Studia Etymologica Cracoviensia vol. 20: 17–46 Kraków 2015 doi:10.4467/20843836SE.15.002.2788 www.ejournals.eu/SEC

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TUNGUSIC HISTORICAL LINGUISTICS AND THE BUYLA (A.K.A. NAGYSZENTMIKLÓS) INSCRIPTION*

Abstract. This paper presents a proper linguistic assessment of the Tungusic reading of the Buyla inscription, as proposed by the late Eugene Helimski (1950–2007) who believed that one of the languages spoken by the European Avars was Tungusic. The main conclusion is that the Tungusic reading should be rejected. This outcome partly agrees with the *communis opinio* whereby the Buyla inscription hides a(n unidentified so far) Turkic language.

Keywords: etymology, philology, medieval history of Asia, historical and comparative linguistics, Tungusic, Hungarian, Avars, migration

1. Introductory remarks

In a series of articles, the late Eugene Helimski (2000a, 2000b, 2003, 2004) argued that an aberrant form of Tungusic could have entered the Carpathian basin during the Avar period, the only evidence of which is preserved in the Buyla (or Boyla/Boila) inscription and a handful of words found in the classical sources on the Avars.¹ Moreover, it is possible to infer from the wording of the author

^{*} Paper supported by the Research Project DURSI 2009 SGR 18 (Spain). I would like to express my gratitude and appreciation to the anonymous reviewers for their corrections and many valuable suggestions. Needless to say, I alone am responsible for all remaining errors and omissions.

¹ From the viewpoint of European history, the so-called Asian Avars are traditionally identified as the Ruanruan (402–555). The term Avars refers to the European Avars (567–822), i.e. the Asian Avars that entered Europe in 555 AD (see i.a. Pohl 2002). The Nagyszentmiklós treasure to which the Buyla inscription belongs (see §2 below) is associated with the last remnants of the European Avar culture, i.e. the one which spread over the Carpathian basin during the 8th–9th centuries. Good summaries with additional literature of the two major competing interpretations regarding the ethnolinguistic affinities of the Ruanruan can be found in Golden (1992: 76–79), who presents the traditional position that the Ruanruan were actually a Mongolic language

that the Avar confederation could have been constituted, among many other unknown nations, by a small contingent of Tungusic individuals (Helimski 2000b: 53 fn. 12). It was the Tungusic reading of the Buyla inscription that led him to this conclusion.

Tungusic is one of the many indigenous ethnolinguistic groups of the Asian continent, its current habitat covering most of Eastern Siberia and Manchuria. Speakers of the Northern Tungusic languages can be found in Central and Northeastern China, whereas the bulk of the Southern Tungusic speakers concentrates in the Amurian region and the Northernmost part of the Sakhalin Island.² Manchuric speakers aside, about which we know a great deal thanks to Chinese sources, the Siberian Tungusic were first reported at the very beginning of the 17th century.³ The time depth of the Tungusic language family is very shallow, with Manchuric being the most aberrant group (specialists consider this condition to be the result of Mongolic and Chinese influence).

population, and Janhunen (1996: 190), who believes that the linguistic core of the Ruanruan was Turkic. Beckwith (2009: 390–391) points out that "[c]areful study of the Jou-jan [= Ruanruan] names in the Chinese sources could shed light on the eth-nolinguistic affinities of the Jou-jan; until that is done, speculation on the subject is premature." In the same vein, see Vovin's remarks (2007: 180, 184–185). Incidentally, the hypothetical connection between the ethnonyms *ruanruan* and *ju(r)cen* 'Jurchen' echoed by Helimski (2000b: 137) is most likely false and should be abandoned (for the etymological intricacies of the term *ju(r)cen*, see Janhunen 2004).

- 2 As is custom in recent specialist literature on Tungusic linguistics and in agreement with some of the ideas by Janhunen on phonological transcription (1987, 1996: xiii–xiv), Helimski's (e) has been replaced with (a), (j) with (y), (3 & 3) and (c & č) merged in (i) and (c), respectively, vowel length is written with double-vowels. Other conventions: Northern Tungusic (= Northwestern: Ewenki, Ewen, Solon, Negidal, Arman, Udihe), Southern Tungusic (= Amurian Tungusic: Oroch, Nanay, Kilen, Kili, Ulcha, Orok), with Udihe and Oroch serving as a bridge between one branch and the other, Manchuric (Early and Late Jurchen, Written Manchu [= WM], Spoken Manchu and Sibe), Common Tungusic [= CT] (all languages but Manchuric, i.e. Northern Tungusic + Southern Tungusic), and Proto-Tungusic (= Pan-Tungusic = Common Tungusic + Manchuric). "Lit." stands for "Literary", and (-") for (lightly) nasalized final vowel. The difference between Proto-Tungusic and Pan-Tungusic is that the latter does not make any claims regarding the (genealogical) inheritance of a given word, i.e. it may refer to both inherited and borrowed terms (see for instance the presence of English loanwords across entire linguistic families: they are common, pan-elements, but not proto-elements; the former emphasizes the synchronic distribution, the latter its diachronic depth).
- ³ It may be worth noting that the Middle Amur region is commonly identified as the most likely *Urheimat* for the parental language from which all the Tungusic languages descend (see general discussion in Janhunen 1996: 167–172, and also Janhunen 1985, 2012, 2013: 27–28; for further details on the Northern Tungusic expansion, see Atknine 1997 and, for the larger Altaistic perspective, see Miller 1994).

The Avar-Tungusic theory is indeed a bold proposal. If it turns out that Helimski is right, then the Buyla inscription would instantly become the oldest linguistic monument in any Tungusic language, washing away even the earliest Jurchen records. In spite of the apparent relevance of such a statement, Helimski's proposal was passed over in silence in the Tungusic specialist literature. No less surprising is to find out that critics from other areas disregard the Tungusic nature of the Buyla inscription without discussing its substance. They are usually Turcologists believing that the only possible reading of the inscription has to be Turkic. The most explicit statement was made by Erdal: "[...] the hypothesis is, however, arrived at by some arbitrary stretching of Tungus data, [it] is far-fetched by itself and is therefore rather unlikely" (2007: 79).⁴ Erdal did not go into great detail in order to explain the reader what the "stretch of the Tungus data" involved. Therefore, the general opinion is that the Tungusic reading of the Buyla inscription is wrong,⁵ but no one can explain why that is so.

The main goal of this paper is to provide the reader with an evaluation of Helimski's hypothesis based on the Tungusic data. Neither the geopolitical scenario set up by Helimski (or by any other author for that mater) nor the paleographical analysis of the inscription shall be discussed at large in the present contribution. The former issue seemingly depends in its entirety on the linguistic hypothesis that each of the author endorses.⁶ As for the latter, the topic has been approached by specialists much more qualified than the present author (see i.a. Róna-Tas 2001).

⁴ Berta/Róna-Tas (2011: 1163) claim that both Helimski's hypothesis and Futaky's *Hungaro-Tungusica* (see Excursus below) have been refuted somewhere else (Kara 2002 and Róna-Tas 2003). Unfortunately, the references provided by the authors concerns only Futaky's work, with no mention whatsoever to the work of Helimski on the Buyla inscription. As shall be shown, Helimski's and Futaky's works require the adoption of different approaches, put another way, the conclusions of criticizing one, while having an impact to certain degree, cannot be uncritically applied to the other.

⁵ This opinion is echoed in one of the obituaries about Helimski (Janhunen 2009: 368–369, see also Janhunen 2013: 55 and Szalontai/Károly 2013: 367). Stachowski (2004) has spoken in support of Helimski's hypothesis, at least as far as the possibility of identifying a Tungusic substratum in Europe is concerned, and made what seems best use of it by proposing a new etymology of English *sabre* (← French ← German ← Hungarian ← Avar? ← Manchu *seleme* 'a dagger carried at the belt' and other Tungusic related terms). However, there is no harm whatsoever in removing the Tungusic substratum element of the equation. This etymology can be judged in its own merits assuming, for instance, that sabre is a *Kulturwort/Wanderwort*.

⁶ There is a causal relationship between linguistics and geopolitics. This fact apparently renders them incompatible with each other: if one claims that the Buyla inscription reflects a Turkic language, then it cannot be argued that the Tungusic were to be counted among the (Asian) Avars, and *vice versa*. But since the Avars were a multiethnic state, the idea that both Turkic and Tungusic populations may have been a part of it cannot be rejected out of hand. Be that as it may, it is necessary to highlight that Helimski's

The organization of the paper is the following. A tabulated summary of the Tungusic and Turkic readings by Helimski and Erdal, respectively, is shown in §2. In §§3–7, I shall discuss the particulars of the etymological proposals for most elements found in the Buyla inscription, including few grammatical elements. The only question dealing with morphosyntax (i.e. the nominative or zero-accusative objects) is analyzed in §8. That section is followed by a brief excursus discussing some of Futaky's Hungarian–Tungusic etymologies. Conclusions in §9 close the article.

2. The Buyla Inscription

The Nagyszentmiklós treasure is comprised of several inscriptions, all of them inscribed on vessels. There are three types: Greek inscriptions in Greek letters, Turkic inscriptions in Greek letters, and runiform inscriptions (written in the so-called Nagyszentmiklós-Szarvas alphabet, a runiform, Semitic-origin script; for further details, see Róna-Tas 2001: 121–127). The Buyla inscription – discovered in 1799 and initially catalogued as "object number XXI (drinking vessel)" – is usually included in the second group, despite the lack of a Turkic reading for it (for a full list containing all the existing proposals, see Göbl / Róna-Tas 1995: 9–20, esp. 18–19). This has encouraged some authors to propose alternative readings moving away from the general assumption that the inscription contain a Turkic text.

The inscription reads as follows (good reproductions can be found in Göbl/ Róna-Tas 1995: Tafel XXIV, Kovács / Garam 2001: 41, Róna-Tas 1999: 127, Greek alphabet according to Erdal 1988: 221):

• ВОҮНЛА • ZOAПAN • TECH • Δ УГЕТОІГН • ВОҮТАОҮЛ • Z ω AПAN • TAГРОГН • HTZIГН • TAICH

Erdal's proposal of a Turkic reading for it translates: "It is Buyla Žoapan who carries the bowl. Drinking bowl, made by But Aul Žoapan" (1988: 233). Helimski's alternative Tungusic reading translates: "The *basileus* declares the displacement

hypothesis is coherent from the geopolitical, historical and linguistic viewpoints: it is theoretically plausible that (1) a fraction of the original Ruanruan population was Tungusic, (2) that fraction might have fled westwards to Europe after the attack of the Turkic-Chinese alliance in 552, (3) a linguistic substratum may have survived in the languages of the Carpathian basin region. The plausibility of this scenario set up by Helimski is what makes it unique: although everything sounds perfectly logical, it is totally indemonstrable unless very convincing linguistic evidence is presented. In the discussion below, it will be shown that the linguistic evidence actually does not stand up to serious scrutiny.

of Buyla as zhupan. The *basileus* declares his recognition and watch over Butaul as (the new) zhupan" (2000b: 51–52).

The Tungusic reading of the Buyla inscription proposed by Helimski is shown in the following table, where A = transliteration of the Greek text (Helimski 2000: 44), B = the "actual text" in Slavicized Tungusic as reconstructed by Helimski, C = the Proto-Tungusic archetype underlining the "actual text", and D = a brief summary of the Turkic reading by Erdal (1988)⁷:

#	A	†₿		*C	D
Ι	buila (-yl-)	buyla	buyla	PERSONAL NAME [not Tungusic]	PERSONAL NAME / TITLE [cf. <i>Buyla Baga Tarkan</i> in the Toñukuk and Bilgä Kagan inscriptions]
II	zoapan (ž-, j-)	župan	župan	TITLE	TITLE
III	tesi (-ī)	täsi	tägä-si	TITLE [{sit.down-NLZ}]	†täwsi / täpsi {bowl-ACC?}
IV	dügetügi (dy-, dyy-; -ī)	dügätägii	jügä-t-rä. gii-Ø	{change-HAB- PRT.AOR-3SG}	†yūd-δök-i {carry-PRT.PST-3SG. POSS}
V	butaul	butawul	buta-wul	PERSONAL NAME [{hunt-NLZ}]	PERSONAL NAME [†but ogul, cf. <i>But Qaya</i> in Uighur sources]
VI	zoapan (ž-, j-)	župan	župan	TITLE	TITLE
VII	tagrogi (-y-, -ī)	tagrogii	taag-ra. gii-Ø	{recognize-PRT. AOR-3SG}	†tag-δök-i {make-PRT.PRF-3SG. POSS}
VIII	icigi (ī-, -y-, -ī)	icigii	icä-rä. gii-Ø	{see-PRT. AOR-3SG}	†iči-y.i < *iči-g-i {drink-DER-3SG.POSS} [izafet construction?]
IX	tesi (-ī)	täsi	tägä-si	TITLE [{sit.down-NLZ}]	†täwsi / täpsi {bowl-ACC?}

⁷ There is no special reason to choose Erdal's over the reading of other specialists. It is recommendable to stick to the opinion expressed by Róna-Tas regarding some Turkic readings, namely "[these] interpretations are based on Vilhelm Thomsen's work – held perhaps in overly high esteem – as well as a series of inconsistent and unfounded assumptions, so for the time being they can be ignored. All the more so, since we now know the clasp was attached to the drinking vessel at a later date" (2001: 129). This comment can be extended to all the Turkic readings. However, the mention of at least one Turkic version may make a good service as a model against which to contrast the Tungusic reading by Helimski.

If the data are tabulated as in the previous table, it is possible to notice at once – obvious differences between the Tungusic and Turkic readings aside – that out of the nine words, four are titles (only two, twice repeated) and two personal names. Helimski only has to identify the meaning of what, in his view, are three verbal forms (with the same ending!) and one of the titles. Additionally, he proposed alternative etymologies for (II & VI) and (V) too, though he did it rather hesitantly.

3. <-ГН>

The core of Helimski's analysis lies in the verbal forms (IV, VII–VIII). The sequence $\langle -\Gamma H \rangle = \dagger -gi(i)$ is identified with a well known Tungusic morpheme which plays a central role in the Tungusic verbal morphology: the aorist participial ending *-rA-gi(i).

The reconstruction of medial *-g- in the aorist participle marker *-rA-gi(i) is a proposal usually ascribed to Benzing (TVSG 128–129: §135[b]). Material evidence, however, does not support it. Historical languages show -ray(i) or -raa, i.e. vowel cluster (hereafter diphthongoid) or long vowel. Benzing is aware of the fact that diphthongoids and long vowels may sometimes result after the loss of a consonant between vowels. Some languages preserved the vowel sequence as such with the possible insertion of yod: *aCy > a(y)i, whereas other languages underwent crasis: *aCy > aa. The most likely candidate for a consonant to be lost in such a context is *-g-, hence Benzing's reconstruction *-ra-gi(i).

It is crucial to bear in mind that there is no historical testimony supporting the reconstruction of *-g-. This segment is preserved in Northern Tungusic, its loss being systematic in Southern Tungusic and Manchuric (see TVSG 29-31: §41). This leads to the conclusion that, at least from a methodological viewpoint, there is something wrong with Benzing's reconstruction. Taking into account that (a) it is safe to assume that the parental language had diphthongoids which do not require whatsoever the assumption of a previous stage with medial consonants, and (b) diphthongoids provide a convincing explanation for some historical long vowels, i.e. *ay > aa (this assumption is already implicit in Benzing's reasoning!), it follows that there is actually no need or justification to postulate the loss of a consonant segment in the ancestral forms of the endings -raa and -ray(i). Reconstruction ends when all historical forms are accounted for. There is no need to go as back as *-ra-Ci, because -C- does not solve any problem regarding the substance of the historical languages. Benzing's *-ra-gi is a good example of petitio principii: based on it, one could argue for example that all diphthongoids surfaced from an original sequence *VCV. All in all, it seems that the most honest,

simplest and logical solution is to reconstruct -raa < *-ray > -ray(i). Benzing's *-*ra-gi* is a ghost, put another way, an *ad hoc* reconstruction.⁸

In case of accepting Helimski's reading, we could legitimately talk about the Tungusic "laryngeal", somehow echoing the famed Saussure-Hrozný-Kuryłowicz story in the field of Indo-European studies, in the sense that reconstruction had been precluded before material evidence came up. Unfortunately, unless additional evidence is brought up, this interpretation cannot be accepted. Furthermore, the reconstruction of **ra-gi* poses some additional problems. For example, given the presence of **-g-*, it follows that the Buyla inscription must reflect a truly aberrant, archaic form of Tungusic, perhaps even a very old stage of the Tungusic parental language. This conclusion goes against other linguistic features which are better described as recent (see discussion below).

4. $(\underline{B}OYTAOY\Lambda)$

The sequence (BOYTAOYA) hides a personal name according to both Turkic and Tungusic readings. Helimski interprets that *†Buta-wul* corresponds to a Proto-Tungusic word meaning 'to hunt, fish' (SS 1.108b). In reality, *buta- may have meant just 'to fish' (EEW 157–158[1714]), while 'to hunt' is the result of a secondary specialization after the spread of Northern Tungusic and Manchuric out of the Amurian region. This scenario suits the semantic distribution of *buta-: fishing dominates in the Southern Tungusic languages, e.g. Ulcha büta- 'to hunt & fish', but derivates büta+la 'fisherman' and büta-nda- 'to go fishing', Literary Udihe buta- 'to lay in, store', Literary Nanay & Kili & Kilen bota- 'to fish'. The meaning 'to hunt' is restricted to Northern Tungusic, see i.a. Ewenki bulta- 'to hunt' or Solon bülüü- 'id.'. As for WM buta- 'to catch (game or fish)' and buta-ra niyalma 'hunter' vs. nimaha buta-ra niyalma 'fisherman', since it is necessary to add the element nimaha 'fish' to the noun phrase butara nivalma, it follows that WM buta- may have originally referred only to hunting (cf., however, the ambiguity in butha-mbi 'to hunt and fish', butha-i niyalma 'hunter, fisherman, sportsman'). This may be confirmed in the Pentaglot Dictionary (Wŭtĭ 2.663 [3036-2]), where butambi (buta- plus infinitive marker -mbi) corresponds to Chinese 打牲 dǎshēng and Mongolian görügele-müi, two terms referring exclusively to hunting, cf. Chinese 牲 *shēng* 'livestock', Mongolian *görüge(n)* 'antelope; game'. The authors of the SS rightly points out that all the Ewenki forms along with the Solon are Yakut in origin, cf. Yakut bultā- 'to hunt' < Proto-Turkic (+ Chuvash) *bul- 'to search, look

⁸ Although a minor question, the verbal formations $\dagger taag-ra-gi$ and $\dagger ic(\ddot{a})-r\ddot{a}-gi$ are grammatically odd: it is almost customary to find one or more voice or modal suffixes between the stem and the participial ending, as is the case of the imperfective/habitual marker *-t(i)- in $\dagger j\ddot{u}\ddot{g}\ddot{a}-t-r\ddot{a}-gi$.

for' (Clauson 1972: 332a, Sevortjan 1978: 252–253). Helimski mentions the Ewenki clan name Buta(n), but this may reflect an archaism (the original word could have been entirely replaced by the new base *bulta*- \leftarrow Yakut) or be of foreign origin.

As for the onomastic element *-wul*, it is found in male personal names only in (some) Ewenki dialects. Its presence in Ewen is rare, and there seems to be no trace of it in Negidal, Solon or Arman.⁹ Therefore *-wul* cannot be called Northern Tungusic, let alone Pan-Tungusic, but only "Ewenki". As Vasilevič explains (1974: 299–300), the ending *-(w)ul* ~ *-(g)ul* is already attested in Middle Mongolian (*Secret History: boro'ul* ~ *boroyul* from *boro* 'grey'), also in the Amurian region among the Dagur (Mongolic). Mongolic *-*b*- > -*γ*- \rightarrow Tungusic (Ewenki) *-w*- is a regular correspondence in loanwords, as has been already noted by Poppe (1966: 189–192, cf. 1972: 97–98). The same element can be also found in Yukaghir (isolated), Nganasan (Samoyedic, Uralic), Yakut and Dolgan (both Turkic), and even in historical records of Kott (Yeniseian). This distribution, plus the presence of *-(w)ul* ~ *-(g)ul* in Mongolic and other languages of Northern Eurasian, point out that this is rather a foreign, later element in Ewenki.

In Helimski's opinion, the Buyla inscription is somehow closer to Southern Tungusic and Manchuric (see i.a. 2000b: 53). $\dagger Buta$ - fits the bill (it could pass as a typical Southern Tungusic element), but the combination of this base with the onomastic suffix -(w)ul, only attested in Ewenki, diminishes the persuasive power of his initial proposal.

5. (ΔΥΓΕΤΟΙΓΗ) and (ΖΟΑΠΑΗ)

In Helimski's view, $\langle \Delta Y \Gamma E T O I \Gamma H \rangle = \dagger d \ddot{u} \ddot{g} \ddot{a} \ddot{c} \ddot{g} i(i)$ is the continuation of PT $\ast j \ddot{u} \ddot{g} \ddot{a}(\ddot{a}) t t \ddot{a} \ddot{g} i < \ast j \ddot{u} \ddot{g} \ddot{a}(\ddot{a}) - t - r \ddot{a} - g i$ (there is no Manchuric cognate for this word). The assimilation of the internal cluster $\ast - tr$ - is regular, e.g. Ewenki j $\ddot{u} \ddot{g} \ddot{a} a t < \ast j \ddot{u} \ddot{g} \ddot{a} t$ $t - r \ddot{a}$ 'not changing' (negative participle), but the initial depalatalization $\ast j - > d$ - is clearly an anachronism from the viewpoint of Tungusic historical phonology, as depalatalization is only systematic in Orok. Helimski, who is aware of this detail, mentions that there exist examples in WM showing this irregular sound change. These examples come from Benzing (TSVG 36: §48). If my reading of the passage

⁹ Clan names among the Ewenki are usually marked with the suffix -gir (PL -gil). Vasilevič's list (1969: 262–286) contains no clan names with -wul. Negidal alcakul (?), the name of the unidentified Tungusic people around the Čara river bilyakur (?), Ewenki gayul (but cf. Ewenki maugir ~ maul), Arman (Gobdzur) = gobjur (?), Birar malakul, Ewenki oceul, Ewenki tamtakul, Ewenki tonkul, Ewenki xängul and Ewenki ceernoul, all contain a series of elements, namely -ul, -gul and -kul, that could be historically related to -wul. Note, however, that the etymology of the clan names above are not always entirely clear.

Though Helimski seems to accept the common reading of $\langle ZOA\Pi AH \rangle$ as Slavic †*župan*, he offers an alternative solution: †*jupan* $\langle *ju(w)an$ 'ten'.¹¹ This is an inconsequential decision, because it comes into conflict with previous proposal, e.g. **j*- > †*d*- before high (round) vowels in (IV) *dügetägi*, and *-*w*- > Ø in (V) *Butaul*. I find very unlikely that two different historical outcomes of two different segments may cohabit in the very same text, especially when the text is made up of two sentences, and supposedly carved by the same person. Furthermore, the result *-*w*- > †-*p*- is unheard of in Tungusic. The alternation -*p*- \sim -*w*- is common only in Northern Tungusic, and it can be always traced back to an original *-*p*- (TSVG 32–34: §44). This fact alone again contradicts the Southern Tungusic pedigree of the Buyla inscription as assumed by Helimski.

6. Slavicized Tungusic

Another very important pillar of Helimski's hypothesis is the presence of Slavic individuals in the very same spot inhabited by the Avars in the Carpathian basin and, most importantly, the linguistic influence they may have exerted on the Avar. It is in this context that the alleged sound change Proto-Tungusic $*\bar{a} \& *\bar{a} >$ Buyla Tungusic a & o makes sense, since the same development has been described for Common Slavic, e.g. Turkic *tavar [= ta'var] \rightarrow Proto-Slavic $*tawar\sigma >$ Common Slavic $*tovar \sigma$ 'good, commodity' (cf. Polish towar, Russian továr, Slovenian tóvor). These sound changes would account quite elegantly for (VII), i.e. Slavicized Tungusic $\dagger t \bar{a}gr ag \bar{i} >$ TAFPOFH (Helimski 2000a: 48) as well as

¹⁰ Note that WM *duksi* < **jüxi+ktä*, the only example supplied by Benzing (TSVG 42 §55, with a question mark!) and reproduced by Helimski, may be an intra-borrowing from Amurian Tungusic (it is necessary to assume metathesis in WM, i.e. *-ks-* <**-sk-* <**-xikt-*), cf. Ulcha *jüstä*, Literary Nanay *jusiktä*, Orok *dusiktä* (SS 1.256b). The diagnostic feature precisely is the depalatalization of initial **j* (regular, non-conditioned only in Orok). It may also be possible that none of these words are related. The preservation of the consonant cluster *-ks-* points out that this sequence may be part of the base, rather than the remnant of a suffix, e.g. PT **tüksa* 'house cover made of birch bark' > Ewenki *tiksa*, WM *tuksa* in the collocation *tuksa boo* 'house made of birch bark' (SS 2.179a). Moreover, the nominal suffix **ktA* systematically yields WM *-hA* (as in Udihe), e.g. Proto-Northern Tungusic **tii-lä-* 'to search for lice' > Ewenki *tiilä-* id. ~ Proto-Southern Tungusic **tii(i)+ktä* 'louse' > Ulcha *tiktä*, Nanay *ciktä*, WM *cihe* (SS 2.179a, 181b).

¹¹ Alemany (2009) has recently proposed that \underline{zupan} might be a blend formation, the first component corresponding to Chinese \underline{m} *zhou* 'regions'.

another lexical item which does not belong to the Buyla inscription, namely †*Boyar-inъ*, PL †*Boyare* < Slavicized Tungusic **băyā.r*(ъ), partly preserved in the Ewenki clan names *Boyar* ~ *Buyar* (Helimski 2000b: 144–146).¹² One wonders why this so regularly applied in these two words, but it failed in †*Bută*(*w*)*ul* > ***Butowul* (?) or †*Apă.r* > ***opar* (?) 'Avar' (in theory, a plural formation built on the Southern Tungusic base **apa-* 'to attack, assault' > Nanay *apa-* [\rightarrow intra-borrowing in Hailar Solon *apa-ldi-* id.], Kilen & WM *afa-* id., the only nominal derivate is WM *afan* 'battle, fight', cf. SS 1.47a, see below for further details).

In this connection, Helimski suggested that Slavicized Tungusic * $b\check{a}y\bar{a}.r(b)$ is a plural formation: SG *baya.n 'rich, wealthy' vs. PL *baya.r (but WM baya-sa).¹³ The identification of * $b\check{a}y\bar{a}.r(b)$ as Tungusic sounds natural.¹⁴ Note, however, that Helimski himself mentions that the Ewenki clan names $Boyar \sim Buyar$ may be connected with WM bayara 'guard, troops (of the Emperor)' (see SS 1.65b). The latter however contains no plural marker, but the marker of the so-called aorist or imperfect participle -ra. In an attempt at saving the Tungusic link, one could argue as an alternative explanation that * $b\check{a}y\bar{a}.r(b)$ is not a plural formation, but actually a participial formation, the change Slavicized Tungusic * $-ra \rightarrow$ Proto-Slavic *-rb being the result of analogical readjustments inspired by loanwords such as Turkic * $tavar \rightarrow$ Proto-Slavic * $t\check{a}w\bar{a}rb$. Unfortunately, Helimski failed to notice that already Vasilevič (1969: 263–264) considered those Ewenki clan names as mere variants of the more transparent $Bayagir \sim Bayagir \sim Boyagir$, with sporadic

¹² The origin of the vocalism in *Boyar* ~ *Buyar* remains unexplained (folk etymology and blending with Russian *bogáč* 'rich man', *bogátyj* 'rich' and perhaps *bogatýr* ' hero (in Russian folklore)"?). The resemblance with the vowel development in other well known "Altaic" loanwords in the Slavic languages such as Polish *kozak* ← Ukrainian *kozák* ~ Russian *kazák* 'Cossack' ← Common Turkic *kazak* 'free man, vagabond' cannot be denied. However, there is no unanimous account for the /o/ ~ /a/ vowel alternation in this word (though commonly treated as an internal Slavic process, it may have already been present in Turkic, see i.a. Pritsak 2006: 241 fn. 4 *pace* Doerfer 1967: 462–468 §1479; for additional examples and some general remarks on "Altaic" loanwords in the Slavic languages, see Stachowski 2005), therefore it is unclear whether the same explanation can apply to both *kozak* and *Boyar*. This issue requires further investigation. I am indebted to Dr. Tomasz Majtczak for bringing this fact to my attention.

¹³ As far as the Common Tungusic languages are concerned (Manchuric has reduced the original system almost to zero, cf. TSVG 76–78 §87), rules regarding the formation of plurals are straightforward: bases ending in *-n* take *-r*, otherwise they take *-l* (this includes vowel, *y*-, *l*- and *r*-bases), e.g. Lit. Ewenki *urä* 'mountain' \Rightarrow *urä-l*, *adil* 'net' \Rightarrow *adil.i-l* & *bur* 'island' \Rightarrow *bur.i-l* (*i*-epenthetic vowel insertion), *gujäy* 'pretty' \Rightarrow *gujäyl*, *oron* 'deer' \Rightarrow *oro-r*. Exceptions cover kinship terms and collectives.

¹⁴ In the Mongolic languages (they are also involved in the discussion regarding the ethnolinguistic affiliations of the Avars), the corresponding plural formation is *baya.d (*T*-plurals are only attested in Mongolic, Samoyedic and Sogdian, the few cases in Turkic being most likely of Mongolic origin, see Sinor 1952, Poppe 1977).

loss of *-g*- between vowels, perhaps under the influence of Southern Tungusic or even Manchu(ric). It may be worth noting that WM *bayara* also refers to one of the oldest clans among the Manchu (Shirokogoroff 1924: 20).

7. (TECH) & (TAICH)

Paleographic discrepancies aside, Helimski proposes that (III) & (IX), †täsi in his reading, are the continuation of $t\ddot{a}g\ddot{a}+si$, with a base meaning 'to sit' (this is a very regular base which is used even to coin neologisms for modern utensils, e.g. Orok tääk(k)u 'chair', see Ozolina 1995: 98, Ozolinja 2001: 364) and the formant +si corresponding to the well known nomina actoris suffix in WM. In Manchu grammars this suffix is usually listed along with -msi, -ci and -(m)ji (see i.a. Zakharov 2010²: §42 [10]), e.g. kumun 'music' \Rightarrow kumusi 'musician', adun 'herd, swarm' \Rightarrow aduci 'herder', boigon 'family' \Rightarrow boigoji 'host, master', butu 'dark, hidden' \Rightarrow butumji 'cunning, deceitful', taci- 'to learn' ⇒ tacimsi 'student (of the Imperial Academy of Learning)'. They should not be called allomorphs because the details concerning the criteria for their distribution are unknown. Perhaps more obvious, however, is the fact that the variant -(m)i belongs with Lit. Ewenki -mdii, Negidal & Udihe -mni ~ -mdi, Ulcha -mdi ~ -mji, Oroch & Orok & Nanay -mji, all going back to Common Tungusic *+mdi(i) (TSVG 64: §75[d], 65: §76[d] s.v. *-mgi, Sunik 1982: 92–100, Boldyrev 1987: 53–57).¹⁵ As for the variants WM -si and -ci, they are of Mongolian origin. The former variant underwent phonetic naturalization, showing in consequence the diagnostic sound correspondence WM / s / (/si / = [si])vs. Mongolian /c/ (Doerfer 1985: 177–179). The latter reflects the Mongolic -ci suffix as such (see i.a. Poppe 2006²: 40-41: §118; 1987: 274-275: §227).

All in all, it seems mandatory to assume that the language of the Buyla inscription is certainly very close to Manchuric, for this is the only Tungusic language showing the result +si. However, this is anachronistic if taken together with other features as presented by Helimski. For instance, it is remarkably inconsequent to argue for the retention of *-g- in [1], and, at the same time, to assume

¹⁵ In spite of Sunik's efforts, Ewen *-myaa* may not belong here after all. Contrary to what Boldyrev claims (1987: 56), Benzing (1953: 113, TSVG 56 §69) never proposed that *-*mdi(i)* was originally a "suffixed noun" meaning 'person connected to an object or an action' (if something, that is Benzing's provisional translation for a suffix which appears with both verbal and nominal bases!). Sunik, following the tracks of G. Ramstedt, proposes that this suffix can be segment into the deverbal noun *-*m*-+ PT **gäy* 'second; another' or **näri* 'human being', whereas Boldyrev (1987: 56–57), while rejecting all the previous attempts, proposes *-*mari* ~ **-masi* or **-Buri* (where B = /w b p m/) with no further insights regarding the exact value or later evolution of each of the components he set up. Though it is irrelevant for present purposes, none of these hypotheses has been accepted so far.

its loss. Needless to say, Helimski is well aware of this fact. In order to ameliorate its seriousness, he adds: "[i]t can be only remarked that problems of that kind frequently accompany the attempts to give an accurate description of the reflexes of "weak" consonants in Tungus-Manchurian (and in other Altaic, as well as non-Altaic) languages. Just one example: T[ungus-]M[anchurian] *daga 'root' is attested in Negidal as $d\bar{a}$, though normally -g- is preserved here (TM *daga 'near' > Negidal daya)" (2000b: 50 fn. 9). From such a picture, one may think that the situation in Tungusic is chaotic and therefore one is at liberty to choose whichever scenario may be most convenient.

Notwithstanding Helimski's agile response, the situation is actually not chaotic. As a matter of fact, the example brought up by Helimski is problematic. One of the most salient isoglosses setting apart Upper and Lower Negidal is the fate of the parental language velar plosives: PT *-*k*- yields Upper Negidal -*k*-, but Lower Negidal -*x*- (Myl'nikova / Cincius 1931: 133), and PT *-*g*- is retained in the former, but lost in the latter (according to Xasanova & Pevnov 2003: 6–7, the loss of -*g*- along with -*y*-, -*w*- and -*ŋ*-, is most noticeable in the Ust'-Amgun subdialect of Lower Negidal).¹⁶ Negidal *daga* 'near' is attested in both Upper and Lower dialects, therefore there is room to speculate that speakers of Lower Negidal may have secondarily adopted the corresponding Upper Negidal form (for example, through mixed marriages). PT **daga* 'root' is only attested in Lower Negidal and it shows the regular loss of *-*g*- between vowels as expected.

Against the preconceived chaotic situation argued for by Helimski, it may also be mentioned that the distribution of this isogloss in Negidal is not fortuitous. As is well known, Upper Negidal is linguistically and culturally linked to the Ewen, i.e. a Northern Tungusic people, whereas Lower Negidal is very closely tied to the realm of the Amurian (= Southern) Tungusic peoples (see i.a. Xasanova & Pevnov 2003: 228–229). Generally speaking, PT *-g- continues intact in Northern Tungusic, but it is systematically lost in Southern Tungusic (TSVG 29–31: §41), therefore the isogloss in the Negidal dialects has an areal basis. All in all, Helimski's

¹⁶ Schmidt (1923: 8), following the advice of certain Mr. K.D. Loginovskij, divided the Negidal language territory into four major dialectal areas: Amgun's upper current, middle current, lower current, and that of the village Tyr (virtually identical to some Ewenki varieties). To this picture, some later authors added Samagir (see i.a. Doerfer 1978: 10), a variety spoken in the valley of the Gorin, the left tributary river of the Amur, very close to the Amgun, and has been since characterized as "nanaized Negidal" (see i.a. Ligeti 1953; an aberrant Nanay dialect is spoken in the very same valley, see Putinceva 1954). Samagir and Tyr are, in overall, transitional dialects, one leaning towards Southern Tungusic, the other towards Northern Tungusic. Current views, however, give much credit to the binary classification, especially after the work of Myl'nikova and Cincius (1931, see also Cincius 1982: 17–19), which we adopt here for the sake of clarity and simplicity.

appreciation about the chaotic history of the "weak" consonants in the Tungusic languages is an oversimplification.

As for the fact that $\dagger t \ddot{a} si > \dagger t esi$ is actually not documented in the (very) extensive Manchu corpus, Helimski qualifies it as "[...] a fact that can hardly be surprising, because all political terminology of this language consists of Chinese and Mongolian loan-words." Once again, this statement is not entirely accurate: although it is true that the administrative and political terminology comes from Chinese and Mongolian, each term has its corresponding Manchu translation. Interestingly enough, the Beijing pentaglot dictionary (*Wŭtĭ qīngwénjiàn*) contains around 580 terms belonging to this very semantic field (Wŭtĭ 1.107–138) and none of them resembles the one of which Helimski is in need.¹⁷

8. Some thoughts on morphosyntax

The Buyla inscription, according always to Helimski's hypothesis, contains two prototypical transitive sentences. The typological profile of the Tungusic languages deserves no special treatment: they are agglutinative, SOV, and accusative. If these characteristics are borne in mind, the only striking fact in the Buyla inscription is the lack of direct object markers in *†taagragii*, *†jügäträgii* and *†butawul*. However, Helimski (2000b: 51) mentions that there are numerous cases of zero-accusatives (= nominative objects in Helimski's wording) in Nanay, especially when the patient is undetermined (= indefinite objects). Regretfully, Helimski again simplifies a highly complicated issue. In reality, there are two different issues which need to be dealt with: (a) actual zero-accusatives and (b) the so-called indefinite accusative or destinative.

a) Nominative objects or zero-accusatives

The existence of nominative objects or zero-accusatives can be supported with extensive documentation. Helimski profits from Avrorin's research on Nanay syntax. Avrorin (1981: 155–158) explains that there are nominative objects already documented in 19th and early 20th century sources (e.g. Protodiakonov, Dobrolovskij). These sources actually reflect Kilen (= Sungari Nanay), a language whose grammatical structure stands very close to Southern Tungusic (see i.a.

¹⁷ The Manchu word *dasan* 'rule, government, control', which loosely reminds of †*täsi*, is traditionally explained as a (recent) Mongolism, cf. Manchu *jasak* 'chief of a Mongol banner' after dissimilation (Rozycki 1994: 121; see some remarks on the sound change in §5 above). SS editors (1.201a) mention Chinese 治 *zhì* ~ *chí* 'to work, make, regulate, govern > well-governed, in good order', which they derive from **dai* (Pulleyblank 1991: 56, 408; Schuessler 2007: 619).

Sem 1976: 14–24, Janhunen 1996: 61–61, Doerfer 1977: 57, 60: §2).¹⁸ Why this is relevant, I shall explain in the following paragraphs. Interestingly enough, neither Avrorin nor, consequently, Helimski provide examples of this phenomenon. The two fragments below were gathered by I.A. Dobrolovskij and published by Kotvičъ (= Władysław Kotwicz). The first example (simple sentence) shows the use of the overt accusative marker. The second, however, shows in the first place the overt accusative marker in a context where it is expected, but afterwards, a nominative object is found instead¹⁹:

- Kilen (1) (Абка ендурі баю оwoi дуні джолодзі owo хані.) heaven spirit sky-ACC set-PRT.AOR-LOC-3SG.POSS stone-INST set-PST-3SG 'When the celestial spirit made the heavens, he made (it) with stone(s).' (Kotvičь 1909: 217, Text III, lines 1–2)
 - (2) «"неу бі ему баду, ему бансі джефахаі, хесумі ачарсін сакді".-сини джефахаси уке сакді?-"Міні джефахаі тені сакді: бу нінгун боје ему бансіwö джефемі илан іненгі илан долбо джефехаї коптомоніха фоlді ларцін. [...]"> young.brother I one place-LOC one pelmen eat-PST-1SG say-CV.SG not. possible big you.GEN eat-PST-2SG so big I.GEN eat-CV.PL this big we six person one pelmen-ACC eat-CV.SG three day three night eat-CV.PL jacket-3SG.POSS-EMPH pierce-NEG-PST.3SG

"(Young) brother, at a certain place I ate one pelmen [a kind of ravioli], so big, one would say it cannot be (that) big", – "That what you ate, how big was it?", "What I ate was that big! We (were) six men, we had one pelmen for three days and three nights, and the jacket did not get (even) pierced!"" (Κοτνičъ 1909: 218. Text IV. lines 4-10)²⁰

¹⁸ For a long time, it was customary to treat some aberrant varieties of Amurian Tungusic as Nanay dialects. It was after Doerfer's work that Najxin (= Literary) Nanay, Kilen (= Bikin Nanay) and Kili (= Kur-Urmi Nanay), together with Hezhe(n), are considered autonomous variants (see Janhunen 2012: 16, items [13–15] in Appendix, and Alonso de la Fuente 2011b, esp. pp. 15–17 for some linguistic features distinguishing Literary Nanay [Janhunen's "proper Nanai"], Kilen and Kili).

¹⁹ Both examples have been Latinized (they were originally written in the Cyrillic script) and translated into German (Walravens 1992: 1–12, esp. 10 and 11, respectively).

²⁰ This fragment contains some obscure words deserving clarification. Based on the translation provided by Kotwicz, it is possible to speculate that the modifier *†uke* corresponds to Kilen $\ddot{a}k\ddot{a}$ = Literary Nanay $\ddot{a}y\ddot{a}$ 'this (close)' (see Avrorin 1959: 269–270, Sem 1976: 61–62; one is tempted to mention Manchu *uhe* '(comm)unity, unified; at one, in concert; in general, on the whole' or the emphatic *weke* 'hey you!'). Apparently isolated within Tungusic, the verbal base *†foldi.la*- may be related to Manchu *folo-mbi* 'to carve, engrave' or *folko-mbi* 'to leave a pace, make an interval, make a pause'. *†tänii* corresponds to the emphatic particle =*tAni* which is commonly attached to the desiderative verbal mood (Avrorin 1961: 267–268). *†koptomo-ni-ha* (with $\langle h \rangle = [\gamma] < -k-?$) contains the emphatic particle =*kA* (Avrorin 1961: 268), though one would not expect it here.

On one hand, example (2) shows the typical context where the ACC marker is dropped: direct objects referring to generic entities or direct objects which are mentioned for the first time ('one pelmen'). On the other hand, examples (1) and partly (2) make clear that definiteness is the feature that triggers the obligatory presence of the ACC marker ('the heavens', 'the pelmen (that one, the big one)'). As far as Manchuric is concerned, the presence of the ACC marker *be* is obligatory in Classical Manchu only when the direct object of a transitive verb occurs in a distant position or in negative utterances. However, in declarative, affirmative sentences, if the object occurs immediately before the governing transitive verb, the ACC marker can be left out. It is also claimed that the presence of the ACC marker greatly depends on whether the direct object refers to specific entities (see i.a. Tamura 1990, Gorelova 2002: 170–172, Larsen 2007).

The two sentences of the Buyla inscription seem to fulfill the requirements for definiteness, but we have no ACC marker. Its absence therefore may have a different motivation. In Udihe (see i.a. Nikolaeva & Tolskaya 2001: 120-123), for instance, the circumstances under which the accusative may surface as the nominative, namely with the zero-marker, are (1) phonetic, e.g. allegro pronunciation of the accusative marker after bases ending in /o/, /u/, /wa/, /fa/, e.g. au(-wa) 'cup', inofo(-wo) 'bird cherry tree' mäwa(-wa) 'heart', mafa(-wa) 'old man; bear', or before words beginning with /wa/ (especially transitive verbs), e.g. wa- 'to kill', or (2) semantic, e.g. with non-specific patients (mass or generic nouns) or if the corresponding participant is being introduced in the text for the first time (see Kilen example [2] above). Could it be that there are no ACC markers in the Buyla inscription because the direct objects refer to entities mentioned for the first time? This is very unlikely, because "the first time" context requires that the direct object has to be mentioned on several occasions, as in the Kilen example (2) above, where 'pelmen' appears twice: the first time without the ACC marker, but with it attached the second time.

From the perspective of textual typology, the closest parallel and model for the Buyla inscription are the Jurchen memorials. Jurchen, together with Manchu and Sibe, constitutes the Manchuric (or Jurchenic in Janhunen's terminology) branch of the Tungusic language family. These languages are very close to the Southern Tungusic branch, hence the pertinence of the comparison in regards to Helimski's hypothesis. The Jurchen memorials have a very rigid formulaic language as shown in the following example belonging to the Tōyō Bunko collection (Kiyose 1977: 208–209 [Memorial XVII]; I follow his transliteration and translation):

Jurchen †haisi gitan wei du jihuwi jaligi jejimei / jaulamai ahai cinho juwa sunja aniya juwa juwe / biya juwa uyun inengi bahabi di ejehei weilebe / tee aniya salada wajir biye juwii / cuyanha digun širaru ahai bahabi di / ejehei weilebe jaulamai bahabi / aciburu haganni sahi. Haisi Gitan guard regional commissioner Jaligi be.awed-CV.AOR memorial-DER-CV.AOR slave Ch'eng-hua ten five year ten two month ten nine day get-CV.PRF "of"²¹ post thing-ACC now year aged finish-DER exist son Cuyanha come-DER inherit-HOR slave get-CV.PRF "of" post thing-ACC memorial-DER-CV.AOR get-CV.PRF divine emperor know-PRT.PRF

I, Jaligi, Regional Military Commissioner of the Gitan Guard of Hai-hsi, respectfully memorialize concerning the position which I obtained on the 19th day of the 12th month in the 15th year of the Ch'eng-hua period. I have aged now and have a son, Cuyanga. Let him come and assume (my) position. Would that the Divine Emperor but acknowledge my petition.

Note that the direct object *ejehei weile* 'position' appears twice carrying the ACC marker, irrespective of whether it occurs immediately before the governing transitive verb or its referent has been mentioned for the first time. This fact casts some doubts on Helimski's statement.

b) Indefinite accusative

The indefinite accusative (IND.ACC, Russian винительный неопределенный падеж) could shed some light on the question raised by Helimski regarding zero-accusatives. Some authors now argue that the IND.ACC is connected to the destinative or designative case (DES, Russian назначительный падеж; note that in his comparative treatise, Benzing locates it *sub* "Partitiv", cf. TSVG 81–83: §92, Menges 1952, Kazama 2012).

In the Northern Tungusic languages, the so-called indefinite accusative signals an unknown or indefinite direct object and it is obligatory in negative transitive sentences (one of the two obligatory contexts in which the ACC marker is obligatory in Manchuric or Nanay). The destinative, on the other hand, "[...] designates a thing which is prepared for the future use of the person specified by the person suffix, so this possessive relation is called 'future possession'. Syntactically the designative case functions like the accusative [...]" (Kazama 2012: 124). The DES appears always with possessive endings. In contrast, if the IND.ACC is followed by possessive endings, it carries the same function as the DES. When both IND. ACC or DES and ACC co-occur in the same sentence, the later signals more abstract, secondary objects, e.g.

Ewenki	(1) jäwgää-yä gamii, aya bi-mcä.
	food-ACC.IND take good be-COND
	'It would be good to get some (any) food.'
	(Literary Ewenki; Bulatova & Grenoble 1999: 9)

²¹ The presence of this element is usually explained as the product of Chinese influence (calques), e.g. †bakjumei di 'to be hostile' is translated in Chinese 對敵 duìdí 'to confront, face the enemy', lit. 'opponent' + 'to be hostile', cf. Manchu bakcin 'opponent,

 (2) Küldinakaan mata Mängunkaan ahaatkaan-ma ahi-ya-wi ga.da-n. Küldinakaan hero Mängunkaan girl-ACC wife-IND.ACC-REF.SG take. AOR-3SG
 'The hero called Küldinakaan took as wife a girl called Mängunkaan.' (Sakhalin Ewenki; Vasilevič 1936: 106 [line 47])
 Nanay
 Si ami-si bu.ji-i juliälä-ni täy äktä-wä asi-go-a-si ga-ci-ni. you father-2SG.POSS die-PRT.AOR-POSS.REF before-3SG.POSS here

woman-ACC wife-DES-OCM-2SG.POSS buy-PST-3SG 'Before he passed away, your father bought here a woman as wife.' (Avrorin 1981: 159)

Generally speaking, the distribution of the IND.ACC and DES markers within the Tungusic languages is complementary (cf. Kazama 2012: 143): Northern Tungusic languages exhibit IND.ACC,²² whereas Southern Tungusic have DES. Manchuric has none of them, the loss of this marker being traditionally ascribed to Mongolic and Chinese influence. It follows naturally that the IND.ACC and the DES may have shared the same source in the distant past. The following table summarizes the distribution of the IND.ACC and DES:

Language	Ending		Description	Reference
Ewenki	$C^{\circ}-a \sim V^{\circ}-ya$		Indefinite accusative	Konstantinova (1964: 49)
Negidal	Class I (V°) -ya, e.g. joo 'house' \Rightarrow joo-ya Class II (/g y l m ŋ/°) -ya ~ -ña, e.g. laan 'trap' \Rightarrow laan-ña Class III (/k x p t s/°) -ya, e.g. es 'larch' \Rightarrow ees-ya Class IV (n°) -a, e.g oyon 'deer' \Rightarrow oyon-o PL -la, e.g. joo-l-la		Indefinite accusative	Cincius (1982: 27, Table I)
Solon	$C^{\circ}-a \sim V^{\circ}-ya$		Indefinite accusative Partitivus	Poppe (1931: 113: §31) Hú / Cháokè (1986: 25)
Ewen	Class I (V°) -ga- Class IIa (C[-strong]°) -ga- Class IIb (C[+strong]°) -ka- Class III (n°) -ŋa-+ POSS.F		Destinative	Novikova (1960: 188–195)

opposite side'. The Chinese transcription of $\dagger bakjumei$ di has $\oiint de$ for the last element (Kiyose 1977: 141 [797], fn. 326 and 327). It is worth noting that Chinese $\oiint de$ is placed between the object and its governing verb when used as emphatic particle.

²² Note that in Literary Ewenki, the IND.ACC marker is -(y)a, and the regular ACC is -wa. The former and the Manchuric ACC marker (-)be are cognates (see i.a. TSVG 80–81 §91).

Language	Ending		Description	Reference
Oroch	Class I (V°) <i>-yaa- ~ -laa-</i> Class II (n°) <i>-naa-</i> Class III (g°) <i>-laa-</i>	+ POSS.REF	Destinative	Avrorin / Boldyrev (2001: 115–118)
Udihe	-na-	+ POSS.REF	Destinative	Nikolaeva / Tolskaya (2001: 126–127)
Kili	-na-	+ POSS.REF	Destinative	Sunik (1958: 72)
Orok	-ddoo-	+ POSS.REF	Partitive	Petrova (1967: 51-52)
Ulcha	POSS -ju- SG.REFL -ju-ï PL.REFL -ju-wa-r(i)	+ POSS.REF	Destinative	Sunik (1985: 34–35)
Kilen	Class I (V°) <i>-go-</i> Class II (n°) <i>-(ŋ)go-</i>	+ POSS.REF	Destinative	Sem (1976: 40–41)
Nanay	1&2SG&PL.POSS -go-a- 1SG.POSS -go-i-wa 1PL.POSS -go-po- SG.REFL -go-i PL.REFL -go-a-ri	+ POSS.REF	Destinative	Avrorin (1959: 179)

The history of this case is fairly complicated. The Ewenki marker -(y)a goes along with Solon & Negidal & Oroch -(y)a. Benzing explains that Udihe (& Kili) -(n)a (+POSS personal endings) is the result of reinterpreting the final segment of *n*-bases as part of the marker, i.e. $CVCVn-a > CVCV-na.^{23}$ Since deaffrication is regular in Orok, it is possible to link Ulcha and Orok. Benzing, however, provides no reconstruction, most certainly because he finds very difficult to reconcile the *y*-endings with Ewen -ga (+POSS personal endings), Nanay -go- and Ulcha -ju-. Had the original CT ending have *-g-, Southern Tungusic languages would have yielded Ø. Moreover, the sound change *g > /j/ is irregular in the Tungusic languages, therefore there is little to recommend in the explanation that Ulcha & Orok /j/ is a development of Ewen & Nanay /g/. The plural formation in Negidal points out that there is a consonant assimilated to the plural marker /l/, e.g. joo-l-la < *joo-l-Ca, but this is not reflected in Ewenki, e.g. oro-r-o {deer-PL-DES}, with regular C°-a ending. It is safe to assume that Negidal elusive "C" is /y/.

²³ Kazama's skepticism about the validity of this explanation (2012: 144) is unfounded. Such a process, i.e. reinterpretation of morpheme boundaries, cross-linguistically is very common. The original or primary stage is preserved in the allomorphy of Oroch & Ewen. It is possible to speculate that Udihe & Kili, due to external influences (Mongolic, Chinese), generalized the *n*-allomorph (the generalization, or simplification, of allomorphy is another fairly common process, see the IND.ACC in Ewenki & Solon, or, with more profound consequences, the history of Manchuric, where there is almost no consonantal allomorphy).

From a functional viewpoint, Kazama (2012: 146–147) convincingly argues that IND.ACC is original, the DES being a later development. Unfortunately, he does not elaborate further on the details of this functional evolution, nor does he explain the formal diversity of the marker in the historical languages. To account for Ewen *-ga*, Malchukov / Nedjalkov (2010: 347–349) proposed a grammaticalization scenario whereby the source structure, in origin a serial-verb construction, would require the presence of a non-finite form of the verb *ga-* 'to take' with a subordinate object (Malchukov's (h) = ours (x)):

Hin turki-ga-s emu-re-m	*[Hin turki(-w) ga-ga-s] emu-re-m
your sledge-DES-2SG <	your sledge(-ACC) take-CV-2SG
bring-AOR-1SG	bring-AOR-1SG

This ingenious solution has some advantages: Ewen ga- is the continuation of a Proto-Tungusic verbal base *ga- 'to take' (SS 1.133–134), therefore it is possible to propose that the source construction was already used in the parental language. I would add that the grammaticalization described by Malchukov / Nedjalkov may have involve not only *ga-, but also *gaju- 'to bring or take something back'. This word whose etymology is not entirely clear (traditional accounts related the last segment to Southern Tungusic + Manchuric *ji- < *di- 'to come', see SS 1.255a) has also Proto-Tungusic pedigree:

PT (SS 1.133–134, EEW [3932, 3940])	*ga- 'to take'	*ga.ju- 'to (go to) bring or take something back'
Ewenki	ga-	ga.ju-
Ewen & Arman	ga-	ga.jï-
Negidal	ga-	gajï-
Solon	ga-	gajüü-
Oroch	ga-	gay- 'to bring'
Udihe	ga-	gaji-~gaju-, cf. gagi- 'to gather, take back'
Nanay	ga-	gajo-, cf. gago- 'to gather, take back'
Kili	ga-	
Kilen	ga-	gajī-
Ulcha	ga-	gajü-
Orok	ga-	gasü-
WM	<i>gai-</i> , imperative <i>gaisu</i> ²⁴	<i>gaji-</i> 'to bring', imperative † <i>gaju</i> ~ <i>gaji</i> (cf. Sibe <i>gaju-</i> 'to bring')

²⁴ I shall elsewhere deal with the origins of Manchu -*i* in *gai*- as well as the imperative *gaisu*.

There is nothing ludicrous in proposing that *gaju- could account for the formal diversity of the IND.ACC and DES markers. This hypothesis should be able to overcome two phonetic obstacles: (1) the anomalous distribution of $\frac{g}{n}$ in the onset (the sound change $*-g - > \emptyset$ is regular only in Southern Tungusic and Manchuric), and (2) the back articulation of the vowel in Southern Tungusic. The initial autonomy of *ga- would explain why *g has not been regularly lost in Southern Tungusic (as a matter of fact, this happened only in Orok and Ulcha, e.g. *...gaju- > *...(a)iU-; after the grammaticalization was completed, idiosyncratic changes in Orok took place, i.e. *-j->-s-). It is reasonable to assume that Northern Tungusic (+ Oroch, Udihe) *-(y)a could have originated after the (irregular) complete loss of *ga- and the lenition of -j- to -y-, as in Oroch ga- vs. gay- (while admittedly irregular, such a scenario is not unheard of, see TVSG 36-37: §48).²⁵ The reduction in Nanay & Kilen -go- < *-gaju- is also unexpected. In this case, however, the point of departure might be just *ga-: labialization is fairly common, especially, though not exclusively, after labial and velar consonants, when adopting regular harmonic vowel patterns (e.g. instrument nouns from verbs: Lit. Ewenki -*ŋkii* vs. Nanay -*ŋko*, or alienable possession: Lit. Ewenki +*ŋii*+ vs. Nanay +ngo+, etc., see Boldyrev 1987: 32–39 and 1976: 130–142, respectively). Another solution would involve the presence of two "competing" IND.ACC markers: *-(y)a vs. *-ga(ju), the former is original and partially preserved in Northern Tungusic, Udihe (& Kili), whereas the latter, a secondary product, developed in Ewen and Southern Tungusic.

How could Helimski's hypothesis benefit from the foregoing discussion? If the Buyla inscription reflects a language closer to Southern Tungusic, it is legitimate to speculate that it could reflect a sort of intermediate stage in which the IND. ACC is undergoing the functional change towards the DES: $\dagger taag$ - 'to recognize' and $\dagger ic\ddot{a}$ - 'to see (> watch over)' can actually target objects with the DES marker, which is most frequently attached to the objects of verbs belonging to a very specific semantic class ('discovering, pursuing, making, achievement, appearance'). For example, Kazama (2012: 126–127) mentions Nanay *baogo*- 'to see', *ta*- 'to do, make', *gaajo*- 'to bring' (the lexical source for the very DES ending) or *baa*- 'to get, obtain' (its cognate is present in the Jurchen memorial). However, if the change IND.ACC > DES obligatorily requires the use of POSS markers or the grammaticalization of **ga*(*ju*)-, then it is very difficult to reconcile this requirement with the material evidence in the Buyla inscription, where nothing can be traced back to possessives or **ga*(*ju*-).

²⁵ Contraction and phonetic simplification involving irregular sound changes are common stages in the process of grammaticalization (for an in-depth discussion with additional examples in Tungusic, see Alonso de la Fuente 2011a, esp. 18–24, 105–110).

EXCURSUS. Hungaro-Tungusica.

Helimski agrees with Futaky in that there are a few Hungarian words, the etymology of which, being impossible to be discerned through the Finno-Ugric background of the language, could be solved by invoking Tungusic substratum.²⁶ Since Futaky also mentions the Avar question, Helimski may find support for his own hypothesis by accepting Futaky's. There is no place in this brief contribution for an exhaustive review of Futaky's proposal, which has been received very negatively. Among others, the Hungarian Mongolist Gy. Kara (Kara 2002; see now Knüppel 2013: 194–197) explains that most etymologies suffer of lame semantics, inconsistent sound correspondences, anachronisms, etc. In what follows, the core of the discussion will revolve around four well known etymologies that, according to Helimski (2000: 53), are faultless. These four etymologies allegedly account for the Tungusic background of Hungarian beteg 'ill', oldal 'side', hamar 'quickly', and kanál 'spoon'. It must be highlighted that the present author is not trained in Finno-Ugric linguistics and therefore cannot discuss Hungarian matters in its proper context, therefore comments will be restricted to Tungusic.

#	Hungarian (Futaky 2001 / Kara 2002)	Tungusic (reconstruction [adapted] = EEW / materials = SS)
Ι	beteg 'ill' (35–37 / 492)	PT *bö.dä- (PRT.AOR) ~ *bö.cä- (PRT.PST) 'to die' (147 _[1562]) > Lit. Ewenki bu.dä- & bu.rä- (both PRT.AOR, the latter is analogical), Lit. Ewen (& Arman) bu-ni 'deceased', butään 'pain, indisposition' \Rightarrow butääk 'sickly, unhealthy' (cf. Arman butääkñä), Solon busé ~ buc'á (PRT.PST), Negidal bu.dä- ~ buldä-, Nanay bu(y)- & bur-, Orok & Ulcha bu(l)-, Kili & Kilen & Oroch & Lit. Udihe bu.dä-, WM bude- ~ buce- (Sibe becë-) (I.98–99), all meaning 'to die'.
II	<i>oldal</i> 'side' (65 / 495)	CT * <i>xoldaa.n</i> 'side' (642 _[8521]) > Lit. Ewenki <i>oldoon</i> , Lit. Ewen <i>oldaan</i> , Hailar Solon <i>oldoⁿ</i> , Negidal <i>oldon</i> , Arman <i>oldaanji</i> 'around' (< CT * <i>xoldaa.n+ji</i>), Lit. Udihe & Oroch <i>ogdo(n-</i>), Kili <i>oldoⁿ</i> , Ulcha <i>xoldo(n)</i> , Nanay <i>xoldoⁿ</i> , Orok <i>xoldo(n-</i>), Kilen <i>xoldoⁿ</i> (II.13), all meaning 'side'.

²⁶ Not interfering with Uralic and Finno-Ugric comparative linguistics is the main difference between Futaky's and previous attempts at linking Hungarian and Manchu(ric) or Tungusic, a tradition which apparently begun with Conon von Gabelentz's 46 Manchu–Hungarian (lexical) comparisons (Conon de la Gabelentz 1832: 6–8).

#	Hungarian (Futaky 2001 / Kara 2002)	Tungusic (reconstruction [adapted] = EEW / materials = SS)
III	<i>hamar</i> 'quickly' (51–52 / 493)	PT *(x)ama+ 'quick(ly), fast' $(69_{[466, 467]}) >$ Lit. Ewenki ama, Dial. Ewenki kamaña ~ kamakaan / gamakaan, Solon amarii, Lit. Ewen aamrək, Dial. Ewen amdak / aamnak, Arman aasmak (I.34), all meaning 'quick(ly), fast'. Cf. Lit. Ewenki amiltaan- 'to be in time, catch up', Lit. Ewen aaməltən- id., Arman aamaltan- id. (I.38a).
IV	<i>kanál ~ kalán</i> 'spoon' (60–61 / 494)	CT *kala.n 'kettle' (448 _[5748]) > Ewenki kalan (\Rightarrow kala+kaan {DIM} 'little kettle' & verbal derivates from kala-ruu-, cf. Arman kalaa-was ~ kalaa-wüs 'bag'), Nanay & Kile kala ⁿ , Ulcha & Lit. Udihe kala(n-) (I.364–365), all meaning 'kettle'.

Everything would be alright if the sound correspondences which Futaky established on the basis of these etymologies would apply in the remaining cases with the same regularity. Just to mention one illustrative example: Hungarian (e) and (é) may correspond to Tungusic * \ddot{o} , *e, *i or *ya (this holds true also for Futaky's Hungarian-Mongolic comparisons, e.g. Hungarian *beze* 'really, truly' > *bezzek* 'of course', *biz(ik)* 'to entrust, confide', *deber* [> *deberke*] 'a kind of dumpling' and *kebel* 'abdomen, lap' are compared with Mongolic *biz*, *bisira*, *debure* and *kebeli*, respectively, see Futaky 2001: 23–32 s.vv.). There is no problem with this scenario as long as the diversity of results is explained. Unfortunately, Futaky provides the reader with no explanations at this regard.

There is also a striking lack of consistency with the relative chronology of some sound changes occurring in the history of Tungusic phonology. For example, Hungarian *oldal* (II) reflects the vowel sequence o...a, certainly very archaic in Tungusic (it has been partially preserved only in Literary Ewen), but there is no trace of the initial *x, another very archaic feature in Tungusic which is commonly taken to co-occur with the vowel sequence *CoCa. However, Futaky assumes that (III) goes back to *xamar, in spite of the lack of Southern Tungusic cognates supporting the reconstruction of initial *x.²⁷ Note that dialectal forms in Ewenki with initial *g*- (East: Kacug, Nercin, Tokmin; South: Stony Tungus) and *k*- (East: Aldan, Tokmin, Ucur; North: Erbogocen; South: Stony Tungus) may be the result of secondary processes, e.g. contamination with CT *kama- 'to oppress, prohibit; be at a loss' (SS 1.369). As for *g*-, it could be a prothetic consonant, perhaps triggered

Futaky was apparently aware of this fact, e.g. *hajdan* 'in times past, in former times' ← *xaal(i)+daa {when-LOC} 'some time' (2001: 50–51), the derivate is only attested in Southern Tungusic and Oroch, being absent in Northern Tungusic; Futaky does not explain Hungarian -n, which cannot be of Tungusic origin because Tungusic -n never follows grammatical endings (SS 1.32a, Kara 2001: 493).

by analogy with other (postpositional) forms such as *xamari* 'down'.²⁸ Why was x left untouched in one word, but lost in the other?

In this connection, there seems to be a preference for Northern Tungusic materials in Futaky's works, although there is no explicit statement to this effect. It remains unclear why Futaky chose Literary Ewenki *iiy(ä)* 'horn' and related forms (see SS 1.298–299) as the point of departure for the etymology of Hungarian *ij* 'bow', when it is well known that the corresponding form in the parental language is $x \ddot{u} y \ddot{a}$ 'id.' (> Orok & Ulcha *xuyä*, Literary Nanay *xuyi*ⁿ, Manchu *weihe* ~ *uihe*, etc., see i.a. EEW 386 [4973]). Even less comprehensible is his decision to relate Hungarian *buk(ik)* 'to fall, collapse' (Futaky 2001: 37) to Literary Ewenki *buk*- 'to throw on, upon; to rush' (SS 1.103b). The presence of this word in only a handful of (Northern) Ewenki dialects and its remarkable resemblance with Yakut *bok kin*- 'to do something immediately, at once' (Pekarskij 1959: 489) cannot be fortuitous and begs for a common explanation.²⁹

In previous paragraphs it was shown that some Hungarian words apparently retain certain salient archaic features of Tungusic, e.g. initial **x*, but Futaky's practice of targeting only Northern Tungusic materials goes very often against this trait. Again, the scenario may be plausible as long as Futaky explains why the Hungarian lexicon has Northern Tungusic items, in spite of the implications, namely, a much recent chronological layer that makes the description the journey of those Tungusic words into the Carpathian basin even harder. The dispersion of Ewenki speakers over Northern Siberia is a rather recent event (it is commonly taken to be no earlier than the 12th c., see i.a. Janhunen 2013: 35) which cannot be linked under any circumstance with population movements heading towards southeastern regions.

²⁸ Castrén's vocabulary is one of the earliest witnesses to the alternation (h) ~ Ø, e.g. hokto (Urulgin dialect) ~ okto (Manikova dialect) 'path, track', halgan ~ algan 'foot', or häŋä ~ äŋä 'friend, companion' (1856: 82–83), etc. This is a regular alternation among Ewenki dialects, the point of departure of which is PT *p- (preserved in Ulcha & Orok p-, against Lit. Ewen & Negidal & Udihe & Oroch h- [h ~ x], therefore it cannot be equated with amar, see TSVG 32–34 §44). Could †[yamar] be an example of hypercorrection? Secondary /h/, which appears as a prothetic segment in words beginning with high back vowels, is a very common feature in Ewenki dialects, e.g. Sym (Southern) Ewenki (h)utä ~ 'utä vs. Lit. Ewenki hutä 'son', with putative PT *p-, but horokto vs. oro(o)kto 'grass', from PT *oraa+kta 'grass, hay', cf. Lit. Ewen oraat (SS 2.24, Vasilevič 1948: 64).

²⁹ The Yakut connection, ignored by Futaky even though it is already pointed by the SS editors, is not entirely clear, though: the distribution of *bok* seems restricted also in Yakut (Pekarskij provides only one source) and the sound correspondence Ewenki /u/: Yakut /o/, though not uncommon, is ambiguous, cf. Yakut *üüt turaan* 'vollständige Stille' ← Ewenki *toron* 'Stille' or Yakut *noxto* ~ *nolto* 'Ader, Vene' ← Ewenki *ungukta* id. (Kałużyński 1982: 266, 268; for further details on the phonology of the vowel correspondences, see Romanova / Myreeva / Baraškov 1975: 34–42). All in all, this would rather point to a Tungusic loan in Yakut, and not the other way around.

One would expect that Futaky's and Helimski's linguistic evidences³⁰ would show some kind of homogeneity. For example, the Hungarian words discussed by Futaky could reflect some of the Slavic features described by Helimski. But this is not the case, even when the context would favor such a scenario. What is more, the obvious Northern Tungusic bias aside, it is impossible by any stretch of the imagination to provide a specific set of features characterizing the Tungusic language behind Futaky's Hungarian etymologies. Another example of the non-complementary relationship between Helimski's and Futaky's hypotheses: on several occasions Helimski suggested that the Tungusic language which arrived to the Carpathian basic was very similar to Southern Tungusic and Manchuric. Once again, no one will find an independent confirmation of this in Futaky's hypothesis.

One could argue that the differences between Futaky's and Helimski's hypotheses lie in the fact that they exploit different sources. Helimski worked with a textual sample which consequently demands some kind of linguistic homogeneity. However, Futaky preferred to deal with individual items, scattered through the Hungarian lexicon, for which there is a lack of the most basic information about their original cultural and linguistic contexts. Therefore, it would be legitimate to conclude that the apparent homogeneity proposed by Helimski cannot be called for in Futaky's materials, because each item analyzed by the Hungarian scholar may well belong to different chronological layers. But even if this is so, the fact remains that both hypotheses must be rejected due to their many inconsistencies and faulty methodology.

9. Conclusions

In the foregoing discussion (see \$\$3-\$), it has been shown that the Tungusic reading of the Buyla inscription by E. Helimski poses some insurmountable problems: the reconstruction of *-g- in the aorist participle marker, the ghost word $\dagger t \ddot{a} s i$, the inconsistency of the so-called "Slavic" features (= Slavicized Tungusic), the rather arbitrary presence of Northern elements when it is claimed that the inscription stands closer to Southern Tungusic and Manchuric, the uncertainties surrounding the morphosyntactic analysis, etc. More problematic is Futaky's idea regarding the presence of Tungusic words in Hungarian (see **Excursus**). Although both Helimski's and Futaky's hypotheses could greatly profit from each other owing

³⁰ Incidentally, it could be mentioned that cultural traits linking Asian Avars and Tungusians have been also proposed in the specialist literature. Köhalmi-Uray (2004: 119–120) has recently suggested, "[a]lthough not without doubts and reluctance", that there might be a connection between a historical episode of the Asian Avars (= the Ruanruan, see foot note 1 above) and the tale of the Nišan shamaness.

to the more or less common background they share, in reality the two proposals are mutually exclusive.

In an audacious leap of imagination, Helimski tried to find the solution to a long-standing problem by adopting an entirely new perspective. As S.J. Gould argued in a memorable essay (1980: 59–68), the success of any scientific endeavor depends on the balance between inductivism ("[a] new and significant theory [...] can arise from a firm foundation of facts. [...] each fact is a brick in a structure built without blueprints. Any talk or thought about theory (the completed building) is fatuous and premature before the bricks are set") and eurekaism ("[g]reat scientists [...] are distinguished more by their powers of hunch and synthesis, than their skill in experiment or observation"). Gould illustrated this point invoking Darwin's achievements. Helimski did not find the middle road between inductivism and eurekaism, but rather strayed off and got lost in the latter.

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Abbreviations

1, 2, 3 = person; ACC = accusative; AOR = aorist; COND = conditional; CT = Common Tungusic; CV = converb; DER = derivative (suffix); DES = destinative; EMPH = emphatic (particle); GEN = genitive; HAB = habitual; HOR = hortative; IND = indefinite; INST = instrumental; LOC = locative; NEG = negative; NLZ = nominalizer; OCM = oblique case marker; PL = plural; POSS = possessive; PRF = perfect; PRT = participle; PST = past; REF = reflexive; SG = singular; WM = Written Manchu.

References

Alemany A. 2009. From Central Asia to the Balkans: the Title *ču(b)-pān. – Allison Ch. / Joisten-Pruschke A. / Wendtland A. (eds.), From Daēnā to Dîn: Religion, Kultur und Sprache in der iranischen Welt. Festschrift für Philip Kreyenbroek zum 60. Geburtstag. Wiesbaden: 3–12.

Alonso de la Fuente J.A. 2011a. *Tense, Voice and* Aktionsart *in Tungusic. Another Case of "Analysis to Synthesis"*? Wiesbaden.

Alonso de la Fuente J.A. 2011b. Venjukov's [1858] 1862/1868 Nanai materials. – *Journal de la Société Finno-Ougrienne* 93: 11–35.

- Atknine V. 1997. The Evenki Language from the Yenisei to Sakhalin. Northern Minority Languages: Problems of Survival. Senri Ethnological Studies 44: 109–121.
- Avrorin B.A. / Boldyrev B.V. 2001. Grammatika oročskogo jazyka. Novosibirsk.
- Avrorin V.A. 1959. *Grammatika nanajskogo jazyka*, vol. 1: *Fonetičeskoe vvedenie i morfologija imennyx častej reči*. Moskva / Leningrad.
- Avrorin V.A. 1961. Grammatika nanajskogo jazyka, vol. 2: Morfologija glagol'nyx i narečnyx častej reči, meždometij, služebnyx slov i častic. Moskva / Leningrad.
- Avrorin V.A. 1981. Sintaksičeskie issledovanija po nanajskomu jazyku. Leningrad.
- Beckwith C.I. 2009. *Empires of the Silk Road. A History of Central Eurasia from the Bronze Age to the Present*. Princeton / Oxford.
- Benzing J. 1953. Remarques sur les langues tongouses et leurs relations avec les autres langues dites "altaiques". *Ural-altaische Jahrbücher* 25.1–2: 109–118.
- Boldyrev B.V. 1976. Kategorija kosvennoj prinadležnosti v tunguso-man'čžurskix jazykax. Moskva.

Boldyrev B.V. 1987. Slovoobrazovanie imen suščestvitel 'nyx v tunguso-man'čžurskix jazykax v sravnitel 'no-istoričeskom osveščenii. Novosibirsk.

Bulatova N. / Grenoble L. 1999. Evenki. München.

Castrén M.A. 1856. *Grundzüge einer tungusischen Sprachlehre nebst kurzem Wörterverzeichniss.* St. Petersburg.

- Cincius V.I. 1982. Negidal'skij jazyk. Issledovanija i materialy. Leningrad.
- Clauson G. 1972. *An Etymological Dictionary of Pre-Thirteenth-Century Turkish*. Oxford.
- Conon de la Gabelentz H. 1832. Élémens de la grammaire mandchoue. Altenbourg.
- Doerfer G. 1967. Türkische und mongolische Elemente im Neupersischen, Band 3: Türkische Elemente im Neupersischen (ğīm bis kāf). Wiesbaden.
- Doerfer G. 1977. Ist Kur-Urmiisch ein nanaischer Dialekt?. Decsy Gy. / Dimov-Bogoev Ch.D. (eds.), *Eurasia nostratica. Festschrift für K.H. Menges.* Wiesbaden, vol. 1: 51–63.

Doerfer G. 1978. Classification Problems of Tungus. – Weiers M. (ed.), *Tungusica*. *Beiträge zur nordasiatischen Kulturgeschichte*. Wiesbaden: 1–26.

Doerfer G. 1985. Mongolo-Tungusica. Wiesbaden.

EEW = Doerfer G. 2004. *Etymologisch-ethnologisches Wörterbuch tungusischer Dialekte*. Unter Mitwirkung von M. Knüppel. Hildesheim.

- Erdal M. 1988. The Turkic Nagy-Szent-Miklós Inscription in Greek Letters. Acta Orientalia Academiae Scientiarum Hungaricae 42.2–3: 221–234.
- Erdal M. 2007. The Khazar Language. Golden P. / Ben-Shammai H. / Róna-Tas A. (eds.), *The World of the Khazars*. Leiden / Boston: 75–108.
- Futaky I. 2001. Nyelvörténeti vizsgálatok a Kárpát-medencei avar-magyar kapcsolatok kérdéséhez. Budapest.
- Göbl R. / Róna-Tas A. 1995. *Die Inschriften des Schatzes von Nagy-szentmiklós. Eine paläographische Dokumentation.* Wien.

- Golden P. 1992. *An Introduction to the History of the Turkic Peoples*. Wiesbaden. Gorelova L.M. 2002. *Manchu Grammar*. Leiden / Boston / Köln.
- Gould S.J. 1980. *The Panda's Thumb. More Reflections in Natural History*. New York / London.
- Helimski E. = Xelimskij E. 2000a. Jazyk(i) Avarov: Tunguso-man'čžurskij aspekt. – *Folia Orientalia* 36 (= Studia in honorem Stanislai Stachowski dicata): 135–148.
- Helimski E. 2000b. On Probable Tungus-Manchurian Origin of the Buyla Inscription from Nagy-Szentmiklós (Preliminary Communication). – *Studia Etymologica Cracoviensia* 5: 43–56.
- Helimski E. = Xelimskij E. 2003. Tunguso-man'čžurskij jazykovoj komponent v avarskom kaganate i slavjanskaja ètimologija (Materialy k dokladu na XIII Meždunarodnom sъezde slavistov, Ljubljana, 15–21 avgusta 2003). Hamburg.
- Helimski E. 2004. Die Sprache(n) der Awaren: Die mandschu-tungusische Alternative. – Naeher C. (ed.), Proceedings of the First International Conference on Manchu-Tungus Studies (Bonn, August 28 – September 1, 2000), vol. 2: Trends in Tungusic and Siberian Linguistics. Wiesbaden: 59–72.

Hú Zēngyì, Cháokè. 1986. Èwēnkèyǔ jiǎn zhì. Běijīng.

- Janhunen J. 1985. The Tungus People and the Conquest of Siberia. Jarring G. / Rosén S. (eds.), *Altaistic Studies. Papers Presented at the 25th Meeting of the Permanent International Altaistic Conference (Uppsala 1983).* Stockholm: 73–77.
- Janhunen J. 1987. Towards a unified phonological transcription of the Siberian languages. *Journal de la Société Finno-Ougrienne* 81: 151–174.
- Janhunen J. 1996. Manchuria. An Ethnic History. Helsinki.
- Janhunen J. 2004. From Choson to Jucher: On the Possibilities of Ethnonymic Continuity in Greater Manchuria. *Studia Etymologica Cracoviensia* 9: 67–76.
- Janhunen J. 2009. Eugene Helimski (1950–2007). Finnisch-Ugrische Forschungen 60.1–3: 364–371.
- Janhunen J. 2012. The Expansion of Tungusic as an Ethnic and Linguistic Process. Malchukov A. / Whaley L. (eds.), *Recent Advances in Tungusic Linguistics*. Wiesbaden: 5–16.
- Janhunen J. 2013. The Tungusic Languages: A History of Contacts. Kim J. / Ko D. (eds.), *Current Trends in Altaic Linguistics. A festschrift for Professor Emeritus Seong Baeg-in on his 80th Birthday.* Seoul: 18–60.
- Kałużyński S. 1982. Einige tungusische Lehnwörter im Jakutischen. Acta Orientalia Academiae Scientiarum Hungaricae 36.1–3: 261–269.
- Kara Gy. 2002. Review of Futaky 2001. Magyar Nyelv 98: 491-496.
- Kazama S. 2012. Designative in Tungusic languages. Malchukov A. / Whaley L. (eds.), *Recent Advances in Tungusic Linguistics*. Wiesbaden: 123–152.
- Kiyose G.N. 1977. Study of the Jurchen Language and Script. Kyoto.

- Knüppel M. 2013. Professor István Futaky (12.5.1926–21.1.2013) als Tungusologe. *Studia Linguistica Universitatis Iagellonicae Cracoviensis* 130: 191–198.
- Kőhalmi-Uray C. 2004. The Myth of Nishan Shaman. Hoppál M. (ed.), *Rediscovery of Shamanic Heritage*. Budapest: 113–124.
- Konstantinova O.A. 1964. Evenkijskij jazyk. Fonetika. Morfologija. Moskva / Leningrad.
- Kotvičъ W. 1909. Materialy dlja izučenia tungusskixъ narěčij. I. Obrazcy jazyka sungarijskixъ gol'dovъ. *Živaja Starina* 18.2–3: 206–218.
- Kovács T. / Garam É. (eds.) 2001. The Gold of the Avars. The Nagyszentmiklós Treasure. Catalogue of the Exhibition. Budapest
- Larsen T.W. 2007. Instrumental Noun Phrases and Unmarked Objects in Classical Manchu. – Wadley S. / Naeher C. (eds.), *Proceedings of the First North American Conference on Manchu Studies*, vol. 2: *Studies in Manchu Linguistics*. Wiesbaden: 21–41.
- Ligeti L. 1953. Le problème de l'ethnogenèse des samaghirs. Acta Orientalia Academiae Scientiarum Hungaricae 3.1–2: 33–44.
- Malchukov A. / Nedjalkov I. 2010. Ditransitive Constructions in Tungusic Languages. – Malchukov A. / Haspelmath M. / Comrie B. (eds.), Studies in Ditransitive Constructions. A Comparative Handbook. Berlin / New York: 318–351.
- Menges K.H. 1952. Zur einigen Problemen der tungusischen Grammatik. Ural-Altaische Jahrbücher 24.1: 112–121.
- Miller R.A. 1994. The Original Geographic Distribution of the Tungus Languages. Aronson H.I. (ed.), *Non-Slavic languages of the USSR. Papers from the Fourth Conference*. Columbus: 272–297.
- Myl'nikova K.M. / Cincius V.I. 1931. Materialy po issledevaniju negidal'skogo jazyka. *Tunguskij sbornik* 1: 107–218.
- Nikolaeva I. / Tolskaya M. 2001. A Grammar of Udihe. Berlin.
- Novikova K.A. 1960. *Očerki dialektov èvenskogo jazyka. Ol'skij govor, čast' 1.* Moskva / Leningrad.
- Ozoliņa L. 1995. Present day linguistic situation among the Val Oroks (Uilta) of Eastern Sakhalin. *Linguistic and Oriental Studies from Poznań* 2: 91–104.
- Ozolinja L.B. 2001. Oroksko-russkij slovar'. Novosibirsk.
- Pekarskij E.K. 1959². Slovar' jakutskogo jazyka. Jakutsk.
- Petrova T.I. 1967. Jazyk orokov (ul'ta). Leningrad.
- Pohl W. 2002. *Die Awaren. Ein Steppenvolk in Mitteleuropa 567–822 n.Chr.* München.
- Poppe N.N. 1931. Materialy po solonskomu jazyku. Leningrad.
- Poppe N. 1966. On Some Ancient Mongolian Loan-words in Tungus. Central Asiatic Journal 11: 187–198.
- Poppe N. 1972. On Some Mongolian Loan Words in Evenki. *Central Asiatic Journal* 16: 95–103.

- Poppe N. 1977. The Altaic Plural Suffix -*t. Studia Orientalia 47: 165-174.
- Poppe N. 1987. Introduction to Mongolian Comparative Studies. Helsinki.
- Poppe N. 2006². Grammar of Written Mongolian. Wiesbaden.
- Pritsak O. 2006. The Turkic Etymology of the Word *Qazaq* 'Cossack'. *Harvard Ukrainian Studies* 28.1–4: 237–243.
- Pulleyblank E.G. 1991. Lexicon of Reconstructed Pronunciation in Early Middle Chinese, Late Middle Chinese, and Early Mandarin. Vancouver.
- Putinceva A.P. 1954. Morfologija govora gorinskix nanaj. Leningrad.
- Romanova A.V. / Myreeva A.N. / Baraškov P.P. 1975. *Vzaimovlijanie èvenkijskogo i jakutskogo jazykov*. Leningrad.
- Róna-Tas A. / Berta Á. 2011. *West Old Turkic. Turkic Loanwords in Hungarian*, 2 vols. [with the assistance of L. Károly]. Wiesbaden.
- Róna-Tas A. 1999. Hungarians and Europe in the Early Middle Ages. Budapest.
- Róna-Tas A. 2001. The Inscriptions of the Nagyszentmiklós Treasure. Kovács T. / Garam É. (eds.), *The Gold of the Avars. The Nagyszentmiklós Treasure. Catalogue of the Exhibition.* Budapest: 120–129.
- Róna-Tas A. 2003. *Börtön* szavunk és az avar-magyar kapcsolatok. *Nyelvtudományi Közlemények* 100: 219–225.
- Rozycki W. 1994. Mongol Elements in Manchu. Bloomington.
- Schmidt P.P. 1923. The Language of the Negidals. *Acta Universitatis Latviensis* 5: 3–38.
- Schuessler A. 2007. ABC Etymological Dictionary of Old Chinese. Honolulu
- Sem L.I. 1976. Očerk dialektov nanajskogo jazyka. Bikinskij (Ussurijskij) dialekt. Leningrad.
- Sevortjan È., ed. 1978. *Ètimologičeskij slovar' tjurkskix jazykov*, vol. 2 "B". Moskva.
- Shirokogoroff S.M. 1924. Social Organization of the Manchus. A Study of the Manchu Clan Organization. Shanghai.
- Sinor D. 1952. On Some Ural-Altaic Plural Suffixes. Asia Major (NS) 2: 203-230.
- SS = Cincius V.I., ed. 1975–1977. *Sravnitel'nyj slovar' tunguso-man'čžurskix jazykov*, vol. 2. Leningrad.
- Stachowski M. 2004. The origin of the European word for sabre. *Studia Ety-mologica Cracoviensia* 9: 133–141.
- Stachowski M. 2005. Uwagi o zapożyczeniach ałtajskich w- języku prasłowiańskim i kwestie pokrewne. – Siemieniec-Gołaś E. / Pomorska M. (eds.), *Turks* and Non-Turks Studies on the History of Linguistic and Cultural Contacts. Special Issue Presented to Professor Stanisław Stachowski to His Seventy Fifth Birthday (= Studia Turcologica Cracoviensia 10). Kraków: 437–454.
- Sunik O.P. 1958. Kur-Urmijskij dialekt. Issledovanija i materialy po nanajskomu jazyku. Leningrad.
- Sunik O.P. 1982. *Suščestvitel'noe v tunguso-man'čžurskix jazykax*. Leningrad. Sunik O.P. 1985. *Ul'čskij jazyk. Issledovanija i materialy*. Leningrad.

- Szalontai Cs. / Károly L. 2013. Runiform Fragments of the Late Avar Period from Hungary. *Acta Orientalia Academiae Scientiarum Hungaricae* 66.4: 365–396.
- Tamura K. 1990. Manshū-go no taikaku ni okeru mokuteki-go no gentei-shō. *Chūkyō daigaku kyōyō ronsō* 31.2: 579–601.
- TSVG = Benzing J. 1956. *Die tungusischen Sprachen. Versuch einer vergleichenden Grammatik.* Wiesbaden.
- Vasilevič G.M., ed. 1936. Sbornik materialov po èvenkijskomu (tungusskomu) fol'kloru. Leningrad.
- Vasilevič G.M. 1948. Očerki dialektov èvenkijskogo /tungusskogo/ jazyka. Leningrad.
- Vasilevič G.M. 1969. *Èvenki. Istoriko-ètnografičeskie očerki (XVIII–načalo XX v.).* Leningrad.
- Vasilevič G.M. 1974. Antroponimy u narodov ural'skoj i altajskoj semej, rasselennyx v Sibiri (opyt kartografirovanija). – Bruk S.I. / Borodina M.A. (eds.), *Problemy kartografirovanija v jazykoznanii i etnografii*. Leningrad: 296–302.
- Vovin A. 2007. Once again on the Etymology of the Title qaγan. Studia Etymologica Cracoviensia 12: 177–187.
- Walravens H. 1992. Die frühesten goldischen Texte. Faksimile-Nachdruck einiger Übersetzungen von Prokopij Protodiakonov. Mit einem Essay von Władysław Kotwicz über die Erforschung der goldischen (Nanai-)Sprache. Berlin.
- Wuti = Corff O. et alii. 2013. Auf kaiserlichen Befehl erstelltes Wörterbuch des Manjurischen in fünf Sprachen, 2 vols. Wiesbaden.
- Xasanova M.M. / Pevnov A.M. 2003. Mify i skazki negidal'cev. Suita.
- Zakharov I. 2010². *A Grammar of Manchu / Grammatika man'čžurskago jazyka*. Folkestone [Sanktpeterburgъ].