contacts*, November 22–24, 2001, Groningen/NL.

HOLOPAINEN, Sampsa. 2016. On the etymology of Hungarian *úr* 'lord, gentleman', *Folia Uralica Debreceniensia* 23, 57–68.

HONTI, László. 1982. *Geschichte des obugrischen Vokalismus der ersten Silbe*. Budapest: Akadémiai Kiadó.

ITKONEN, Erkki. 1956. Etymologisches Wörterbuch der uralischen Sprachen [Review of Collinder 1955], *Ural-Altische Jahrbücher* 28, 56–80.

GODDARD, Cliff. 2005. *The Languages of East and Southeast Asia: An Introduction*. Oxford: OUP.

GODDARD, Cliff; WIERZBICKA, Anna. 2014. *Words and Meanings. Lexical Semantics across Domains, Languages, and Cultures*. Oxford: Oxford University Press.

ISANBAEV, N. I. 1989–1994. *Марийско-тюркские языковые контакты* [I–II]. Yoshkar-Ola: Марийское книжное издательство.

JACOBSON, Hermann. 1922. *Arier und Ugrofinnen*. Göttingen: Vandenhoeck & Ruprecht.

JOKI, Aulis. 1973. *Uralier und Indogermanen*. MSFOU 151. Helsinki: Finno-Ugrian Society.

JUNTILA, Santeri. 2015. *Tiedon kumuloituminen ja trendit lainasanatutkimuksessa. Kantasuomen balttilaislainojen tutkimushistoria*. (Doctoral dissertation). Helsinki.

KALLIO, Petri. 2018. Ensitavun diftongit kantasuomessa. Sampsa HOLOPAINEN & Janne SAARIKIVI (ed.), *Peri orthotētos etymōn. Uusiutuva uralilainen etymologia*. UH 11. Helsinki: Finno-Ugrian Society, 251–268.

KARJALAINEN, K.F. 1913. Wie EGO im ostjakischen die verwandten benennt. *Finnisch-Ugrische Forschungen* 13, 207–295.

KATZ, Hartmut. 1983. Zu idg. \**mṛtō-*, *Die Sprache* 29, 174–177.

KISELYOVA L. N.; MIKOLAYČIK V. I. 1978. *Дару-русский словарь*. Moscow: Русский язык.

KITANOVA, M. 1999. Материалы к словарю болгарских терминов родства. In: Svetlana M. TOLSTAYA, *Категория родства в языке и культуре*. Moscow: Индрик, 279–302.

KOIVULEHTO, Jorma. 1991. *Uralische Evidenz für die Laryngealtheorie*. Wien: Verlag der Österreichischen Akademie der Wissenschaften.

--- (posthumous). 2016. *Verba vagantur. Jorma Koivulehto in memoriam*. Eds. Sampsa Holopainen, Petri Kallio & Janne Saarikivi. Mémoires de la Société Finno-Ougrienne 274. Helsinki: Finno-Ugrian Society.

KORENCHY, Éva. 1972. *Iranische Lehnwörter in den obugrischen Sprachen*. Budapest: Akadémiai Kiadó.

KORN, Agnes. 2005. *Towards a Historical Grammar of Balochi*. Studies in Balochi Historical Phonology and Vocabulary. Wiesbaden: Dr. Ludwig Reichert Verlag.

KÜMMEL, Martin. 2015. Die Schwestern der Eltern: Samische Evidenz für germanische Wortbildung? In: Thomas KRISCH and Stefan NIEDERREITER (eds.), *Diachronie und Sprachvergleich*. Innsbruck: Innsbrucker Beiträge zur Sprachwissenschaft.

LÄGLOS = KYLSTRA, A. D. et al. 1991–2012: *Lexikon der älteren Germanischen Lehnwörter der ostseefinnischen*. Amsterdam • New York/Atlanta, GA: Rodopi.

LYTKIN, V. I. and GULYAEV, E. S. 1999. *Краткий этимологический словарь коми языка*. Syktyvkar: Коми книжное издательство.

MAJER, Marek. 2018. Slavic \**ljuby* ‘love’ < \**lewbh-ōs* and the heterogeneity of the \*-y, \*-*ьve* inflectional class. Paper presented 5.4.2018 at 4. Indogermanische Forschungskolloquium, Zürich.

MÉSZÁROS, Edit. 2001. A mordvin rokonságnevek eredet szerinti vizsgálata, *Néprajz és Nyelvtudomány* 41, 169–184.

MILANOVA, Veronika. 2016. (Proto-)Indo-European kinship terms in *\*-ter* and (ancient) age-grade systems. Kin, clan and community – a symposium on Indo-European social institutions. University of Copenhagen, 17. May 2016 [handout]: [www.academia.edu/34436295/\_Proto-\_Indo-European\_kinship\_terms\_in\_-ter\_and\_ancient\_age-grade\_systems]

---. 2018. Праиндоевропейские термины родства на *\*-ter* и возрастные степени. In: Vladimir A. Popov (ed.), *Алгебра родства: Родство. Системы родства. Системы терминов родства* Вып. 16. St.-Petersburg: Russian Academy of Sciences; КИО, 2018, 70–97.

---. 2019 (forthcoming). <sup>MUNUS/f</sup> *duttarijata/i-* and some other Indo-European maidens. In: *Hrozný and Hittite: The First Hundred Years*. (Conference Proceedings, Prague 11 – 14 November 2015). Leiden: Brill.

MILANOVA, Veronika; HOLOPAINEN, Sampsa; BRADLEY Jeremy. 2018. Contact phenomena in IE kinship and social terms and beyond (a pilot study with special focus on the Iranian and Uralic languages in the context of Central Eurasia). [handout for the international colloquium on loanwords and substrata in Indo-European languages in Limoges, 4<sup>th</sup>–7<sup>th</sup> June 2018]: [kinship.mari-language.com/limoges.pdf, kinship.mari-language.com/limoges-table.pdf]

MOISIO, Arto; SAARINEN, Sirkka. 2008. *Tscheremissisches Wörterbuch*. Helsinki: Finno-Ugrian Society / Kotimaisten kielten tutkimuskeskus.

MUNKÁCSI, Bernát. 1901. *Árja és kaukázusi elemek a finn-magyar nyelvekben*. Budapest: MTA.

MYERS-SCOTTON, Carol. 2002. *Language contact: Bilingual encounters and grammatical outcomes*. Oxford: Oxford University Press.

NIL = WODKO, Dagmar S. et al. 2008. *Nomina im indogermanischen Lexikon*. Heidelberg: Winter.

NIRVI, R.E. 1952. *Synonyymitutkimuksia sukulaismiestön alalta*. Helsinki: SKS.

NOVÁK, L'ubomír. 2013. *Problem of Archaism and Innovation in the Eastern Iranian Languages* (Doctoral dissertation). Charles University in Prague.

ORANSKIY, I. M. 1979. Vvedenie. In: Vera S. RASTORGUEVA (ed.), *Основы иранского языкознания. I. Древнеиранские языки*. Moscow: Академия Наук СССР, 10–128.

RÄSÄNEN, Martti. 1923. *Die tatarischen Lehnwörter im Tscheremissischen*. Mémoires de la Société Finno-Ougrienne L. Helsinki: Finno-Ugrian Society.

RÓNA-TAS, András. 1988. Turkic Influence on the Uralic Languages. In: Denis SINOR (ed.), *The Uralic languages: Description, History, and Foreign Influences*. Leiden: E. J. Brill, 742–780.

RÓNA-TAS, András; BERTA, Árpád. 2011. *West Old Turkic. Turkic loanwords in Hungarian*. Wiesbaden: Harrassowitz.

RUTTKAY-MIKLIÁN, Eszter. 2007. A színjai hanti rokonsági terminológia. *NyK* 104, 181–212.

RYKIN, Pavel. 2011. The system of kinship and affinity terms in the Middle Mongolian, *Acta Orientalia Academiae Scientiarum Hungaricae* 64 (1), 25–47.

SALMINEN, Tapani. 2002. Problems in the taxonomy of the Uralic languages in the light of modern comparative studies. In: *Лингвистический беспредел: сборник статей к 70-летию А. И. Кузнецовой*. Москва: Издательство Московского университета, 44–55.

SAMMALLAHTI, Pekka. 1988. Historical phonology of the Uralic languages with special reference to Samoyed, Ugric and Permic. In: Denis Sinor (ed.), *The Uralic languages: description, history and foreign influences*. Handbuch der Orientalistik 8: Handbook of Uralic studies 1. Leiden: E. J. Brill, 478–554.

---. 1998. *The Saami Languages: An introduction*. Kárášjohka: Davvi Girji.

SCHWYZER, Eduard. 1939. *Griechische Grammatik*. Band 1. München: Beck.

SETÄLÄ, E. N. 1900. I.N. Smirnow's Untersuchung über die Ostfinnen, *Journal de la Société Finno-Ougrienne* 17, 17–28.

SIMON, Zsolt. 2018. Vélelmezett indoeurópai jövevényiszavak az uráli és finnugor alapnyelvekben [Presentation, Institute of Linguistics, Hungarian Academy of Sciences, 27.3.2018].

SKÖLD, Hannes. 1925. *Die ossetischen Lehnwörter im ungarischen*. Lund: Gleerup.

SMIRNOV, Ivan N. 1889. *Черемисы: историко-этнографический очерк*. Kazan: Типография императорского университета.

SPOONER, Brian. 1966. Iranian Kinship and Marriage, *Iran* 4, 51–59.

STEER, Thomas 2015. *Amphikiniese und Amphigenese. Morphologische und phonologische Untersuchungen zur Genese amphikinetischer Sekundärbildungen und zur internen Derivation im Indogermanischen*. Wiesbaden: Reichert.

SWADESH, Morris. 1950. Salish Internal Relationships. *International Journal of American Linguistics* 16 (4), 157–167.

SWADESH, Morris (posthumous); SHERZER, Joel (ed). 1971. *The Origin and Diversification of Language*. London: Routledge and Kegan Paul.

TADMOR, Uri. 2010. Loanwords in the world's languages: Findings and results. In: Martin HASPELMATH and Uri TADMOR (eds.), *Loanwords in the world's languages: a comparative handbook*. Berlin: de Gruyter Mouton, 55–75.

TUNKELO E. A. 1913. Wortgeschichtliche Beiträge, *Finnisch-Ugrische Forschungen* 13, 74–119.

UEW = Rédei, Károly et al. 1988. *Uralisches Etymologisches Wörterbuch*. Wiesbaden: Harrassowitz.

WICHMANN, Yrjö. 1903. *Die tschuwassischen Lehnwörter in den permischen Sprachen*. Mémoires de la Société Finno-Ougrienne XXI. Helsinki: Finno-Ugrian Society.

Contact phenomena in Indo-European kinship and social terms and beyond<sup>23</sup>

WICHMANN, Yrjö 1924. Etymologisches aus den permischen Sprachen, *Finnisch-Ugrische Forschungen XIV*, 29–63.

WIERZBICKA, Anna. 2016. Back to ‘Mother’ and ‘Father’. Overcoming the Eurocentrism of Kinship Studies through Eight Lexical Universals, *Current Anthropology* 57 (4), 408–29.

YOSHIDA, Yutaka. 2009. Sogdian. In: Gernot WINDFUHR (ed), *The Iranian Languages*. London & New York: Routledge., 279–335.

ZHIVLOV, Mikhail. 2006. *Реконструкция праобско-угорского вокализма*. (Unpublished doctoral dissertation). Russian State University for the Humanities.

ZHIVLOV, Mikhail. 2010. Studies in Uralic vocalism I, *Journal of Language Relationship* 4, 167–176.